



Exam : 070-551

Title : UPGRADE: MCAD Skills to MCPD Web Developer by Using the Microsoft .NET Framework

Ver : 10.25.07

QUESTION 1

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528. All ASP.NET 1.1 Web applications hosted by IIS on Certkiller -WS528 are accessed on port 80.

You are required to develop a new ASP.NET inventory application named CK_Invtry that will be integrated into Certkiller .com's existing e-Commerce Web site. You want to store all source files for the CK_Invtry application in the C:\Inetpub\wwwroot\CK_Invtry folder on TESTING-WS528. During development you must be able to access CK_Invtry at the URL "http://localhost:80/CK_Invtry". You need to configure the New Web site dialog box in Visual Studio 2005 to meet your requirements.

What should you do?

- A. In the Location field, select File System and set the location to http://localhost/CK_Invtry.
- B. In the Location field, select HTTP and set the location to C:\Inetpub\wwwroot\CK_Invtry.
- C. In the Location field, select File System and set the location to C:\Inetpub\wwwroot\CK_Invtry.
- D. In the Location field, select HTTP and set the location to http://localhost/CK_Invtry.

Answer: D

Explanation: When you select HTTP in the location field, Visual Studio 2005 will create and configure a Web application in IIS. The source files will be stored in folder associated with the Web application in IIS. By default this is a folder in C:\Inetpub\wwwroot.

Incorrect Answers:

A, C: When you select File System in the Location field, Visual studio allows you to create the Web application in a specified folder. However, you will not be able to access the application on port 80 as port 80 is used by IIS.

B: When you select HTTP in the location field, you must specify the URL for the project and not the path. The folder path must be configured in IIS.

QUESTION 2

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a page named Process.aspx in a shopping cart Web application that will be integrated into Certkiller .com's existing e-Commerce Web site. The

Process.aspx page allows customers to pay for purchases using their credit cards. The Process.aspx page contains a Button control that confirms the customer's payment and calls an external Web service that charges the customer's credit card. You must implement confirmation and prevent postback unless the customer confirms payment. What should you do?

- A. Set the OnClientClick property to a JavaScript statement.
- B. Set the PostBackUrl property to a JavaScript statement.
- C. Set the PostBackUrl property to the URL of a confirmation page.
- D. Set the OnClientClick property to the URL of a confirmation page.

Answer: A

Explanation: The OnClientClick property allows you to override the client script that causes postback to the server. You need to use a JavaScript statement as the default action of the OnClick event of an HTML element is to submit the page. The JavaScript statement that will process the confirmation; if the customer declines the payment, the JavaScript statement will return a false to the control and postback will not occur.

Incorrect Answers:

- B: The PostBackUrl property cannot be set to a JavaScript statement. It can only be set to a URL. If it is set to a URL it will cause postback to that URL.
- C: If you set the PostBackUrl property to the URL of a confirmation page as this cause the Button control to postback to the confirmation page. You must prevent postback.
- D: You should set the OnClientClick property to a JavaScript statement that will process the confirmation without causing postback.

QUESTION 3

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a product search page named Search.aspx for Web application that will be integrated into Certkiller .com's existing e-Commerce Web site. The Search.aspx page allows customers search for products that match specific criteria. The search criteria are implemented as CheckBox controls. The Search button is implemented as a Button control. You want the CheckBox controls to be cleared when the Search button is clicked.

What should you do?

- A. Set the Checked property of each CheckBox to False in the designer. Set the EnableViewState property of each CheckBox to False in the designer.
- B. Set the Checked property of each CheckBox to False in the Page_Load event handler if the Search.aspx page's IsPostBack property is True.

Set the AutoPostBack property of each CheckBox to False in the designer.

C. Set the Checked property of each CheckBox to False in the designer.

Set the Checked property of each CheckBox to False in the event handler for the Search button's Click event.

D. Set the EnableViewState property of each CheckBox to False in the designer.

Set the AutoPostBack property of each CheckBox to False in the designer.

Answer: C

Explanation:

To ensure that the initial state of the CheckBox controls are clear, you must set the Checked property of each CheckBox to False in the designer. You should then set the Checked property of each CheckBox to False in the event handler for the Search button's Click event to reset the CheckBox controls to their initial state upon the Click event.

Incorrect Answers:

A: You should set the Checked property of each CheckBox to False in the designer to ensure that the initial state of the CheckBox controls are clear. But setting the EnableViewState property will not clear the CheckBox controls. The EnableViewState property determines whether the CheckBox controls should be visible or not.

B: Setting the Checked property of each CheckBox to False in the Page_Load event handler if the Search.aspx page's IsPostBack property is True and the AutoPostBack property of each CheckBox to False in the designer will clear the CheckBox controls whenever a postback occurs. You want the CheckBox controls to be cleared when the Search Button is clicked, not when a postback occurs.

D: The EnableViewState property determines whether the CheckBox controls should be visible or not. It does not clear the CheckBox controls. The AutoPostBack property will clear the CheckBox controls whenever a postback occurs. You want the CheckBox controls to be cleared when the Search Button is clicked, not when a postback occurs.

QUESTION 4

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a product search page named Search.aspx for Web application that will be integrated into Certkiller .com's existing e-Commerce Web site. The Search.aspx page allows customers search for products that match specific criteria. Once a product is located, you want an image of the product to be displayed. You want to use an Image control to display the image.

You want to configure the Image control to display a description of the image if the image cannot be displayed in the customer's Web browser.

What should you do?

A. Set the ToolTip property of the Image control.

- B. Set the ImageUrl property of the Image control.
- C. Set the AlternateText property of the Image control.
- D. Set the DescriptionUrl property of the Image control.

Answer: C

Explanation: The text entered in the AlternateText property is displayed if the image cannot be displayed in the customer's Web browser.

Incorrect Answers:

A: The text entered in the ToolTip property is displayed when the mouse hovers over the image. It is not displayed when the image cannot be displayed in the customer's Web browser.

B: The text entered in the ImageUrl property specified the path to the Image. It does not display a description when the image cannot be displayed in the customer's Web browser.

C: The text entered in the DescriptionUrl property is used when accessibility features are turned on. It does not display a description when the image cannot be displayed in the customer's Web browser.

QUESTION 5

DRAG DROP

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a navigation application. You add an ImageMap control to a Web page named NYCity.aspx and set its ImageUrl property to the URL of an image that represents the street map of central New York. When a user clicks on an area that represents a building, you want to display a street address for the building on the same page

You want to configure the NYCity.aspx page and the ImageMap control to accomplish this task.

What should you do? To answer, select the appropriate actions and arrange them in the correct order in the work area.

Actions

- Set the HotSpotMode property of the ImageMap control to Navigate.
- Set the PostBackValue property of each PolygonHotSpot control to building name.
- Set the HotSpotMode property of each PolygonHotSpot control to building name.
- Handle the Click event of the ImageMap control.
- Set the HotSpotMode property of the ImageMap control to PostBack.
- Create a PolygonHotSpot control for each building.
- Configure the page to implement the IPostBackEventHandler
- Configure the page to implement the IPostBackDataHandler

Answer:

Actions

- Set the HotSpotMode property of the ImageMap control to Navigate.
-
- Set the HotSpotMode property of each PolygonHotSpot control to building name.
-
-
-
- Configure the page to implement the IPostBackEventHandler
- Configure the page to implement the IPostBackDataHandler

Work Area

- Place first action here.
- Place second action here.
- Place third action here.
- Place fourth action here.
- Place fifth action here.
- Place sixth action here.
- Place seventh action here.
- Place eighth action here.

Work Area

- Create a PolygonHotSpot control for each building.
- Handle the Click event of the ImageMap control.
- Set the HotSpotMode property of the ImageMap control to PostBack.
- Set the PostBackValue property of each PolygonHotSpot control to building name.
- Place fifth action here.
- Place sixth action here.
- Place seventh action here.
- Place eighth action here.

Explanation:

You need to define a hotspot as a set of polygonal coordinates for each building on the ImageMap. You then need to handle the Click event for the ImageMap to capture user input. The Click event contains an ImageMapEventArgs parameter that contains a PostBackValue property that identifies the polygon. You should then set the PostBackValue to a value that will identify the address that needs to be displayed.

Incorrect Answers:

Setting the HotSpotMode of either the ImageMap or PolygonHotSpot will treat these controls as hyperlinks but you want the data to be displayed on the same page.

Therefore you do not need hyperlinks.

You also don't need IPostBackEventHandler and IPostBackDataHandler as these raise server-side events based on client-side events.

QUESTION 6

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a page named Products.aspx in a Web application that contains three DropDownList controls that are dynamically loaded from a SQL Server 2005 database file. The DropDownList controls represent a vendor list, a certification list, and an exam list. Certkiller .com customers use the Products.aspx page to select exams related to particular certifications on offer from a particular vendor. A Go button initiates the selection. Each DropDownList control has an associated RequiredFieldValidator control.

Whenever the customer selects a vendor, and the vendor offers certifications, then the customer must also select a certification if the. If the vendor only offers exams and not certifications, the certification list should remain hidden. Whenever the customer selects a certification, the customer must also select an exam. Validation error messages should only be displayed when the Go button is clicked.

You need to set properties on the vendor DropDownList control.

What should you do?

- A. Set the AutoPostBack property to True and the CausesValidation property to False.
- B. Set the AutoPostBack property to False and the CausesValidation property to True.
- C. Set the AutoPostBack property to True and the CausesValidation property to True.
- D. Set the AutoPostBack property to False and the CausesValidation property to False.

Answer: A

Explanation: You need to set the AutoPostBack property to True so that you can programmatically determine whether or not the certifications DropDownList control should be displayed. By default, validation occurs when a postback takes place. To prevent this, you should set the CausesValidation property to False.

Incorrect Answers:

B: If you set the AutoPostBack property to False, you will not be able to determine if the certification DropDownList control should be displayed or not.

C: If you set the CausesValidation property to True then validation will occur when a postback takes place. Validation error messages are displayed whenever validation occurs.

D: If you set the AutoPostBack property to False, you will not be able to determine if the certification DropDownList control should be displayed or not as postback will not occur. Validation will also not occur as it occurs when a postback takes place.

QUESTION 7

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a page named Products.aspx in a Web application. You need to allow external vendors to insert product information into the Products.aspx page. You decide to implement this functionality by using a DropDownList control. You add the following code to the Products.aspx page.

```
<asp:DropDownList ID="_categoryDDL" runat="server" DataSourceID="_categoryDataSource"
    DataTextField="CategoryName" DataValueField="CategoryID">
</asp:DropDownList>
<asp:SqlDataSource ID="categoryDataSource" runat="server"
    ConnectionString="<%$ ConnectionStrings:CatalogConnectionString %>"
    SelectCommand="SELECT [CategoryID],[CategoryName] FROM [Categories]">
</asp:SqlDataSource>
```

You need to ensure that the DropDownList control defaults to [None] and that [None] is the first item in the DropDownList.

What should you do? (Each correct answer presents part of the solution. Choose two.)

- A. Set the DataSourceID property of the DropDownList control to "".
- B. Add the string "[None]" to the Items property of the DropDownList control.
- C. Change the SelectCommand property SqlDataSource control to "SELECT [None], [CategoryID], [CategoryName] FROM [Categories]".
- D. Set the AppendDataBopundItems property of the DropDownList control to True.

Answer: B, D

Explanation: You must add a static item to the DropDownList in the Items property. You should then set the AppendDataBopundItems property of the DropDownList control to True to prevent DataBound items from overwriting the static item.

Incorrect Answers:

A: You cannot set the DataSourceID property of the DropDownList control to an empty string. This will prevent you from binding data to the DropDownList.

C: The SELECT statement lists database columns from which data must be selected. [None] is not a column in the database and should not be listed in the SELECT statement as it will cause the DataBound operation to return an error.

QUESTION 8

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services

(IIS) is installed on Certkiller -WS528.

You are developing a chat forum for the Certkiller .com Web site. You are using ASP.NET 2.0 to develop the chat forum. You are developing a Web Form that allows a subscriber to alter enter their account details. The page contains the following code snippet.

```
31 <div>
32     <asp:TextBox ID="_Description" Rows="5" />
33 </div>
```

You need to programmatically hide the TextBox control based on other input. What should you do?

- A. Add a Runat="server" attribute to the TextBox control.
- B. Declare _Description as a TextBox in the code-behind class.
- C. Replace the <div> element with <table>, <tr>, and <td> elements.
- D. Replace the <div> element with a Panel server control.

Answer: A

Explanation: Code-behind processing occurs at the server therefore you need to add the Runat="server" attribute to the TextBox control.

Incorrect Answers:

B: Controls are automatically declared in the code-behind page in ASP.NET 2.0.

Therefore you do not need to declare the control.

C, D: The <div> element does not have a bearing on your ability to use the TextBox control in a code-behind class. Therefore there is no need to change the <div> element.

QUESTION 9

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com is a major supplier of Widgets for various affiliate online retail companies.

Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application that allows Certkiller .com's affiliates to manage their accounts at Certkiller .com. Because of the complexity and size of the data, Certkiller .com implements a staging environment and a production environment for their affiliates. The URLs staging and a production environments are stored in the <appSettings> section of the Web.config file. The <appSettings> section of the Web.config file is shown in the following exhibit:

```
<appSettings>
  <add key="Staging" value="http://staging.certkiller.com"/>
  <add key="StagingConnectionString"
    value="server=CERTKILLER-DB01;database=CK_DB;Integrated Security=SSPI"/>
  <add key="ProductionConnectionString"
    value="server=CERTKILLER-DB01;database=CK_DB;Integrated Security=SSPI"/>
</appSettings>
```

You write the following code to access the connection string from the current HttpContext object:

```
bool staging = Request.Url.Host == ConfigurationManager.AppSettings["Staging"];
if (staging)
{
    Context.Items.Add("ConnectionString",
        ConfigurationManager.AppSettings["StagingConnectionString"]);
}
else
{
    Context.Items.Add("ConnectionString",
        ConfigurationManager.AppSettings["ProductionConnectionString"]);
}
```

You need to place the code in the appropriate event handler.
What should you do?

- A. Place the codes in the Application_Start event handler.
- B. Place the codes in the Session_Start event handler.
- C. Place the codes in the Application_BeginRequest event handler.
- D. Place the codes in the Session_End event handler.

Answer: C

Explanation:

Items in the HttpContext object are cleared after each request; therefore you need to repopulate the object after each request using the Application_BeginRequest event handler. Once the object is populated, it can be accessed from any page throughout the request.

Incorrect Answers:

A: The Application_Start event is raised only when the application starts. However, items in the HttpContext object are cleared after each request; therefore you need to repopulate the object after each request using the Application_BeginRequest event handler.

B: The Session_Start event is raised only when the session starts. However, items in the HttpContext object are cleared after each request; therefore you need to repopulate the object after each request using the Application_BeginRequest event handler.

D: The Session_End event is raised only when the session ends. However, items in the HttpContext object are cleared after each request; therefore you need to repopulate the object after each request using the Application_BeginRequest event handler.

QUESTION 10

You are employed as an application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com.

You are in the process of redeveloping the Certkiller .com Web application. You want to add a TreeView control to a Web Form named cisco.aspx.

The following XML defines the site map data for Certkiller .com.

```
<siteMapNode url="~/default.aspx" title="Home" description="Home Page">
<siteMapNode url="ms.aspx" title="Microsoft" description="Microsoft
Training Guides">
```

```
<siteMapNode url="mcpt.aspx" title="MCPT" description="MCPT Training
Guides" />
<siteMapNode url="mcse.aspx" title="MCSE" description="MCSE Training
Guides" />
<siteMapNode url="mcts.aspx" title="MCTS" description="MCTS Training
Guides" />
</siteMapNode>
<siteMapNode url="cisco.aspx" title="CISCO" description="Cisco Training
Guides">
<siteMapNode url="ccda.aspx" title="CCDA" description="CCDA Training
Guides" />
<siteMapNode url="ccdp.aspx" title="CCDP" description="CCDP Training
Guides" />
<siteMapNode url="ccie.aspx" title="CCIE" description="CCIE Training
Guides" />
<siteMapNode url="ccip.aspx" title="CCIP" description="CCIP Training
Guides" />
<siteMapNode url="ccna.aspx" title="CCNA" description="CCNA Training
Guides" />
<siteMapNode url="ccnp.aspx" title="CCNP" description="CCNP Training
Guides" />
<siteMapNode url="ccsp.aspx" title="CCSP" description="CCSP Training
Guides" />
</siteMapNode>
</siteMapNode>
```

You need to bind the TreeView control to the site map data so that users can navigate only within the CISCO section.

What should you do? (Choose all that apply)

- A. To achieve this you need to set the StartingNodeUrl property of the SiteMapDataSource control to ~/cisco.aspx.
- B. You need to add a SiteMapDataSource control to the Web Form and bind the TreeView control to the Web Form.
- C. You need to ensure that the site map XML is embedded within the AppSettings node of the Web.config file.
- D. You need to add a SiteMapPath control to the Web Form and bind the TreeView control to the Web Form.
- E. You need to ensure that the site map XML is embedded within the SiteMap node of the Web.sitemap file.

Answer: A, B, E

Explanation: The TreeView control should be bound to a SiteMapDataSource. By default the SiteMapDataSource will extract its information from the web.sitemap file. The StartingNodeUrl property of the SiteMapDataSource can be used to restrict the SiteMap to only the marketing pages.

Incorrect Answers:

C: Putting the site map XML in the web.config file could be done. This will require defining a custom site map provider. This is not the ideal place for site map data.

D: The SiteMapPath is not a site map provider which is what the TreeView needs to bind with. A SiteMapPath is a server control that can be used as an alternative to TreeView in order to display a site map in a more compact manner.

QUESTION 11

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com is a major supplier of Widgets for various affiliate online retail companies.

Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You recently developed a Web application that accesses an external Web service to retrieve current exchange rates for Certkiller .com's e-Commerce Web site. The Web service converts USD prices to the customer's local currency. You have stored the URL to the external Web service's endpoint in the <appSettings> section of the Web.config file. The Web application has been successfully deployed to a Certkiller .com Web server named Certkiller -SR14.

A few months later the vendor of the Web service changes the port that is used to access the Web service. You need to update the <appSettings> section of the Web application's Web.config file from Certkiller -WS528. You need to ensure that your solution has a minimal impact on customers that may be connected to the e-Commerce Web site.

What should you do?

- A. Create a Host entry in the Lmhosts file on Certkiller -SR14. Point the Host entry to the new end point.
- B. Use the Copy Web Site function in Visual Studio 2005 to deploy the Web.config file from Certkiller -WS528 to Certkiller -SR14.
- C. Create a Web Setup project in Visual Studio 2005 to deploy the Web.config file from Certkiller -WS528 to Certkiller -SR14.
- D. Use the Web Site Administration Tool to change the <appSettings> section of the Web.config file.

Answer: D

Explanation: You can use the Web Site Administration Tool to change settings at run-time without having to redeploy the Web application. This will have a minimal impact on users currently accessing the Web application.

Incorrect Answers:

A: The Lmhosts file is used for IP Address to host name resolution. It does not change the settings in the <appSettings> section of the Web application's Web.config file.

B, C: The Web.config file contains environment-specific settings in the production

environment. Deploying the Web.config file from your local computer to the production server may overwrite these settings.

QUESTION 12

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com is a major supplier of Widgets for various affiliate online retail companies.

Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a search page named Search.aspx for Web application that will be integrated into Certkiller .com's existing e-Commerce Web site. The Search.aspx page allows customers search for products that match specific criteria. The search query is entered into a TextBox control and is initiated by a Search button. When the Search button is clicked, a postback to the server occurs. The search query is then used to display results in a GridView control. You need to ensure that the TextBox control always receives focus.

What should you do?

- A. Convert the TextBox control to a TextArea element and call the Focus method of the element.
- B. Call the SetFocus method of the Page instance in the Page_Load event handler.
- C. Call the Focus method of the Search button in the OnClick event handler.
- D. Convert the TextBox control to an Input element and call the Focus method of the element.

Answer: B

Explanation: You can set the focus of a control in the Focus method of the control itself, in the Page.SetFocus method and pass the ID of a control that should receive focus or in the SetFocus method of the Page instance in the Page_Load event handler.

Incorrect Answers:

A, D: The TextBox is used in server-side code. Therefore you cannot convert it to a TextArea or Input element as these cannot be used in server-side code.

C: You can set the focus of a control in the Focus method of the control itself, in the Page.SetFocus method and pass the ID of a control that should receive focus or in the SetFocus method of the Page instance in the Page_Load event handler. You cannot set the focus of a control in the Focus method of another control. The OnClick event handler also does not support a Focus method.

QUESTION 13

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

The Certkiller .com network contains an Oracle database server named Certkiller -DB01. Certkiller -DB01 hosts a database named CK_Products that

stores product information for Certkiller .com's e-Commerce Web site. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a product page named Catalog.aspx for Web application that will be integrated into Certkiller .com's existing e-Commerce Web site. The Catalog.aspx page must access data from the CK_Products database. You need to use a stored procedure named sp_GetAllProducts to display data in a GridView control named _gridView. The stored procedure takes no parameters. You add a SqlDataSource control to the page.

What should you do next? (Each correct answer presents part of the solution.

Choose two.)

- A. Set the DataSourceID property of the GridView control to the ID of the SqlDataSource.
- B. Set the SelectMethod property to the stored procedure name "sp_GetAllProducts".
- C. Set the SelectCommand property to the stored procedure name "sp_GetAllProducts".
- D. Set the DataSourceID property of the GridView control to the stored procedure name "sp_GetAllProducts".

Answer: A, C

Explanation: You need to bind data to a Grid View control, which is a tabular data-bound control. You have already created the SqlDataSource control which allows you to bind data from the Oracle database. You now need to specify the SqlDataSource as the DataSourceID for the GridView control, and specify the sp_GetAllProducts stored procedure as the SelectCommand of the SqlDataSource control. The SqlDataSource control will then use the stored procedure to retrieve the required data.

Incorrect Answers:

B: You are using a stored procedure to retrieve the data from the database. You should therefore use the SelectCommand property to specify the stored procedure to be used, and not a SelectMethod. The SelectMethod property is used when you use a method in a business class to return the data.

D: The DataSourceID property specifies the SqlDataSource control that populates the data in the GridView control. You must therefore specify the ID of the SqlDataSource as the DataSourceID and not the stored procedure name.

QUESTION 14

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a master page named ck_layout.master for a revised version of the Certkiller .com e-Commerce Web site. You want to use a TreeView control to

display the menu on the master page. The TreeView control will be populated from an XML file named ck_menu.xml.

What should you do? (Each correct answer presents part of the solution. Choose three.)

- A. Add a SiteMapDataSource control to the master page.
- B. Add an XmlDataSource control to the master page.
- C. Add a Menu control to the master page.
- D. Set the DataBindings property of the TreeView control.
- E. Set the DataFile property to ck_menu.xml.

Answer: B, D, E

Explanation: You need to bind XML data to a TreeView control by adding an XmlDataSource control to the master page. You must then specify the DataFile property of the XmlDataSource as the ck_menu.xml file, and the DataBindings property of the TreeView control. The DataBindings property of the TreeView control allows you to map XML nodes to TreeView nodes.

Incorrect Answers:

A: You do not need a SiteMapDataSource control to implement a TreeView control. SiteMapDataSource controls work with site map providers and not with XML files.

C: You do not need a Menu control to implement a TreeView control.

QUESTION 15

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains an SQL Server 2005 database server named Certkiller -DB01. A database named CK_Products is hosted in the default instance on Certkiller -DB01. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a product page named Catalog.aspx for Web application that will be integrated into Certkiller .com's existing e-Commerce Web site. The Catalog.aspx page must access data from the CK_Products database. You need must use a stored procedure named sp_GetAllProducts to display data in a GridView control named _gridView. The stored procedure takes no parameters. You need to create a connection to the default instance on Certkiller -DB01. You use Server Explorer in Microsoft Visual Studio .NET 2005 to you open the Advanced Properties dialog box for the connection. You need to ensure that the connection uses your Microsoft Windows domain user account to access the default instance on Certkiller -DB01.

What should you do?

- A. Set the Integrated Security property to True.
- B. Set the Context Connection property to False.
- C. Set the Persist Security Info property to True.

D. Set the User Instance property to True.

Answer: A

Explanation: The Integrated Security property specifies that the connection should be established using the domain credentials of the current user when it is set to True.

Incorrect Answers:

B: The Context Connection property specifies whether the connection should come from the SQL Server context that is hosting the common language runtime (CLR). It does not specify the credentials that should be used to make the connection.

C: The Persist Security Info property specifies whether the security information used to establish the connection should persist in the connection instance. It does not specify the credentials that should be used to make the connection.

D: The User Instance property specifies whether the connection should be made to a database instance that is running under the context of the current user.

QUESTION 16

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains an SQL Server 2005 database server named Certkiller -DB01 and a Web server named Certkiller -SR15.

Certkiller -DB01 hosts a database named CK_Finance that is accessed by an in-house Web application. The Web application is hosted on Certkiller -SR15 and uses SQL Server authentication to access the CK_Finance database. Several Certkiller .com users in the Sales department have access to Certkiller -SR15 but do not have permission to access the CK_Finance database. You need to ensure that the Certkiller .com users who should not have access to the CK_Finance database cannot use the Web application to access the database.

What should you do?

A. Add code that verifies the user's permissions in each request before accessing the data in the CK_Finance database.

B. Store the database connection string in a Web.config file and encrypt the section that contains the connection string.

C. Add code that calls a secure Web service that returns the database connection string.

D. Store the database connection string in code so that it can be compiled into an assembly.

Answer: B

Explanation:

The threat in this scenario is that users who have access to Certkiller -SR15 can locate the connection string and use the information in the connection string to access the database. You need to encrypt the connection string to prevent users from using the information contained in it. This can only be done if you store the

connection string in the Web.config file and encrypt the section that contains the connection string. Then only user accounts with the required permission to access the key container can decrypt the connection string.

Incorrect Answers:

A: Verifying user permissions at the Web application level does not prevent users who have access to Certkiller -SR15 from locating the connection string and using the information in the connection string to manually access the database.

C, D: Assemblies can be reversed engineered to retrieve the code contained within them.

QUESTION 17

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains an SQL Server 2005 database server named Certkiller -DB01. A database named CK_Products is hosted in the default instance on Certkiller -DB01. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application that uses the .NET Data Provider for Microsoft SQL Server to access the CK_Products database. You want the Web application to implement connection pooling.

What should you do?

- A. Create a single SqlConnection instance and store the SqlConnection in the Application object.
- B. Create a SqlConnection instance for each request, and specify the same connection string with each call to the Open method.
- C. Create a SqlConnection instance for each request, and do not call the Close method until the Application_End event is raised.
- D. Create a single SqlConnection instance and store the SqlConnection in the Session object.

Answer: B

Explanation: To make use of connection pooling, you must create a SqlConnection instance for each request, and specify the same connection string with each call to the Open method.

Incorrect Answers:

A: You need multiple connection instances of the same connection string to implement connection pooling. Furthermore, connection instances stored in the Application object are open until the Web application is stopped. However, connection instances that are no longer required should be closed so that they can be returned to the connection pool.

C: Connection instances that are no longer required should be closed so that they can be returned to the connection pool.

D: You need multiple connection instances of the same connection string to implement connection pooling. Furthermore, connection instances stored in the Session object are

open until the Session ends. However, connection instances that are no longer required should be closed so that they can be returned to the connection pool.

QUESTION 18

You work as an application developer at Certkiller .com. You are in the process of developing a Web application that connects to a Microsoft SQL Server database by using the SqlConnection object.

The connection objects are currently being pooled and as the pool gets full the connection request on the database are queued. As a result, a number of connection requests are being rejected.

You need to minimize the rejection of connection requests and you ensure that your application releases connections back to the pool as quick as possible.

What should you do? (Choose all that apply)

- A. The Max Pool Size value inside the connection string should be increased.
- B. Call the Close method on every connection object after it has finished executing.
- C. The Min Pool Size value inside the connection string should be increased.
- D. The value of the ConnectionTimeout property of the SqlConnection object should be increased.
- E. The connection object needs to be left open after it has finished executing.

Answer: A, B, D

Explanation: The connections should be explicitly closed immediately after use. This is to ensure that it can be reused. By increasing the Max Pool Size the web site will be able to deal with more connection requests. This will reduce the queuing. Increasing the ConnectionTimeout property of the SqlConnection object will reduce connection failures because the connection will wait for longer before failing.

Incorrect Answers:

C: Increasing the Min Pool Size may have a small initial benefit but the pool size is managed and increased according to needs anyway.

E: By ensuring that the connections are left open will result in a negative impact on the pooling.

QUESTION 19

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains an SQL Server 2005 database server named Certkiller -DB01. A database named CK_Products is hosted in the default instance on Certkiller -DB01. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application on Certkiller -WS528 that uses the .NET Data Provider for Microsoft SQL Server to access the CK_Products database. Certkiller -DB01 does not have file access to the Web application. The Web application uses a stored procedure named sp_GetCategories to return a list of

product categories from the CK_Products database. However, the sp_GetCategories stored procedure raises the following error:

```
RAISERROR('A premise overlap has occurred.',1,1)
```

You want to write these errors to a custom log on CERTKILLER-WS528.

What should you do?

- A. Attach an event handler to the InfoMessage event of the SqlConnection instance. Write the value of the Message property to the log file.
- B. Call the xp_logevent extended stored procedure from the sp_GetCategories stored procedure. Pass the error message as a parameter.
- C. Replace the sp_GetCategories stored procedure with a managed stored procedure. Use the FileStream class to write the message to the log file.
- D. Use a try/catch block to catch instances of SqlExceptions. Write the value of the Message property to the log file.

Answer: A

Explanation: Whenever a database error with a severity of 10 or less occurs, an InfoMessage event is raised. Attaching an event handler to the InfoMessage event of the SqlConnection instance will allow you to capture information from these events. The full text information from these events is contained in the Message property.

Incorrect Answers:

B: The xp_logevent extended stored procedure logs messages to the SQL Server log file. It does not log messages to custom logs on remote computers.

C: Certkiller _SR15 does not have file access to Certkiller -WS528. Therefore managed stored procedures will not be able to log messages to a custom log on Certkiller -WS528.

D: SqlExceptions are raised for database error that have a severity higher than 10. The error in this scenario has a severity of 1 and would not raise a SqlException.

QUESTION 20

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

The Certkiller .com network contains an Oracle database server named Certkiller -DB01. Certkiller -DB01 hosts a database named CK_Products that stores product information for Certkiller .com's e-Commerce Web site. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a product page named Category.aspx for Web application that will be integrated into Certkiller .com's existing e-Commerce Web site. The Category.aspx page accesses data from the CK_Products database. You use a stored procedure named sp_GetProductsByCategory to display data in a GridView control named _gridView. The stored procedure is shown in the following exhibit.

```
CREATE Procedure [dbo].[sp_GetProductsByCategory]
(
    @CategoryID int
)
AS

SELECT *

FROM
    CK_Products

WHERE
    (CategoryID = @CategoryID)

ORDER BY
    ProductName,
    ProductsNumber

GO
```

The Category.aspx page displays products belonging to a particular category that the customers select. The category is passed as a parameter from a DropDownList control.

You want to create a PowerTools.aspx page that displays all power tools in the CK_Products database. The CategoryID for power tools is listed as 102 in the CK_Products database. You want to use a SqlCommand instance to execute the sp_GetProductsByCategory stored procedure to return the appropriate data from the CK_Products database.

What code segment should you add for the PowerTools.vb code-behind page?

- A. SqlParameter paraCategory =
command.Parameters.AddWithValue("CategoryID",102);
command.ExecuteNonQuery();
- B. SqlParameter paraCategory =
command.Parameters.AddWithValue("@CategoryID",102);
SqlDataReader dataReader = command.ExecuteReader();
- C. SqlParameter paraCategory = new SqlParameter("CategoryID", SqlDbType.Int);
paraCategory.Direction = ParameterDirection.Output;
paraCategory.Value = 102;
command.ExecuteNonQuery();
- D. SqlParameter paraCategory = new SqlParameter("@CategoryID", SqlDbType.Int);
paraCategory.Direction = ParameterDirection.Output;
paraCategory.Value = 102;
SqlDataReader dataReader = command.ExecuteReader();

Answer: B

Explanation: You need to declare the @CategoryID input parameter with a value of 102 that must be passed to the stored procedure. You must then call the

ExecuteReader method of the SqlCommand class to return the results.

Incorrect Answers:

A: This code declares a CategoryID input parameter but the stored procedure only accepts a @CategoryID parameter. This code also calls the ExecuteNonQuery method of the SqlCommand class. The ExecuteNonQuery method of the SqlCommand class does not return data.

C: This code creates an output parameter. However, you need a parameter to pass a parameter to the stored procedure. Input parameters are passed to a stored procedure. This code also calls the ExecuteNonQuery method of the SqlCommand class. The ExecuteNonQuery method of the SqlCommand class does not return data.

D: This code creates an output parameter. However, you need a parameter to pass a parameter to the stored procedure. Input parameters are passed to a stored procedure.

QUESTION 21

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application that will be integrated into the Certkiller .com e-Commerce Web site. You used the Load method of the XmlDocument class to load data from an XML document. The XML document is shown in the following exhibit.

```
<?xml version="1.0" encoding="UTF-8"?>
<Vendor Name="MS">
  <Certification Name="MCNA">
    <Exams>
      <Preerequisites>None</Preerequisites>
      <Available>8</Available>
      <Required>4</Required>
      <Code Name="60-620">...
      <Code Name="60-621">...
      <Code Name="60-622">...
      <Code Name="60-623">...
      <Code Name="60-624">...
      <Code Name="60-631">...
      <Code Name="60-632">...
      <Code Name="60-633">...
    </Exams>
  </Certification>
</Vendor>
```

You later realize that the required exams should be five and not four. You want to use an XmlDocument instance named doc to change the number of required exams to five.

What code segment should you use?

A. XmlNode aNode = doc.DocumentElement.FirstChild.FirstChild;
aNode.ChildNodes[2].InnerText = "5";

B. XmlNode aNode = doc.FirstChild.FirstChild;
aNode.ChildNodes[2].Value = "5";
C. XmlNode aNode = doc.FirstChild.FirstChild;
aNode.ChildNodes[2].InnerText = "5";
D. XmlNode aNode = doc.DocumentElement.FirstChild.FirstChild;
aNode.ChildNodes[2].Value = "5";

Answer: A

Explanation: This code first accesses the document element, which is Vendor. It then accesses the first child of the Vendor element, which is Certification. It then accesses the first child of the Certification element, which is Exams. It then accesses the third child of the Exams element, which is Required - the first element is index 0. It then sets the inner text of the Required element to 5.

Incorrect Answers:

B: This code attempts to access the first child of the first node of the document, which is <?xml>. You need to access the first document element, which is Vendor.

C: This code attempts to access the first child of the first node of the document, which is <?xml>. You need to access the first document element, which is Vendor. This code will also throw an InvalidOperationException instance as elements do not have values but have inner text.

D: This code will access the correct node but will throw an InvalidOperationException instance as elements do not have values but have inner text.

QUESTION 22

You work as an application developer at Certkiller .com. The Certkiller .com network contains an application server named Certkiller -SR33. Microsoft Visual Studio .NET 2005 is installed on Certkiller -SR33.

You create a new Web application that will process several XML documents every second on Certkiller -SR33. The XML documents currently reside on Certkiller -SR33 and will be validated against inline schemas.

You need to read the XML documents from the file system. These documentation needs to be read as fast as possible and all the XML comments should be ignored while reading the XML documents.

What should you do?

A. You need to create an instance of the XmlDocument class and specify a location for the application schema.

B. You need to create an instance of the XmlReader class with an instance of the XmlNodeReader class.

C. You need to create an instance of the XmlReader class by using the XmlReader Create method with an instance of the XmlReaderSettings class.

D. You need to create an instance of the XmlReader class with an instance of the XmlTextReader class.

Answer: C

Explanation: You should use XmlReader for performance reasons. The XmlReaderSettings permits for validation against inline schemas.

Incorrect Answers:

A, D: In this scenario the XmlReader will not support schema validation.

B: The XmlDocument could be used but will result in hurting the performance.

QUESTION 23

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application that will be integrated into the Certkiller .com e-Commerce Web site. You want to load data from an XML file named ck_parts.xml. The schema for the DataSet is stored in a file named ck_part.xsd. You want to implement code that validates the data that is loaded.

What code segment should you use?

- A. `DataSet ds = new DataSet();
ds.ReadXml("ck_parts.xml");
ds.ReadXmlSchema("ck_parts.xsd");`
- B. `DataSet ds = new DataSet();
ds.ReadXml("ck_parts.xml");
string xml = ds.GetXml();
StringReader sr = new StringReader(xml);
ds.InferXmlSchema(sr, null);`
- C. `DataSet ds = new DataSet();
ds.ReadXml("ck_parts.xml");
string xml = ds.GetXmlSchema();
StringReader sr = new StringReader(xml);
ds.InferXmlSchema(sr, null);`
- D. `DataSet ds = new DataSet();
ds.ReadXmlSchema("ck_parts.xsd");
ds.ReadXml("ck_parts.xml");`

Answer: D

Explanation: You must first call the ReadXmlSchema method of the new DataSet instance and then call the ReadXml method of the DataSet instance to validate the data.

Incorrect Answers:

A: You must first call the ReadXmlSchema method of the new DataSet instance and then call the ReadXml method of the DataSet instance to validate the data.

B: You must first call the ReadXmlSchema method of the new DataSet instance and then call the ReadXml method of the DataSet instance to validate the data. Inferring the

XML Schema from the loaded XML will result in the data determining the schema. You thus will not be validating the data against the XML Schema file.

C: Inferring the XML Schema from the loaded XML will result in the data determining the schema. You thus will not be validating the data against the XML Schema file.

QUESTION 24

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains an Oracle database server named Certkiller -DB01. Certkiller -DB01 hosts a database named CK_Products that stores product information for Certkiller .com's e-Commerce Web site. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a product page named Category.aspx for Web application that will be integrated into Certkiller .com's existing e-Commerce Web site. You add a user control named Selector on the Category.aspx page. The user control is implemented in ck_Select.ascx and its code-behind file is ck_Select.ascx.cs. Both ck_Select.ascx and ck_Select.ascx.cs exist in the same application as the Category.aspx page. The assembly associated with the project is named ck_Site.dll. You use the following code to declare the Selection user control on the Category.aspx page:

```
<ck:Selector ID="_categorySelector" Runat="Server"
SelectorType="Category" />
```

The register directive for the user control was accidentally deleted from the Category.aspx page. You need to re-register the user control. What code segment should you use?

- A. <%@ Register TagName="Selector" Src="ck_Select.ascx" Assembly= "ck_Site" %>
- B. <%@ Register TagName="Selector" TagPrefix="ck" Src="ck_Select.ascx" %>
- C. <%@ Register TagName="Selector" TagPrefix="ck" Assembly= "ck_Site" %>
- D. <%@ Register TagName="Selector" Namespace= "ck_Site" %>

Answer: B

Explanation: The TagName and TagPrefix attributes identify the user control on the page while the Src attribute specifies the path to the user control.

Incorrect Answers:

A, C, D: The Assembly attribute and namespace attribute are required when you register a custom Web control. When you register a user control, you need the TagName and TagPrefix attributes, which identify the user control on the page, as well as the Src attribute, which specifies the path to the user control.

QUESTION 25

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

The Certkiller .com network contains an Oracle database server named Certkiller -DB01. Certkiller -DB01 hosts a database named CK_Products that stores product information for Certkiller .com's e-Commerce Web site. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

Certkiller .com's e-Commerce Web application contains a page named Products.aspx that uses data source and data-bound server controls. Customers use the server controls to search for products. The Products.aspx page does not have an associated code-behind file. You need to convert the Products.aspx page to a user control so that its functionality can be reused on other pages.

What should you do? (Each correct answer presents part of the solution. Choose two.)

- A. Move the Products.aspx page to the App_Code folder.
- B. Create a code-behind file for the Products.aspx page.
- C. Rename the Products.aspx page to Products.ascx.
- D. Remove all server controls from the Products.aspx page.
- E. Replace the Page directive with a Control directive.

Answer: C, E

Explanation: There are two things that differentiate a user control from an ASP.NET page: the file extension and the directive. User controls have an .ascx file extension while a page has an .aspx file extension and a page has a Page directive while a user control has a Control directive.

Incorrect Answers:

- A: Only code files and files that generate code should be placed in the App_Code folder.
- B: User controls do not require a code-behind file.
- D: Removing the server controls would also remove the functionality that you want to reuse on other pages.

QUESTION 26

You work as a Web application developer at Certkiller .com. Certkiller .com uses Microsoft Visual Studio .NET 2005 as its Web application development platform. You are in the process of developing the Certkiller .com Web site. Users of the Web site will be able to register and log on to a personalized experience.

You are currently creating a custom user control with two TextBox controls and two Button controls that will be used on several Web Forms of the Certkiller .com Web site. You want the controls in the custom user control to be visible only when users are not logged on to the Web site. You also want to reduce the amount of effort in development and maintenance for the Web site.

What should you do? (Choose all that apply)

- A. You need to add a code segment to the Page_Load method of the Web Form that sets the visibility of the TextBox and Button controls where the control is added.

- B. You need to add the OnClick event handler for the Login button to the code that is used in the custom user control.
- C. You need to add a code segment to the Page_Load method of the custom user control that sets the visibility of the TextBox and Button controls.
- D. You need to add the OnClick event handler for the Login button to the code in the Web Form where the control is added.

Answer: B, C

Explanation: Rory Allen needs to use the Page_Load event of the user control in order to set the visibility of the individual controls based on whether the user is authenticated or not. He should add the same code to the OnClick event handler for the login button within the customer user control.

Incorrect Answers:

A, D: By using the events in the web form when the user control is added, will work but is not centralized and are difficult to maintain. By using the user controls events means that the change only has to be done once.

QUESTION 27

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You have developed a custom control named ProductsGrid and a custom control named DropDownGrid that will be used in the redevelopment of Certkiller .com's e-Commerce Web application. Both custom controls are contained in an assembly named ck_controls.dll. You need to add the two custom controls to the Visual Studio .NET toolbox. However, when you attempt to add the custom controls to the Visual Studio .NET toolbox, you can select the assembly that contains in the Choose Toolbox Item dialog box, only the DropDownGrid control appears in the select list. You need to add an attribute to the ProductsGrid control's class definition to that it is listed in the Choose Toolbox Item dialog box.

What code segment should you use?

- A. [ToolboxBitmap(typeof(ProductsGrid))]
- B. [ToolboxItem(true)]
- C. [ToolboxItemFilter("")]
- D. [ToolboxData("<{0}:ProductsGrid></{0}:ProductsGrid>")]

Answer: B

Explanation: The ToolboxItem attribute specifies whether the control should be visible or not. When it is set to True, the control is visible.

Incorrect Answers:

A: The TooboxBitmap attribute specifies the bitmap image that should be used as the

icon for the control. It will not ensure that the control can be added to the Visual Studio Toolbox.

C: The `ToolboxItemFilter` attribute specifies the filter Visual Studio should use to determine whether the control should be enabled or disabled for a specific designer. It will not ensure that the control can be added to the Visual Studio Toolbox.

D: The `ToolboxData` attribute specifies the markup that should be created on the page when the control is added to a page. It will not ensure that the control can be added to the Visual Studio Toolbox.

QUESTION 28

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer.

You have developed a custom control named CK_Grid and that will be used in the redevelopment of Certkiller .com's e-Commerce Web site. You want to add the CK_Grid control to the Visual Studio .NET toolbox so that it can be dragged onto a Web Forms page.

What should you do?

- A. Create the CK_Grid control as a Web Control Library.
Within the Visual Studio .NET toolbox, click Choose Items.
Then browse to CK_Grid.dll and select it.
- B. Create the CK_Grid control as a User Control.
Within the Visual Studio .NET toolbox, click Choose Items.
Then browse to CK_Grid.ascx and select it.
- C. Create the CK_Grid control as a Web Control Library.
Right-click Web Project, click Add Reference.
Then browse to CK_Grid.dll and select it.
- D. Create the CK_Grid control as a User Control.
Right-click Web Project, click Add Reference.
Then browse to CK_Grid.ascx and select it.

Answer: A

Explanation: The web server control must be compiled as a Web Control Library. This will create a DLL file. You must then add the DLL file to the Visual Studio .NET toolbox. To accomplish this, you must click on Choose Items in the Visual Studio .NET toolbox and select the DLL.

Incorrect Answers:

B: The web server control must be compiled as a Web Control Library, not as a User Control. User controls cannot be added to the Visual Studio .NET toolbox. Furthermore, adding a reference to the Web Project will not add the control to the Visual Studio .NET toolbox.

C: The web server control must be compiled as a Web Control Library. This will create a DLL file. You must then add the DLL file to the Visual Studio .NET toolbox. To

accomplish this, you must click on Choose Items in the Visual Studio .NET toolbox and select the DLL. Adding a reference to the Web Project will not add the control to the Visual Studio .NET toolbox.

D: The web server control must be compiled as a Web Control Library, not as a User Control. User controls cannot be added to the Visual Studio .NET toolbox.

QUESTION 29

You work as a Web application developer at Certkiller .com. Certkiller .com uses Microsoft Visual Studio .NET 2005 as its Web application development platform. You are in the process of developing the Certkiller .com Web site. Users of the Web site will be able to register and log on to a personalized experience. You have created a Web control with two labels and two associated text boxes that will be used on several Web Forms of the Certkiller .com Web site. You want to ensure that the Web control has both toolbox and visual designer support. What should you do?

- A. You need to add a Mobile Web User Control to your solution and then identify a class that inherits from MobileUserControl.
- B. You need to add a Web User Control to your solution and then define a class that inherits from UserControl.
- C. You need to add a Web Control Library project to your solution and then define a class that inherits from CompositeControl.
- D. You need to add a Windows Control Library project to your solution and then define a class that inherits from UserControl.

Answer: C

Explanation: She should create a Web Control Library project to inherit Visual Studio Designer support. She should then identify the web control class to inherit from CompositeControl to permit a single control to be created from a number of individual controls.

Incorrect Answers:

A; B: User or mobile controls could be used. However, it will integrate with the designer.

D: The Windows Control Library is a different kind of control which is not compatible with web forms.

QUESTION 30

You work as a Web application developer at Certkiller .com. Certkiller .com uses Microsoft Visual Studio .NET 2005 as its Web application development platform. Rory Allen is the lead Web application developer at Certkiller .com. You are a member of Rory Allen's team.

You develop a Web Form with a number of UI elements on it. After reviewing your code, Rory Allen suggests that certain UI elements that do not require server-side processing should be grouped into user controls. This will also allow you to programmatically add or remove the UI elements from the page.

You need to create a Web control to group the UI elements that do not require

server-side processing but you want to retain the UI elements' style properties.
What should you do? (Choose all that apply)

- A. You need to group the UI elements using `System.Web.UI.WebControls.Literal`.
- B. You need to group the UI elements using `System.Web.UI.TemplateControl`.
- C. You need to group the UI elements using `System.Web.UI.HtmlControls.HtmlControl`.
- D. You need to group the UI elements using `System.Web.UI.LiteralControl`.

Answer: D

Explanation: `LiteralControl` should be used to group together simple UI elements that does not need server side processing.

Incorrect Answers:

A: The `Literal` control is used to dynamically display the text.

B: `TemplateControl` is an abstract class that offers base functionality to the `Page` and `UserControl` classes.

C: `HtmlControl` is a server control. This will thus run on the server.

QUESTION 31

You work as a Web application developer at Certkiller .com. Certkiller .com uses Microsoft Visual Studio .NET 2005 as its Web application development platform.

You are in the process of redeveloping the Certkiller .com Web site.

You create a custom Web control named `CK_Interface` for the Certkiller .com Web site. You want the Web control to be added the Microsoft Visual Studio .NET toolbox so that it can be used in future projects.

What should you do? (Choose all that apply.)

- A. You need to browse to `CK_Interface.ascx` inside the Visual Studio .NET toolbox and select it.
- B. You need to browse to `CK_Interface.dll` inside the Visual Studio .NET toolbox and select it.
- C. You need to create the `CK_Interface` control as a Web Control Library.
- D. You need to create the `CK_Interface` control as a Web user control.

Answer: B, C

Explanation: Create the control as a Web Control Library to get designer support. This will mean that the control is created as a DLL which is easily added to the toolbox.

Incorrect Answers:

A; D: When you create the control as a user control it will not provide designer support.

QUESTION 32

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named

Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a custom control named ProductsGrid that will be used in the redevelopment of Certkiller .com's e-Commerce Web applications. The ProductsGrid control contains a TextBox control and a DropDownList control that allows for the editing of product descriptions. You need to derive the ProductsGrid class from the appropriate base class or interface.

What should you do? (Each correct answer represents part of the solution. Choose two.)

- A. Use the CompositeControl base class.
- B. Use the Control base class.
- C. Use the WebControl base class.
- D. Use the INamingContainer interface.

Answer: A, B

Explanation: You must derive the control from the Control class before it can be rendered on the page. You can derive the class from the CompositeControl base class, which is the base class that derives from WebControl and implements INamingContainer. The INamingContainer interface generates unique identifiers for the control's child controls.

Incorrect Answers:

C: If you derive the class from WebControl, you must also implement the INamingContainer interface, which generates unique identifiers for the control's child controls. You must also derive the control from the Control class before it can be rendered on the page but you can only choose two options!

D: The INamingContainer interface unique identifiers for the control's child controls and is used in conjunction with a base class such as WebControl. You must also derive the control from the Control class before it can be rendered on the page but you can only choose two options!

QUESTION 33

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a custom control named ProductsGrid that will be used in the redevelopment of Certkiller .com's e-Commerce Web applications. The ProductsGrid control contains a TextBox control and a DropDownList control that allows for the editing of product descriptions. The code for the ProductsGrid control is shown in the following exhibit.

```
[ParseChildren(True)] public class ProductsGrid : Control,
INamingContainer
{
```

```
private Desc _desc;
private ITemplate _descTemplate;
public Desc Desc
{
    get{return _desc;}
    set{_desc = value;}
}
[TemplateContainer(typeof(DescTemplateContainer))] public ITemplate
DescTemplate
{
    get{return _descTemplate;}
    set{_descTemplate = value;}
}
protected override void CreateChildControls()
{
    // TO DO
}
}
public class DescTemplateContainer : Control, INamingContainer
{
    private Desc _desc;
    public DescTemplateContainer(Desc desc)
    {
        _desc = desc;
    }
    public Desc Desc
    {
        get { return _desc;}
        set { _desc = value;}
    }
}
```

You need to ensure that the content specified in the DescTemplate() property is rendered by the ProductsGrid control. You need to override the CreateChildControls method to accomplish this.

What code segment should you use?

```
A. if(this.DescTemplate == null)
{
    this.Controls.Clear();
    DescTemplateContainer templateContainer = new DescTemplateContainer(_desc);
    this.Controls.Add(templateContainer);
}
B. if(this.DescTemplate == null)
{
    this.Controls.Clear();
    DescTemplateContainer templateContainer = new DescTemplateContainer(_desc);
```

```
this.DescTemplate.InstantiateIn(templateContainer);
this.Controls.Add(templateContainer);
}
C. if(this.DescTemplate != null)
{
this.Controls.Clear();
DescTemplateContainer templateContainer = new DescTemplateContainer(_desc);
this.Controls.Add(templateContainer);
}
D. if(this.DescTemplate != null)
{
this.Controls.Clear();
DescTemplateContainer templateContainer = new DescTemplateContainer(_desc);
this.DescTemplate.InstantiateIn(templateContainer);
this.Controls.Add(templateContainer);
}
```

Answer: D

Explanation: You must first determine that the DescTemplate property has returned content and then render the content. You can accomplish this by creating an instance of DescTemplateContainer that holds the content and then add the container to the ProductsGrid control for rendering.

Incorrect Answers:

A, B: If the DescTemplate property has returns a null reference then it has no content to render.

C: You need to call the InstantiateIn method of DescTemplate to place the template in the container.

QUESTION 34

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. Certkiller .com has a test lab that contains a Web server named Certkiller -SR21. Certkiller _SR21 is used to test applications before they are deployed to the production environment. All Web applications on Certkiller -SR21 must be hosted in Internet Information Services (IIS). You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer.

You have developed an ASP.NET inventory application named CK_Invtry that will be integrated into Certkiller .com's existing e-Commerce Web site. All source files for the CK_Invtry application are stored in the C:\ck_apps\CK_Invtry folder on TESTING-WS528. You want to copy the CK_Invtry application to Certkiller -SR21 by using the Copy Web Site tool. CK_Invtry must be hosted in IIS on Certkiller -SR21.

What should you do?

- A. Verify that Microsoft FrontPage Extensions are installed on Certkiller -SR21.
- B. Verify that Internet Information Services (IIS) 6.0 is installed on Certkiller -SR21.
- C. Verify the Windows Server 2003 is installed on Certkiller -SR21.
- D. Verify that you have Write access to the wwwroot folder on Certkiller -SR21.

Answer: A

Explanation: Microsoft FrontPage Extensions are used to copy a Web application to IIS. Therefore you should ensure that Microsoft FrontPage Extensions is installed on the test server.

Incorrect Answers:

B, C: IIS 6.0 and Windows Server 2003 are not required to allow you to copy a Web application to IIS. Microsoft FrontPage Extensions is required.

D: You do not require Write access to the wwwroot folder as Microsoft FrontPage Extensions will manage the security aspects of the connection. You only require FrontPage Extensions.

QUESTION 35

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. Certkiller .com has a test lab that contains a Web server named Certkiller -SR21. Certkiller _SR21 is used to test applications before they are deployed to the production environment. All Web applications on Certkiller -SR21 must be hosted in Internet Information Services (IIS). You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer.

You have developed an ASP.NET inventory application named CK_Invtry that will be integrated into Certkiller .com's existing e-Commerce Web site. The CK_Invtry application contains declarative .aspx pages and code-behind files. You want to deploy the CK_Invtry application to Certkiller -SR21. You need to ensure that no human-readable code exists in the CK_Invtry application once it has been deployed to Certkiller -SR21.

What should you do?

- A. Use the Publish Web Site tool to publish the CK_Invtry application to Certkiller -SR21 and select the option that allows the precompiled site to be updatable.
- B. Use the Copy Web Site tool to copy the CK_Invtry application to Certkiller -SR21 and select the option copy only the files required to run the application.
- C. Use the Publish Web Site tool to publish the CK_Invtry application to Certkiller -SR21 and deselect the option that allows the precompiled site to be updatable.
- D. Build the CK_Invtry application in Visual Studio 2005 and use the XCOPY command to copy only the files in the bin folder to Certkiller -SR21.

Answer: C

Explanation: You should publish the application to the test server and specify that the precompiled site must not be updatable. This requires that you clear the option to allow the precompiled site to be updatable. This will ensure that declarative .aspx pages are not human-readable.

Incorrect Answers:

A: You should publish the application to the test server and specify that the precompiled site must not be updatable. This requires that you clear the option to allow the precompiled site to be updatable. This will ensure that declarative .aspx pages are not human-readable.

B, D: The Copy Web Site tool and the XCOPY command do not allow you to precompile declarative .aspx pages. Declarative pages that are not precompiled are human-readable.

QUESTION 36

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a chat forum that will be integrated into Certkiller .com's existing e-Commerce Web application. You create a method that will authenticate users. The code for the authentication method is shown in the following exhibit.

```
protected void Authenticate(String uName, String pwd)
```

```
{  
    //Code ommitted for brevity  
}
```

You also create a class definition as shown in the following exhibit.

```
private class LoginFailureEvent : WebAuthenticationFailureEvent  
{  
    public LoginFailureEvent(String message, Object eventSource, Integer  
        eventCode,  
        String uName);  
    public LoginFailureEvent( ) : base(message, eventSource, eventCode,  
        uName)  
    {}  
}
```

You enable health monitoring in the Web.config file and use the default health monitor provider. You must now write code to log authentication errors to the provider. Your code must make provision for a different default provider in the production environment.

What code segment should you use?

A. `SecurityException ex = new SecurityException("Authentication failed");
throw ex;`

B. `WebAuthenticationFailureAuditEvent evt = new
WebAuthenticationFailureAuditEvent("Authentication failed", null,
WebEventCodes.AuditMembershipAuthenticationFailure, uName);`


```
tevt.Raise();  
C. MembershipPasswordException ex = new  
MembershipPasswordException("Authentication failed");  
throw ex;  
D. EventLog eLog = new EventLog();  
eLog.WriteEntry("Authentication failed", EventLogEntryType.FailureAudit,  
WebEventCodes.AuditMembershipAuthenticationFailure, uName);
```

Answer: B

Explanation: This code uses the ASP.NET 2.0 Health Monitoring API to log authentication failure events. It creates a `WebAuthenticationFailureAuditEvent` and calls its `Raise` method. It also uses the health monitoring configuration to determine which provider should receive the event.

Incorrect Answers:

A: This code raises an instance of the `SecurityException` but it does not deliver the error message to the provider.

C: This code raises an instance of the `MembershipPasswordException` but it does not deliver the error message to the provider.

D: This code is tied to the Microsoft Windows event log and does not allow you to easily change providers.

QUESTION 37

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You have developed a Web application that will be integrated into Certkiller .com's existing e-Commerce Web application. The Web application contains a performance counter that records the number of requests to the Products table in the CK_Products database.

The code for the counter is shown in the following exhibit.

```
PerformanceCounter cntr = new PerformanceCounter("Table Requests",  
"Products", false);
```

You need to increase the counter by one.

What code segment should you use?

- A. `cntr.NextSample();`
- B. `cntr.RawValue = cntr.NextSame().RawValue;`
- C. `cntr.NextValue();`
- D. `cntr.Increment();`

Answer: D

Explanation: The `Increment` method of the `PerformanceCounter` class is used to

increase the counter by one.

Incorrect Answers:

A: The NextSample method of the PerformanceCounter class returns the next sample of data for the counter. It does not increase the counter by one.

B: This code does not increase the counter by one.

C: The NextValue method of the PerformanceCounter class returns the next value for the counter. It does not increase the counter by one.

QUESTION 38

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are debugging a Web application that has been integrated into the live Certkiller .com e-Commerce Web site. The Web application contains an order processing page named process.aspx. Certkiller .com developers added several Trace.Write and Trace.Warn statements on the process.aspx page.

You need to configure the Web application to display the trace messages but you must ensure that Certkiller .com's customers are not able to view the trace messages. What should you do?

A. Add the following element to the Web.config file:

```
<trace enable="true" pageOutput="false" localOnly="false" />
```

B. Add the following Page directive to the process.aspx page:

```
<% @ Page Trace="true" TraceMode="SortByCategory" %>
```

C. Add the following Page directive to the process.aspx page:

```
<% @ Page Trace="true" TraceMode="SortByTime" %>
```

D. Add the following element to the Web.config file:

```
<trace enable="false" pageOutput="true" localOnly="false" />
```

Answer: A

Explanation: To enable tracing while preventing trace messages from being displayed on the page, you must enable tracing in the Web.config file and set the pageOutput and localOnly properties to false. This will save trace messages to the Trace.axd file in the Web application's root directory.

Incorrect Answers:

B, D: This Page directive enable tracing at the page level. Tracing will be displayed on the page.

D: You need to enable tracing in the Web.config file in the Web.config file, not disable it.

QUESTION 39

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You want to create a PowerTools.aspx page that displays all power tools in the CK_Products database. You use a SqlCommand instance to execute the sp_GetProductsByCategory stored procedure to return XML data from the Products table in the CK_Products database and load the data into an XmlDocument instance.

The code for the stored procedure is shown in the following exhibit:

```
String conString = "database=CK_Products;server= Certkiller -DB01;Integrated Security=SSPI";
```

```
SqlConnection con = new SqlConnection(conString);  
con.Open();
```

```
SqlCommand com = new SqlCommand("sp_GetProductsByCategoryXml", con);
```

```
XmlReader read = com.ExecuteXmlReader();
```

```
XmlDocument doc = new XmlDocument();
```

```
doc.Load(read);
```

You want to cache the XML data until the data in the in the CK_Products database changes.

What code segment should you use?

A. `CacheDependency dep = new SqlCacheDependency("CK_Products", "Products");
if(Cache["Data"] != null)`

```
{  
    Cache.Add("Data", doc, dep, Cache.NoAbsoluteExpiration,  
        Cache.NoSlidingExpiration,  
        CacheItemPriority.Default, null);  
}
```

B. `CacheDependency dep = new SqlCacheDependency("CK_Products", "Products");
if(Cache["Data"] == null)`

```
{  
    Cache.Add("Data", doc, dep, Cache.NoAbsoluteExpiration,  
        Cache.NoSlidingExpiration,  
        CacheItemPriority.Default, null);  
}
```

C. `CacheDependency dep = new SqlCacheDependency("CK_Products", "Products");
if(Cache["Data"] == null)`

```
{  
    Cache.Add("Data", read, dep, Cache.NoAbsoluteExpiration,  
        Cache.NoSlidingExpiration,  
        CacheItemPriority.Default, null);  
}
```

D. `CacheDependency dep = new SqlCacheDependency("CK_Products", "Products");
if(Cache["Data"] != null)`

```
{  
    Cache.Add("Data", read, dep, Cache.NoAbsoluteExpiration,
```

```
Cache.NoSlidingExpiration,  
CacheItemPriority.Default, null);  
}
```

Answer: B

Explanation: This code creates a SqlCacheDependency on the Products table in the CK_Products database that invalidates the cache whenever data in the Products table has changed and updates the XmlDocument with the data.

Incorrect Answers:

A: This code does not invalidate the cache and will update the XmlDocument when no data changes occur at the database level.

C: This code invalidates the cache but it caches the XmlReader and not the XmlDocument.

D: This code does not invalidate the cache. It also caches the XmlReader and not the XmlDocument.

QUESTION 40

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are redeveloping the current ASP.NET 1.1 Certkiller .com Web application to take advantage of the new features in ASP.NET 2.0. The Web application contains a page named layout.aspx that you want to change to a master page.

What should you do?

- A. Set the MasterPageFile attribute of the Page directive to layout.aspx.
- B. Replace the Page directive with a Master directive.
- C. Replace the contents of the layout.aspx page with ContentPlaceHolder controls.
- D. Rename the layout.aspx page to layout.master.

Answer: B, D

Explanation: There are two things that differentiate a master page from an ASP.NET page: the file extension and the directive. Master pages have a .master file extension while a page has an .aspx file extension and a page has a Page directive while a master page has a Master directive.

Incorrect Answers:

A: The MasterPageFile attribute of the Page directive specifies the master page that the content page should merge into. It does not change an .aspx page to a master page.

C: The content that must be added from content pages requires ContentPlaceHolder controls. Any content on the layout page that must appear on all pages should not be replaced by ContentPlaceHolder controls.

QUESTION 41

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application that makes use of a master page. The master page does not contain nested master pages. You want the header section of the master page to be replaced by page-specific declarative content.

What should you do?

- A. Add a WebPart control for the header section on the master page.
- B. Add a Content control for the header section on the master page.
- C. Add a ContentPlaceHolder control for the header section on the master page.
- D. Add a UserControl control for the header section on the master page.

Answer: C

Explanation: The content that must be added from content pages requires ContentPlaceHolder controls.

Incorrect Answers:

A, D: WebPart and UserControl controls cannot be replaced by declarative content.

B: Content controls are added to content pages, not master pages.

QUESTION 42

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application that makes use of a master page. The master page does not contain nested master pages. You want the header section of the master page to be replaced declaratively and programmatically by page-specific content. You need to create the markup for the header section.

What code segment should you use?

- A. `<div ID="_header">`
`<asp:ContentPalceHolder ID="_headerContent" Runat="Server">`
Certkiller .com
`</asp:ContentPalceHolder>`
`</div>`
- B. `<div ID="_header" Runat="Server">`
Certkiller .com
`</div>`
- C. `<div ID="_header">`
`<asp:Content ID="_headerContent" Runat="Server">`

```
Certkiller .com
</asp:Content>
</div>
D. <div ID="_header">
<asp:Content ID="_headerContent">
Certkiller .com
</asp:Content>
</div>
```

Answer: A

Explanation: The content that must be added from content pages requires ContentPlaceHolder controls. To be able to replace the ContentPlaceHolder programmatically, you must set the Runat attribute to Server.

Incorrect Answers:

B: The content that must be added from content pages requires ContentPlaceHolder controls.

C, D: The content that must be added from content pages requires ContentPlaceHolder controls Content controls are added to content pages, not master pages.

QUESTION 43

You work as an application developer at Certkiller .com. Certkiller .com recently switched their application development platform to Microsoft Visual Studio .NET 2005.

You are in the process of redeveloping the Certkiller .com Web application. You want to make use of Visual Studio .NET 2005's nested master pages feature in the redesign of the Certkiller .com Web application. You create a parent master page that consists of a global header and a global footer for the Certkiller .com Web application.

You use the following code segment to add a ContentPlaceHolder to the master page:

```
<asp:ContentPlaceHolder ID="ckbody" runat="server" />
```

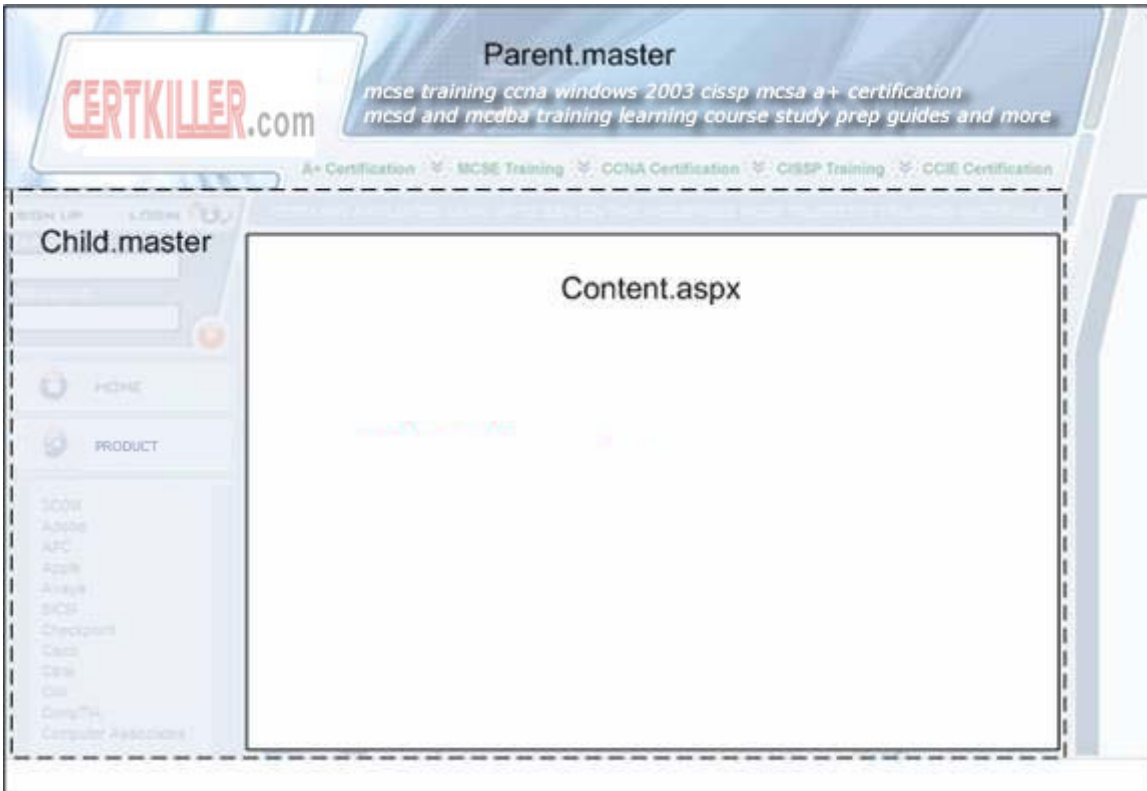
You then use the following code segment to create a content page named Content.aspx:

```
<% @ Page Language="C#" MasterPageFile="~/parent.master"%>
<asp:Content ID="Content1" ContentPlaceHolderID="content"
Runat="Server">
```

Content goes here.

```
</asp:Content>
```

You now need to create a child master page that will hold the menu elements for each page. You must ensure that users are able to see the header, the footer, the menu and the content when they view the page as shown in the exhibit.



Which code segment should you use?

A. `<% @ Master Language="C#" MasterPageFile="~/parent.master"%>`
`<asp:Content runat="server" ContentPlaceHolderID="content">`
`<asp:contentplaceholder id="ckbody" runat="server">`

Menu element

`</asp:contentplaceholder>`

`</asp:Content>`

B. `<% @ Master Language="C#" MasterPageFile="~/parent.master"%>`
`<asp:Content runat="server" ContentPlaceHolderID="ckbody">`
`<asp:contentplaceholder id="content" runat="server">`

Menu

`</asp:contentplaceholder>`

`</asp:Content>`

C. `<% @ Master Language="C#" MasterPageFile="~/parent.master"%>`
`<asp:Content runat="server" ContentPlaceHolderID="ckbody">`

Menu element 1

`<asp:contentplaceholder id="content" runat="server">`

`</asp:contentplaceholder>`

`</asp:Content>`

D. `<% @ Master Language="C#" MasterPageFile="~/parent.master"%>`
`<asp:Content runat="server" ContentPlaceHolderID="content">`

Menu element 1

`<asp:contentplaceholder id="ckbody" runat="server">`

`</asp:contentplaceholder>`

</asp:Content>

Answer: C

QUESTION 44

You work as a Web developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains a Web server named Certkiller -SR03.

Certkiller -SR03 hosts the Certkiller .com intranet that consists of several Web sites. You are in the process of redesigning the Web sites to make their pages and controls consistent in design.

You want to implement the style changes to all the Web sites on Certkiller -SR03 without having to edit the individual pages on every Web site.

What should you do? (Choose all that apply.)

- A. You need to assign a theme by setting the <% @ Page Theme="..." %> directive to the name of the application theme.
- B. You need to assign a theme by specifying the <pages theme="..." /> section in the Web.config file.
- C. You need to place a theme in the App_Themes directory. This should be done under the application root directory.
- D. You need to place a theme under an ASP.NETClientFiles folder under the ASP.NET installation directory.

Answer: B, C

Explanation: The theme should be placed in the App_themes folder. Then it can be specified centrally in the web.config file.

Incorrect Answers:

A: It is possible to set the theme on every page using the Page directive. However, it is more convenient and maintainable to set the theme centrally in the web.config file.

D: The App_themes folder is only reserved for storing themes.

QUESTION 45

You work as an application developer at Certkiller .com. The Certkiller .com Web site makes use of custom Themes based on the Web site user's location. The user's location is set as soon as a user logs on to the web site. The location Theme name is stored in a variable named CK_Themes.

Certkiller .com plans to make its' Web site available in Spanish, Portuguese and French. You need to ensure that the Certkiller .com web site is able to support extra Themes to support users in new locations. You need to use the CK_Themes variable to dynamically set the Web site's Theme.

What should you do?

- A. You should add the code segment Page.Theme = CK_Theme to the Load event of every page on the Web site.

- B.
You should add the code segment `<%@ Page Theme="CK_Theme" ... %>` to the markup source of every page on the Web site.
- C. You should add the code segment `<pages theme="CK_Theme" />` to the Web site's configuration file.
- D. You should add the code segment `Page.Theme = CK_Theme` to the PreInit event of every page on the Web site.

Answer: D

Explanation: It is essential that the theme is dynamically set for every page. The PreInit event occurs early enough in the lifecycle of a page in order to manipulate the theme.

Incorrect Answers:

- A: The Load event takes place too late in the lifecycle of a page.
- B, C: You need to use a declarative approach. This is not suitable since the theme has to be set dynamically depending upon the value of a variable.

QUESTION 46

You work as a Web application developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You are in the process of developing a new Web application for the Certkiller .com Web site.

You want to configure the Web application to store user active themes in user profile objects. You want the users' preferred themes to be applied the as soon as they log on to the Certkiller .com Web site.

What should you do?

- A. You need to set the Theme property of the Page object based on the user profile in the PreLoad event handler.
- B. You need to set the Theme property of the Page object based on the user profile in the InitComplete event handler.
- C. You need to set the Theme property of the Page object based on the user profile in the PreInit event handler.
- D. You need to set the Theme property of the Page object based on the user profile in the OnLoad event handler.

Answer: C

Explanation: You should use the PreInit event to set the theme.

Incorrect Answers:

- A, B, D: The other events happen too late in the lifecycle of the page.

QUESTION 47

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application that that implements themes. You create a theme named BasicTheme that contains two skin files named default.skin and alt.skin. The default.skin file represents the default skin file for all controls in the Web application. You want to associate Button controls on the Web application's default.aspx page with a non-default skin.

What should you do?

A. Associate the alt.skin file with a new theme named altTheme.

On the default.aspx page, add a SkinID property with the value "alt.skin" to the definition of each Button control.

B. Associate the alt.skin file with a new theme named altTheme.

On the default.aspx page, add a SkinID property with the value "alt" to the definition of each Button control.

C. Add a SkinID property with the value "alt" to the Button control's definition in alt.skin.

On the default.aspx page, add a SkinID property with the value "alt" to the definition of each Button control.

D. Add a SkinID property with the value "alt" to the Button control's definition in default.skin.

On the default.aspx page, add a SkinID property with the value "alt" to the definition of each Button control.

Answer: C

Explanation: Both the Button control definition in the non-default skin file on the buttons on the page must have a SkinID property with an identical value.

Incorrect Answers:

A, B: Button control definition in the non-default skin file on the buttons on the page must have a SkinID property with an identical value.

D: The Button control definition in the non-default skin file on the buttons on the page must have a SkinID property with an identical value.

QUESTION 48

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application that enables the administration and management of the existing Certkiller .com Web site. The Web application has a page named subcategories.aspx that makes use of WebParts. The code for the WebPart is shown in the following exhibit.

```
<asp:WebPartZone ID="_webPartZone" Runat="Server">
```

```
<ZoneTemplate>
<custom:CategoryWebPart ID="_category" Runat="Server" />
<custom:SubcategoryWebPart ID="_subcat" Runat="Server" />
</ZoneTemplate>
</asp:WebPartZone>
```

The CategoryWebPart control displays a list of product categories from the CK_Products database. The administrator can either select categories from a DropDownList or manually enter a category in a TextBox. The SubcategoryWebPart control displays the subcategories that belong to the category specified in the CategoryWebPart control. You modify the Web.config file to allow the SubcategoryWebPart control to use the category entered or selected in the CategoryWebPart control. You now need to add code to the subcategories.aspx page that connects the two WebPart controls every time the page is loaded. What code segment should you use?

- A. `<asp:WebPartManager ID="_webPartManager" Runat="Server">`
`<StaticConnections>`
`<asp:WebPartConnection ID="_webPartCon" ProviderID="_subcat"`
`ConsumerID="_category" />`
`</StaticConnections>`
`</asp:WebPartManager>`
- B. `<asp:WebPartManager ID="_webPartManager" Runat="Server">`
`<StaticConnections>`
`<asp:WebPartConnection ID="_webPartCon" ProviderID="_category"`
`ConsumerID="_subcat" />`
`</StaticConnections>`
`</asp:WebPartManager>`
- C. `<asp:ConnectionsZone ID="_conZone" Runat="Server">`
`<custom:CategoryWebPart ID="_category" Runat="Server" />`
`<custom:SubcategoryWebPart ID="_subcat" Runat="Server" />`
`</asp:ConnectionsZone>`
- D. `<asp:ConnectionsZone ID="_categoryCon" Runat="Server">`
`<custom:CategoryWebPart ID="_category" Runat="Server" />`
`</asp:ConnectionsZone>`
`<asp:ConnectionsZone ID="_subcatCon" Runat="Server">`
`<custom:SubcategoryWebPart ID="_subcat" Runat="Server" />`
`</asp:ConnectionsZone>`

Answer: B

Explanation:

The WebPartManager control is used to connect two WebPart controls. The provider WebPart control and the consumer WebPart control must be specified in the StaticConnections element of the WebPartManager control. In this instance, the provider is the _category WebPart control and the consumer is the _subcategory WebPart.

Incorrect Answers:

A: In this instance, the provider is the _category WebPart control and the consumer is the _subcategory WebPart.

C, D: The ConnectionsZones control allows users to configure connections between WebPart controls.

QUESTION 49

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application that enables the administration and management of the existing Certkiller .com Web site. The Web application has a page named subcategories.aspx that contains a WebPart control named _productsWebPart. The _productsWebPart WebPart control has a property named _category of type String. You apply the WebBrowsable attribute to the _category property. You also add an EditorZone control to the subcategories.aspx page. The code for the EditorZone control is shown in the following exhibit.

```
<asp:EditorZone ID="_editorZone" Runat="Server">
```

```
<ZoneTemplate>
```

```
</ZoneTemplate>
```

```
</asp:EditorZone>
```

You must add a control to the ZoneTemplate element of the EditorZone control to allow users to edit the _category property.

What control should you add?

A. A PropertyGridEditorPart control.

B. A WebPartManager control.

C. A TextBox control.

D. A ConnectionsZone control.

Answer: A

Explanation: The PropertyGridEditorPart control allows users to edit a WebPart control's property that has the WebBrowsable attribute.

Incorrect Answers:

B: The WebPartManager control is used to connect two WebPart controls. It does not allow a WebPart control's properties.

C: A TextBox control cannot be added to a ZoneTemplate element.

D: The ConnectionsZones control allows users to configure connections between WebPart controls. It does not allow a WebPart control's properties.

QUESTION 50

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application that enables the administration and management of the existing Certkiller .com Web site. The Web application has a page named subcategories.aspx that contains several WebPart controls.

You must add a zone control to each WebPart control so that users can rearrange the WebParts on the o edit the subcategories.aspx page.

What control should you add?

- A. A CatalogZone control.
- B. A WebPartZone control.
- C. An EditorZone control.
- D. A ConnectionsZone control.

Answer: B

Explanation: The WebPartZone control provides a user interface that allows users to move WebPart controls within and between WebPartZone controls.

Incorrect Answers:

A: The CatalogZone control allows users to add available WebPart controls to the page. It does not allow a WebPart controls to be rearranged.

C: An EditorZone control allows users to edit and personalized WebPart control. It does not allow a WebPart controls to be rearranged.

D: The ConnectionsZones control allows users to configure connections between WebPart controls so that they can interact with each other. It does not allow a WebPart controls to be rearranged.

QUESTION 51

You work as a Microsoft ASP.NET developer at Certkiller .com. The Certkiller .com network contains an Oracle database server named Certkiller -DB01.

Certkiller -DB01 hosts a database named CK_WebUsers. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application for Certkiller .com's extranet Web site. The extranet Web site is accessed by Certkiller .com users as well as some of Certkiller .com's suppliers and affiliates. All users that must access the Web application have their credentials stored in the CK_WebUsers database. You want to implement a login page that authenticates users against the CK_WebUsers database.

What should you do?

- A. Set the Authentication Mode in the Web.config file to Passport.
- B. Set the Authentication Mode in the Web.config file to None.

- C. Set the Authentication Mode in the Web.config file to Windows.
- D. Set the Authentication Mode in the Web.config file to Forms.

Answer: D

Explanation: The Forms Authentication allows you to use a custom login page to authenticate users against any data store.

Incorrect Answers:

- A: Passport authentication requires that users have a Microsoft passport as it is used to authenticate users against the Microsoft Passport system.
- B: Setting the Authentication mode to None disables authentication.
- C: Windows Authentication requires that users have a Microsoft Windows domain user account in Active Directory. The domain user account is passed through IIS to the Web application.

QUESTION 52

You work as a Microsoft ASP.NET developer at Certkiller .com. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01. Certkiller -DB01 hosts a database named CK_WebUsers. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application for Certkiller .com's intranet Web site. You want to implement a login page that authenticates users against their Active Directory user accounts. However, not all pages will require authentication. You also want users to be able to personalize the Web pages and save their personalization settings to the CK_WebUsers database. You need to configure the Web application's Web.config file to meet these requirements.

What code segment should you use?

- A. `<AnonymousIdentification Enabled="True" />`
`<Authentication Mode="Windows" />`
- B. `<AnonymousIdentification Enabled="False" />`
`<Authentication Mode="Forms" />`
- C. `<AnonymousIdentification Enabled="True" />`
`<Authentication Mode="Forms" />`
- D. `<AnonymousIdentification Enabled="False" />`
`<Authentication Mode="Windows" />`

Answer: C

Explanation: You should implement Forms Authentication as Forms Authentication uses a login page to authenticate users against their Microsoft Windows domain user accounts in Active Directory. You also need to enable anonymous identification as it allows ASP.NET to remember users without requiring them to be

authenticated. This allows you to save and retrieve personalization settings for the users.

Incorrect Answers:

A: Windows Authentication requires that users have a Microsoft Windows domain user account in Active Directory. However, Windows Authentication does not make use of a login page. Instead, the domain user account is passed through IIS to the Web application.

B: You need to enable anonymous identification as it allows ASP.NET to remember users without requiring them to be authenticated. This allows you to save and retrieve personalization settings for the users.

D: Windows Authentication requires that users have a Microsoft Windows domain user account in Active Directory. However, Windows Authentication does not make use of a login page. Instead, the domain user account is passed through IIS to the Web application. Furthermore, you also need to enable anonymous identification as it allows ASP.NET to remember users without requiring them to be authenticated. This allows you to save and retrieve personalization settings for the users.

QUESTION 53

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You have developed a Web application for Certkiller .com's existing Web site. The Web application implements role-based security to allow for the administration and maintenance of the Certkiller .com Web site. It allows certain users to administer the Web site, including the databases used by the Web site, while others are allowed to maintain the Web site by adding and editing product information. Only Web administrators should be able to manually add users to the Web application.

You discover that a user named Rory Allen has added a user account to the Web site. You also suspect that he has added his user account to various roles. You want to retrieve a list of the role of which the roryallen user account is a member.

What code segment should you use?

- A. `string[] roles = Roles.GetRolesForUser("roryallen");`
- B. `string[] roles = Roles.FindUsersInRole("roryallen");`
- C. `string[] roles = Roles.FindUsersInRole("", "roryallen");`
- D. `string[] roles = Roles.GetAllRoles();`

Answer: A

Explanation: The GetRolesForUser method of Roles returns a list of roles of which the specified user is a member.

Incorrect Answers:

B: The FindUsersInRole method requires two parameters - the role and the user account.

C: The FindUsersInRole method requires two parameters - the role and the user account.

This code will return a list of users named roryallen in an empty role.
D: The GetAllRoles method returns a list of roles supported by the role provider.

QUESTION 54

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You have developed and deployed a Web application for Certkiller .com's intranet Web site. The Web application has been deployed on a Web server named Certkiller -SR34. Internet Information Services (IIS) 6.0 is installed on Certkiller -SR34. The Web application accesses files that are secured by NTFS permissions and are located in a folder named Projects.

Several Certkiller .com users that have permissions to the files and are able to access the files through the corporate network, report that they cannot access the files through the Web application. You open the Web.config file for the Web application and notice the elements shown in the following exhibit.

```
<identity impersonate="true"/>
```

```
<authentication mode="Windows"/>
```

You need to configure IIS to allow user access to the files through the Web application.

What should you do?

- A. Disable anonymous access.
- B. Change Authentication Mode to None.
- C. Change Authentication Mode to Forms.
- D. Change Authentication Mode to Passport.

Answer: A

Explanation: Identity Impersonation allows IIS to run the Web application under the credentials of the identity authenticated by IIS. By default, this is the IUSR_PRODUCTION account. IUSR_PRODUCTION probably does not have the required NTFS permissions to the files. When anonymous access is disabled, IIS is forced to authenticate the user accessing the Web application.

Incorrect Answers:

A: Passport authentication requires that users have a Microsoft passport as it is used to authenticate users against the Microsoft Passport system. However, NTFS permissions makes use of Active Directory user accounts.

B: Setting the Authentication mode to None disables authentication. You need to have IIS authenticate users against Active Directory. You should therefore not change Windows authentication.

C: The Forms Authentication allows you to use a custom login page to authenticate users against any data store. This will require a custom login page.

QUESTION 55

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application for Certkiller .com's existing Web site. The Web application implements role-based security to allow for the administration and maintenance of the Certkiller .com Web site. It allows members of the Admins role to administer the Web site, including the databases used by the Web site, while allowing members of the Support role to maintain the Web site by adding and editing product information. Only members of the Admins role should have access to confidential user information.

What code segment should you use?

A. if (User.Identity.Name != "Support")

Return;

//Show user info

B. if (User.IsInRole("Support"))

Return;

//Show user info

C. if (User.Identity.Name == "Admins")

Return;

//Show user info

D. if (User.IsInRole("Admins"))

Return;

//Show user info

Answer: D

Explanation: You must determine if the user is a member of the Admins role by calling the IsInRole method and then return the requested information only if the user is a member of the Admins role.

Incorrect Answers:

A, C: This code returns name of the identity that is attached to the current HTTP context. It does not determine whether data should be returned or not.

B: This code determines if the user is a member of the Support role by calling the IsInRole method and then return the requested information if the user is a member of the Support role. Members of support must not have access to user information.

QUESTION 56

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application for Certkiller .com's existing Web site. The Web application allows for the administration and maintenance of the Certkiller .com Web site. The Web application contains a users.aspx page that allows administrators to manually create user accounts for the Certkiller .com Web site.

You add a CreateUserWizard control to the users.aspx page and you do not alter any of the control's properties.

You must add input controls to the wizard steps. However, the input controls that allow administrators to enter user information must be inserted before the Security Question and Security Answer input controls.

What should you do?

- A. Add a StartNavigationTemplate element to the CreateUserWizard control and add the input controls to the StartNavigationTemplate element.
- B. Add a CustomNavigationTemplate element to the CreateUserWizardStep control and add the input controls to the CustomNavigationTemplate element.
- C. Add a ContentTemplate element to the CreateUserWizardStep control and add the input controls to the ContentTemplate element.
- D. Add a StepNavigationTemplate element to the CreateUserWizard control and add the input controls to the StepNavigationTemplate element.

Answer: C

Explanation: The CreateUserWizardStep control is a part of the CreateUserWizard control that is added by default. The CreateUserWizardStep control has a ContentTemplate element to which you can add and remove input controls from the wizard.

Incorrect Answers:

A: The StartNavigationTemplate element to the CreateUserWizard control specifies the content that appears in the navigation area of each wizard page other than the start page and the completion page. It does not allow you to add or remove input controls from the wizard.

B: The CustomNavigationTemplate element to the CreateUserWizardStep control specifies the content that appears in the navigation area of the start page. It does not allow you to add or remove input controls from the wizard.

D: The StepNavigationTemplate element to the CreateUserWizard control specifies the content that appears in the navigation area of each wizard page other than the start page and the completion page. It does not allow you to add or remove input controls from the wizard.

QUESTION 57

Andy Reid is employed as an application developer at Certkiller .com. He receives instruction from the CIO to create a Web Form that will enable the users to create a new account.

Andy Reid adds a CreateUserWizard control by using the following code segment:

```
<asp:CreateUserWizard id="CreateUser" runat="server"/>
```

Andy Reid needs to make sure that e-mail messages are sent to users automatically

as soon as they finished with creating their accounts. This e-mail message needs to be sent via the wizard. He adds a valid <smtp>element to the Web.config file. Andy Reid now needs to add the appropriate code to the Page_Load event. What should Andy Reid do?

- A. Add the code segment `SmtpMail.SmtpServer = "mail. Certkiller .com"` to the Page_Load event.
- B. Add the code segment `CreateUser.MailDefinition.From = registration@ Certkiller .com` to the Page_Load event.
- C. Add the code segment `CreateUser.Email = user@ Certkiller .com` to the Page_Load event.
- D. Add the code segment `CreateUser.RequireEmail = True` to the Page_Load event.

Answer: B

Explanation: In order to enable the wizard to send e-mail messages automatically Andy Reid needs to set the MailDefinition.From the properties of the wizard.

Incorrect Answers:

- A: The question indicates that information of the SMTP server have already been provided in the web.config file.
- C: Andy Reid needs to set the email address of the user to user@ Certkiller .com. This is evidently incorrect because the purpose is to email the specific user that has been created.
- D: RequireEmail property to True will have no affect since it is the default value anyway. An exception will be made by the wizard if the RequireEmail property is true and an email for the user is not given.

QUESTION 58

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528. You have been instructed to develop a Web application that will support mobile devices. You need to create a project for the Web application in Visual Studio .NET 2005. You must be able to test and debug the Web application by using Microsoft Device Emulator 1.0. What should you do?

- A. Create an ASP.NET Web Site project and choose File System as the location for the project.
- B. Create an ASP.NET Web Site project and choose HTTP as the location for the project.
- C. Create a Smart Device Application project and add mobile ASP.NET pages to the project.
- D. Create a Smart Device Console Application project and add mobile ASP.NET pages to the project.

Answer: A

Explanation: Microsoft Device Emulator 1.0 can only connect to ASP.NET Web applications that are hosted in Internet Information Services (IIS). Therefore you must create an ASP.NET Web Site project and choose HTTP as the location for the project.

Incorrect Answers:

B: Microsoft Device Emulator 1.0 can only connect to ASP.NET Web applications that are hosted in IIS. Projects that are located on File System are not hosted in IIS. You should choose HTTP as the location. HTTP projects are hosted in IIS.

C, D: Smart Device Application and Smart Device Console Application projects only support Windows-based applications. They do not support Web-based applications.

QUESTION 59

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer.

You are developing a Web Form named default.aspx that is part of a mobile Web application intended to render the Certkiller .com Web site to a variety of mobile device. You want the default.aspx page of the Web application to adaptively render content designed for the type of the device that is requesting the page.

What should you do?

- A. Add custom controls that emit WML to the default.aspx page.
- B. Add Mobile controls to the default.aspx page.
- C. Add a Mobile Form to the default.aspx page.
- D. Add Web server controls to the default.aspx page.

Answer: A

Explanation: The wireless markup language (WML) and the XHTML adapter classes can be used to render ASP.NET pages for mobile devices.

Incorrect Answers:

B: Mobile controls can only be added to Mobile Forms. They cannot be added to Web Forms.

C: ASP.NET pages only support one form per page. This can either be a Web Form or a Mobile Form but not both.

D: Web server controls do not render content adaptively.

QUESTION 60

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application that must support a variety of browser. Your analysis indicates that the majority of users that will access the Web application will use Microsoft Internet Explorer 6.0 and Microsoft Pocket Internet Explorer 4.0.

You are creating the header for the Web application. The header will display the Certkiller .com logo from a file named ck_logo.jpg. You want the logo to appear appropriately on all browsers.

What code segment should you use?

- A. `<asp:Image ID="ckLogo" Runat="server" IE:ImageUrl="Images/ck_logo.jpg" PIE4:ImageUrl="Images/Small/ck_logo.jpg" />`
- B. `<asp:Image ID="ckLogo" Runat="server" ImageUrl="Images/ck_logo.jpg" PIE4:ImageUrl="Images/Small/ck_logo.jpg" />`
- C. `<asp:Image ID="ckLogo" Runat="server" ImageUrl="Images/ck_logo.jpg" />`
`<asp:Image ID="small_ckLogo" Runat="server"`
`PIE4:ImageUrl="Images/Small/ck_logo.jpg" />`
- D. `<asp:Image ID="ckLogo" Runat="server" IE:ImageUrl="Images/ck_logo.jpg" />`
`<asp:Image ID="small_ckLogo" Runat="server" ImageUrl="Images/Small/ck_logo.jpg"`
`/>`

Answer: B

Explanation: You can use adaptive rendering to modify a server control. This allows different browser to render the control differently. To use adaptive rendering, you should prefix the property that must be rendered differently with the ID of that browser. The ID for Microsoft Pocket Internet Explorer 4.0 is PIE4 the ID for Microsoft Internet Explorer 6.0 is IE. However, you should not prefix IE as you would then only have images rendered on Microsoft Internet Explorer 6.0 and Microsoft Pocket Internet Explorer 4.0. By not prefixing one property, that property will become the default and will only be replaced on by the prefixed property Microsoft Pocket Internet Explorer 4.0 browsers.

Incorrect Answers:

A: You need a default image for browsers, such as Opera and Netscape that are not prefixed. In this code you only have images that will be rendered on Microsoft Internet Explorer 6.0 and Microsoft Pocket Internet Explorer 4.0.

C: You need to use only one Image control. If you use two Image controls the control without a prefixed property will be rendered on all browsers. While the Image control with the PIE4 prefix will also be rendered on Microsoft Pocket Internet Explorer 4.0, resulting in two logos.

D: You need to use only one Image control. If you use two Image controls the control without a prefixed property will be rendered on all browsers. While the Image control with the IE prefix will also be rendered on Microsoft Internet Explorer 6.0, resulting in two logos.

QUESTION 61

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a default.aspx page for Web application that that supports mobile devices. The default.aspx page allows the Certkiller .com CEO to perform searches and reports on the Certkiller .com e-Commerce Web site. Controls for both search and report functionality must exist on the default.aspx page. You want only the search controls to be visible when the CEO runs a search and you want only reporting controls to be visible when the CEO reports information. You cannot use programming to accomplish this task.

What should you do?

- A. Add two mobile Form controls to the page. Add search controls to the one mobile Form and reporting controls to the other.
- B. Add two mobile Panel controls to the page. Add search controls to the one mobile Panel and reporting controls to the other.
- C. Add one mobile Form control to the page. Add two mobile Panel controls to the Form. Add search controls to the one mobile Panel and reporting controls to the other.
- D. Add one ASP.NET Form control to the page. Add two mobile Panel controls to the Form. Add search controls to the one mobile Panel and reporting controls to the other.

Answer: A

Explanation: You must add two mobile Forms to the page but only one will be active at a time. You can thus separate the user interface without using programming.

Incorrect Answers:

B: Adding two mobile Panel controls to the page would require that you use programming to hide one of the Panel controls.

C: Adding two mobile Panel controls to one mobile Form would require that you use programming to hide one of the Panel controls.

D: You cannot add mobile controls to an ASP.NET Web Form. You can only add mobile controls to a mobile Form.

QUESTION 62

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528. All ASP.NET 1.1 Web applications hosted by IIS on Certkiller -WS528 are accessed on port 80.

You are required to develop a new ASP.NET billing application named CK_Billing that will be integrated into Certkiller .com's existing e-Commerce Web site. You want to store all source files for the CK_Billing application in the C:\Inetpub\wwwroot\CK_Billing folder on TESTING-WS528. During development you must be able to access CK_Billing at the URL "http://localhost:80/CK_Billing".

You need to configure the New Web site dialog box in Visual Studio 2005 to meet your requirements.

What should you do?

- A. In the Location field, select File System and set the location to `http://localhost/CK_Billing`.
- B. In the Location field, select HTTP and set the location to `C:\Inetpub\wwwroot\CK_Billing`.
- C. In the Location field, select File System and set the location to `C:\Inetpub\wwwroot\CK_Billing`.
- D. In the Location field, select HTTP and set the location to `http://localhost/CK_Billing`.

Answer: D

Explanation: When you select HTTP in the location field, Visual Studio 2005 will create and configure a Web application in IIS. The source files will be stored in folder associated with the Web application in IIS. By default this is a folder in `C:\Inetpub\wwwroot`.

Incorrect Answers:

A, C: When you select File System in the Location field, Visual studio allows you to create the Web application in a specified folder. However, you will not be able to access the application on port 80 as port 80 is used by IIS.

B: When you select HTTP in the location field, you must specify the url for the project and not the path. The folder path must be configured in IIS.

QUESTION 63

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a page named `Process.aspx` in a shopping cart Web application that will be integrated into Certkiller .com's existing e-Commerce Web site. The `Process.aspx` page allows customers to pay for purchases using their credit cards. The `Process.aspx` page contains a Button control that confirms the customers' payment and calls an external Web service that charges the customer's credit card. You must implement confirmation and prevent postback unless the customer confirms payment.

What should you do?

- A. Set the `OnClientClick` property to a JavaScript statement.
- B. Set the `PostBackUrl` property to a JavaScript statement.
- C. Set the `PostBackUrl` property to the URL of a confirmation page.
- D. Set the `OnClientClick` property to the URL of a confirmation page.

Answer: A

Explanation: The OnClientClick property allows you to override the client script that causes postback to the server. You need to use a JavaScript statement as the default action of the onClick event of an HTML element is to submit the page. The JavaScript statement that will process the confirmation; if the customer declines the payment, the JavaScript statement will return a false to the control and postback will not occur.

Incorrect Answers:

B: The PostBackUrl property cannot be set to a JavaScript statement. It can only be set to a URL. If it is set to a URL it will cause postback to that URL.

C: If you set the PostBackUrl property to the URL of a confirmation page as this cause the Button control to postback to the confirmation page. You must prevent postback.

D: You should set the OnClientClick property to a JavaScript statement that will process the confirmation without causing postback.

QUESTION 64

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a product search page named Search.aspx for Web application that will be integrated into Certkiller .com's existing e-Commerce Web site. The Search.aspx page allows customers search for products that match specific criteria. The search criteria are implemented as CheckBox controls. The Search button is implemented as a Button control. You want the CheckBox controls to be cleared when the Search button is clicked. You set the Checked property of each CheckBox to False in the designer.

What should you do next?

- A. Set the EnableViewState property of each CheckBox to False in the designer.
- B. Set the Checked property of each CheckBox to False in the Page_Load event handler if the Search.aspx page's IsPostBack property is True.
- C. Set the AutoPostBack property of each CheckBox to False in the designer.
- D. Set the Checked property of each CheckBox to False in the event handler for the Search button's Click event.

Answer: D

Explanation: To ensure that the initial state of the CheckBox controls are clear, you must set the Checked property of each CheckBox to False in the designer. You should then set the Checked property of each CheckBox to False in the event handler for the Search button's Click event to reset the CheckBox controls to their initial state upon the Click event.

Incorrect Answers:

A: Setting the EnableViewState property will not clear the CheckBox controls. The

EnableViewState property determines whether the CheckBox controls should be visible or not.

B: Setting the Checked property of each CheckBox to False in the Page_Load event handler if the Search.aspx page's IsPostBack property is True will clear the CheckBox controls whenever a postback occurs. You want the CheckBox controls to be cleared when the Search Button is clicked, not when a postback occurs.

C: The AutoPostBack property will clear the CheckBox controls whenever a postback occurs. You want the CheckBox controls to be cleared when the Search Button is clicked, not when a postback occurs.

QUESTION 65

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a product search page named Search.aspx for Web application that will be integrated into Certkiller .com's existing e-Commerce Web site. The Search.aspx page allows customers search for products that match specific criteria. Once a product is located, you want an image of the product to be displayed. You want to use an Image control to display the image.

You want to configure the Image control to display a description of the image if the image cannot be displayed in the customer's Web browser.

What should you do?

- A. Set the ToolTip property of the Image control.
- B. Set the ImageUrl property of the Image control.
- C. Set the AlternateText property of the Image control.
- D. Set the DescriptionUrl property of the Image control.

Answer: C

Explanation: The text entered in the AlternateText property is displayed if the image cannot be displayed in the customer's Web browser.

Incorrect Answers:

A: The text entered in the ToolTip property is displayed when the mouse hovers over the image. It is not displayed when the image cannot be displayed in the customer's Web browser.

B: The text entered in the ImageUrl property specified the path to the Image. It does not display a description when the image cannot be displayed in the customer's Web browser.

C: The text entered in the DescriptionUrl property is used when accessibility features are turned on. It does not display a description when the image cannot be displayed in the customer's Web browser.

QUESTION 66

DRAG DROP

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a navigation application. You add an ImageMap control to a Web page named City.aspx and set its ImageUrl property to the URL of an image that represents the street map of central Washington. When a user clicks on an area that represents a building, you want to display a street address for the building on the same page

You want to configure the City.aspx page and the ImageMap control to accomplish this task.

What should you do? To answer, select the appropriate actions and arrange them in the correct order in the work area.

Actions

Set the HotSpotMode property of the ImageMap control to Navigate.

Set the PostBackValue property of each PolygonHotSpot control to building name.

Set the HotSpotMode property of each PolygonHotSpot control to building name.

Handle the Click event of the ImageMap control.

Set the HotSpotMode property of the ImageMap control to PostBack.

Create a PolygonHotSpot control for each building.

Configure the page to implement the IPostBackEventHandler

Configure the page to implement the IPostBackDataHandler

Work Area

Place first action here.

Place second action here.

Place third action here.

Place fourth action here.

Place fifth action here.

Place sixth action here.

Place seventh action here.

Place eighth action here.

Answer:

Actions

Set the HotSpotMode property of the ImageMap control to Navigate.

Set the HotSpotMode property of each PolygonHotSpot control to building name.

Configure the page to implement the IPostBackEventHandler

Configure the page to implement the IPostBackDataHandler

Work Area

Create a PolygonHotSpot control for each building.

Handle the Click event of the ImageMap control.

Set the HotSpotMode property of the ImageMap control toPostBack.

Set the PostBackValue property of each PolygonHotSpot control to building name.

Place fifth action here.

Place sixth action here.

Place seventh action here.

Place eighth action here.

Explanation:

You need to define a hotspot as a set of polygonal coordinates for each building on the ImageMap. You then need to handle the Click event for the ImageMap to capture user input. The Click event contains an ImageMapEventArgs parameter that contains a PostBackValue property that identifies the polygon. You should then set the PostBackValue to a value that will identify the address that needs to be displayed.

Incorrect Answers:

Setting the HotSpotMode of either the ImageMap or PolygonHotSpot will treat these controls as hyperlinks but you want the data to be displayed on the same page.

Therefore you do not need hyperlinks.

You also don't need IPostBackEventHandler and IPostBackDataHandler as these raise server-side events based on client-side events.

QUESTION 67

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a page named Products.aspx in a Web application. You need to allow external vendors to insert product information into the Products.aspx page.

You decide to implement this functionality by using a DropDownList control. You add the following code to the Products.aspx page.

```
<asp:DropDownList ID="_categoryDDL" runat="server" DataSourceID="_categoryDataSource"
    DataTextField="CategoryName" DataValueField="CategoryID">
</asp:DropDownList>
<asp:SqlDataSource ID="categoryDataSource" runat="server"
    ConnectionString="<%$ ConnectionStrings:CatalogConnectionString %>"
    SelectCommand="SELECT [CategoryID],[CategoryName] FROM [Categories]">
</asp:SqlDataSource>
```

You need to ensure that the DropDownList control defaults to [None] and that [None] is the first item in the DropDownList.

What should you do? (Each correct answer presents part of the solution. Choose two.)

- A. Set the DataSourceID property of the DropDownList control to "".
- B. Add the string "[None]" to the Items property of the DropDownList control.
- C. Change the SelectCommand property of the SqlDataSource control to "SELECT [None], [CategoryID], [CategoryName] FROM [Categories]".
- D. Set the AppendDataBoundItems property of the DropDownList control to True.

Answer: B, D

Explanation: You must add a static item to the DropDownList in the Items property. You should then set the AppendDataBoundItems property of the DropDownList control to True to prevent DataBound items from overwriting the static item.

Incorrect Answers:

A: You cannot set the DataSourceID property of the DropDownList control to an empty string. This will prevent you from binding data to the DropDownList.

C: The SELECT statement lists database columns from which data must be selected. [None] is not a column in the database and should not be listed in the SELECT statement as it will cause the DataBound operation to return an error.

QUESTION 68

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a page named Products.aspx in a Web application that contains three DropDownList controls that are dynamically loaded from a SQL Server 2005 database file. The DropDownList controls represent a vendor list, a certification list, and an exam list. Certkiller .com customers use the Products.aspx page to select exams related to particular certifications on offer from a particular vendor. A Go button initiates the selection. Each DropDownList control has an associated RequiredFieldValidator control.

Whenever the customer selects a vendor, and the vendor offers certifications, then the customer must also select a certification if the. If the vendor only offers exams and not certifications, the certification list should remain hidden. Whenever the customer selects a certification, the customer must also select an exam. Validation error messages should only be displayed when the Go button is clicked.

You need to set properties on the vendor DropDownList control.

What should you do?

- A. Set the AutoPostBack property to True and the CausesValidation property to False.
- B. Set the AutoPostBack property to False and the CausesValidation property to True.

- C. Set the AutoPostBack property to True and the CausesValidation property to True.
- D. Set the AutoPostBack property to False and the CausesValidation property to False.

Answer: A

Explanation: You need to set the AutoPostBack property to True so that you can programmatically determine whether or not the certifications DropDownList control should be displayed. By default, validation occurs when a postback takes place. To prevent this, you should set the CausesValidation property to False.

Incorrect Answers:

B: If you set the AutoPostBack property to False, you will not be able to determine if the certification DropDownList control should be displayed or not.

C: If you set the CausesValidation property to True then validation will occur when a postback takes place. Validation error messages are displayed whenever validation occurs.

D: If you set the AutoPostBack property to False, you will not be able to determine if the certification DropDownList control should be displayed or not as postback will not occur. Validation will also not occur as it occurs when a postback takes place.

QUESTION 69

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a chat forum for the Certkiller .com Web site. You are using ASP.NET 2.0 to develop the chat forum. You are developing a Web Form that allows a subscriber to alter enter their account details. The page contains the following code snippet.

```
31 <div>
32     <asp:TextBox ID="_Description" Rows="5" />
33 </div>
```

You need to programmatically hide the TextBox control based on other input. What should you do?

- A. Add a Runat="server" attribute to the TextBox control.
- B. Declare _Description as a TextBox in the code-behind class.
- C. Replace the <div> element with <table>, <tr>, and <td> elements.
- D. Replace the <div> element with a Panel server control.

Answer: A

Explanation: Code-behind processing occurs at the server therefore you need to add the Runat="server" attribute to the TextBox control.

Incorrect Answers:

B: Controls are automatically declared in the code-behind page in ASP.NET 2.0. Therefore you do not need to declare the control.

C, D: The <div> element does not have a bearing on your ability to use the TextBox control in a code-behind class. Therefore there is no need to change the <div> element.

QUESTION 70

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com is a major supplier of Widgets for various affiliate online retail companies.

Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application that allows Certkiller .com's affiliates to manage their accounts at Certkiller .com. Because of the complexity and size of the data, Certkiller .com implements a staging environment and a production environment for their affiliates. The URLs staging and a production environments are stored in the <appSettings> section of the Web.config file. The <appSetting> section of the Web.config file is shown in the following exhibit:

```
<appSettings>
  <add key="Staging" value="http://staging.certkiller.com"/>
  <add key="StagingConnectionString"
    value="server=CERTKILLER-DB01;database=CK_DB;Integrated Security=SSPI"/>
  <add key="ProductionConnectionString"
    value="server=CERTKILLER-DB01;database=CK_DB;Integrated Security=SSPI"/>
</appSettings>
```

You write the following code to access the connection string from the current HttpContext object:

```
Dim staging As Boolean = False
If Request.Url.Host = ConfigurationManager.AppSettings("Staging") Then
    staging = True
End If

If (staging) Then
    Context.Items.Add("ConnectionString", _
        ConfigurationManager.AppSettings("StagingConnectionString"))
Else
    Context.Items.Add("ConnectionString", _
        ConfigurationManager.AppSettings("ProductionConnectionString"))
End If
```

You need to place the code in the appropriate event handler.
What should you do?

- A. Place the codes in the Application_Start event handler.
- B. Place the codes in the Session_Start event handler.
- C. Place the codes in the Application_BeginRequest event handler.
- D. Place the codes in the Session_End event handler.

Answer: C

Explanation:

Items in the HttpContext object are cleared after each request; therefore you need to repopulate the object after each request using the Application_BeginRequest event handler. Once the object is populated, it can be accessed from any page throughout the request.

Incorrect Answers:

A: The Application_Start event is raised only when the application starts. However, items in the HttpContext object are cleared after each request; therefore you need to repopulate the object after each request using the Application_BeginRequest event handler.

B: The Session_Start event is raised only when the session starts. However, items in the HttpContext object are cleared after each request; therefore you need to repopulate the object after each request using the Application_BeginRequest event handler.

D: The Session_End event is raised only when the session ends. However, items in the HttpContext object are cleared after each request; therefore you need to repopulate the object after each request using the Application_BeginRequest event handler.

QUESTION 71

You are employed as an application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com.

You are in the process of redeveloping the Certkiller .com Web application. You want to add a TreeView control to a Web Form named cisco.aspx.

The following XML defines the site map data for Certkiller .com.

```
<siteMapNode url="~/default.aspx" title="Home" description="Home Page">
<siteMapNode url="ms.aspx" title="Microsoft" description="Microsoft
Training Guides">
<siteMapNode url="mcpt.aspx" title="MCPT" description="MCPT Training
Guides" />
<siteMapNode url="mcse.aspx" title="MCSE" description="MCSE Training
Guides" />
<siteMapNode url="mcts.aspx" title="MCTS" description="MCTS Training
Guides" />
</siteMapNode>
<siteMapNode url="cisco.aspx" title="CISCO" description="Cisco Training
Guides">
<siteMapNode url="ccda.aspx" title="CCDA" description="CCDA Training
Guides" />
<siteMapNode url="ccdp.aspx" title="CCDP" description="CCDP Training
Guides" />
<siteMapNode url="ccie.aspx" title="CCIE" description="CCIE Training
Guides" />
<siteMapNode url="ccip.aspx" title="CCIP" description="CCIP Training
Guides" />
<siteMapNode url="ccna.aspx" title="CCNA" description="CCNA Training
Guides" />
<siteMapNode url="ccnp.aspx" title="CCNP" description="CCNP Training
Guides" />
```



```
<siteMapNode url="ccsp.aspx" title="CCSP" description="CCSP Training  
Guides" />  
</siteMapNode>  
</siteMapNode>
```

You need to bind the TreeView control to the site map data so that users can navigate only within the CISCO section.

What should you do? (Choose all that apply)

- A. To achieve this you need to set the StartingNodeUrl property of the SiteMapDataSource control to ~/cisco.aspx.
- B. You need to add a SiteMapDataSource control to the Web Form and bind the TreeView control to the Web Form.
- C. You need to ensure that the site map XML is embedded within the AppSettings node of the Web.config file.
- D. You need to add a SiteMapPath control to the Web Form and bind the TreeView control to the Web Form.
- E. You need to ensure that the site map XML is embedded within the SiteMap node of the Web.sitemap file.

Answer: A, B, E

Explanation: The TreeView control should be bound to a SiteMapDataSource. By default the SiteMapDataSource will extract its information from the web.sitemap file. The StartingNodeUrl property of the SiteMapDataSource can be used to restrict the SiteMap to only the marketing pages.

Incorrect Answers:

C: Putting the site map XML in the web.config file could be done. This will require defining a custom site map provider. This is not the ideal place for site map data.

D: The SiteMapPath is not a site map provider which is what the TreeView needs to bind with. A SiteMapPath is a server control that can be used as an alternative to TreeView in order to display a site map in a more compact manner.

QUESTION 72

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com is a major supplier of Widgets for various affiliate online retail companies.

Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You recently developed a Web application that accesses an external Web service to retrieve current exchange rates for Certkiller .com's e-Commerce Web site. The Web service converts USD prices to the customer's local currency. You have stored the URL to the external Web service's endpoint in the <appSettings> section of the Web.config file. The Web application has been successfully deployed to a Certkiller .com Web server named Certkiller -SR14.

A few months later the vendor of the Web service changes the port that is used to

access the Web service. You need to update the <appSettings> section of the Web application's Web.config file from Certkiller -WS528. You need to ensure that your solution has a minimal impact on customers that may be connected to the e-Commerce Web site.

What should you do?

- A. Create a Host entry in the Lmhosts file on Certkiller -SR14. Point the Host entry to the new end point.
- B. Use the Copy Web Site function in Visual Studio 2005 to deploy the Web.config file from Certkiller -WS528 to Certkiller -SR14.
- C. Create a Web Setup project in Visual Studio 2005 to deploy the Web.config file from Certkiller -WS528 to Certkiller -SR14.
- D. Use the Web Site Administration Tool to change the <appSettings> section of the Web.config file.

Answer: D

Explanation: You can use the Web Site Administration Tool to change settings at run-time without having to redeploy the Web application. This will have a minimal impact on users currently accessing the Web application.

Incorrect Answers:

- A: The Lmhosts file is used for IP Address to host name resolution. It does not change the settings in the <appSettings> section of the Web application's Web.config file.
- B, C: The Web.config file contains environment-specific settings in the production environment. Deploying the Web.config file from your local computer to the production server may overwrite these settings.

QUESTION 73

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com is a major supplier of Widgets for various affiliate online retail companies.

Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a search page named Search.aspx for Web application that will be integrated into Certkiller .com's existing e-Commerce Web site. The Search.aspx page allows customers search for products that match specific criteria. The search query is entered into a TextBox control and is initiated by a Search button. When the Search button is clicked, a postback to the server occurs. The search query is then used to display results in a GridView control. You need to ensure that the TextBox control always receives focus.

What should you do?

- A. Convert the TextBox control to a TextArea element and call the Focus method of the element.
- B. Call the Focus method of the TextBox control in the Page_Load event handler.

- C. Call the Focus method of the Search button in the OnClick event handler.
- D. Convert the TextBox control to an Input element and call the Focus method of the element.

Answer: B

Explanation: You can set the focus of a control in the Focus method of the control itself, in the Page.SetFocus method and pass the ID of a control that should receive focus, or in the SetFocus method of the Page instance in the Page_Load event handler.

Incorrect Answers:

A, D: The TextBox is used in server-side code. Therefore you cannot convert it to a TextArea or Input element as these cannot be used in server-side code.

C: You can set the focus of a control in the Focus method of the control itself, in the Page.SetFocus method and pass the ID of a control that should receive focus, or in the SetFocus method of the Page instance in the Page_Load event handler. You cannot set the focus of a control in the Focus method of another control. The OnClick event handler also does not support a Focus method.

QUESTION 74

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains an Oracle database server named Certkiller -DB01. Certkiller -DB01 hosts a database named CK_Products that stores product information for Certkiller .com's e-Commerce Web site. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a product page named Catalog.aspx for Web application that will be integrated into Certkiller .com's existing e-Commerce Web site. The Catalog.aspx page must access data from the CK_Products database. You must use a stored procedure named sp_GetAllProducts to display data in a GridView control named _gridView. The stored procedure takes no parameters.

What should you do?

- A. Add an ObjectDataSource control to the Catalog.aspx page.
Set the DataSourceID property of the GridView control to the ID of the ObjectDataSource.
Set the
SelectCommand property to the stored procedure name "sp_GetAllProducts".
- B. Add a SqlDataSource control to the Catalog.aspx page.
Set the DataSourceID property of the GridView control to the ID of the SqlDataSource.
Set the SelectCommand property to the stored procedure name "sp_GetAllProducts".
- C. Add an ObjectDataSource control to the Catalog.aspx page.
Set the DataSourceID property of the GridView control to the ID of the

ObjectDataSource.

Set the SelectMethod property to the stored procedure name "sp_GetAllProducts".

D. Add a SqlDataSource control to the Catalog.aspx page.

Set the DataSourceID property of the GridView control to the ID of the

SqlDataSource.

Set the SelectMehod property to the stored procedure name "sp_GetAllProducts".

Answer: B

Explanation: You can set the focus of a control in the Focus method of the control itself, in the Page.SetFocus method and pass the ID of a control that should receive focus, or in the SetFocus method of the Page instance in the Page_Load event handler.

Explanation: You need to bind data to a Grid View control, which is a tabular data-bound control. You have already created the SqlDataSource control which allows you to bind data from the Oracle database. You now need to specify the SqlDataSource as the DataSourceID for the GridView control, and specify the sp_GetAllProducts stored procedure as the SelectCommand of the SqlDataSource control. The SqlDataSource control will then use the stored procedure to retrieve the required data.

Incorrect Answers:

A: The ObjectDataSource allows you to bind data from a middle-tier business component but you must bind data from an Oracle database. You use a SqlDataSouce control to bind data from an Oracle database.

C: The ObjectDataSource allows you to bind data from a middle-tier business component but you must bind data from an Oracle database. You use a SqlDataSouce control to bind data from an Oracle database. Furthermore, you are using a stored procedure to retrieve the data from the database. You should therefore use the SelectCommand property to specify the stored procedure to be used, and not a SelectMethod. The SelectMethod property is used when you use a method in a business class to return the data.

D: You are using a stored procedure to retrieve the data from the database. You should therefore use the SelectCommand property to specify the stored procedure to be used, and not a SelectMethod. The SelectMethod property is used when you use a method in a business class to return the data.

QUESTION 75

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a master page named ck_layout.master for a revised version of the Certkiller .com e-Commerce Web site. You want to use a TreeView control to display the menu on the master page. The TreeView control will be populated from an XML file named ck_menu.xml.

What should you do? (Each correct answer presents part of the solution. Choose three.)

- A. Add a SiteMapDataSource control to the master page.
- B. Add an XmlDataSource control to the master page.
- C. Add a Menu control to the master page.
- D. Set the DataBindings property of the TreeView control.
- E. Set the DataFile property to ck_menu.xml.

Answer: B, D, E

Explanation: You need to bind XML data to a TreeView control by adding an XmlDataSource control to the master page. You must then specify the DataFile property of the XmlDataSource as the ck_menu.xml file, and the DataBindings property of the TreeView control. The DataBindings property of the TreeView control allows you to map XML nodes to TreeView nodes.

Incorrect Answers:

- A: You do not need a SiteMapDataSource control to implement a TreeView control. SiteMapDataSource controls work with site map providers and not with XML files.
- C: You do not need a Menu control to implement a TreeView control.

QUESTION 76

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains an SQL Server 2005 database server named Certkiller -DB01 and a Web server named Certkiller -SR15.

Certkiller -DB01 hosts a database named CK_Finance that is accessed by an in-house Web application. The Web application is hosted on Certkiller -SR15 and uses SQL Server authentication to access the CK_Finance database. Several Certkiller .com users in the Sales department have access to Certkiller -SR15 but do not have permission to access the CK_Finance database. You need to ensure that the Certkiller .com users who should not have access to the CK_Finance database cannot use the Web application to access the database.

What should you do?

- A. Add code that verifies the user's permissions in each request before accessing the data in the CK_Finance database.
- B. Store the database connection string in a Web.config file and encrypt the section that contains the connection string.
- C. Add code that calls a secure Web service that returns the database connection string.
- D. Store the database connection string in code so that it can be compiled into an assembly.

Answer: B

Explanation: The threat in this scenario is that users who have access to

Certkiller -SR15 can locate the connection string and use the information in the connection string to access the database. You need to encrypt the connection string to prevent users from using the information contained in it. This can only be done if you store the connection string in the Web.config file and encrypt the section that contains the connection string. Then only user accounts with the required permission to access the key container can decrypt the connection string.

Incorrect Answers:

A: Verifying user permissions at the Web application level does not prevent users who have access to Certkiller -SR15 from locating the connection string and using the information in the connection string to manually access the database.

C, D: Assemblies can be reversed engineered to retrieve the code contained within them.

QUESTION 77

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains an SQL Server 2005 database server named Certkiller -DB01. A database named CK_Products is hosted in the default instance on Certkiller -DB01. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a product page named Catalog.aspx for Web application that will be integrated into Certkiller .com's existing e-Commerce Web site. The Catalog.aspx page must access data from the CK_Products database. You need must use a stored procedure named sp_GetAllProducts to display data in a GridView control named _gridView. The stored procedure takes no parameters. You need to create a connection to the default instance on Certkiller -DB01. You use Server Explorer in Microsoft Visual Studio .NET 2005 to you open the Advanced Properties dialog box for the connection. You need to ensure that the connection uses your Microsoft Windows domain user account to access the default instance on Certkiller -DB01.

What should you do?

- A. Set the Integrated Security property to True.
- B. Set the Context Connection property to False.
- C. Set the Persist Security Info property to True.
- D. Set the User Instance property to True.

Answer: A

Explanation: The Integrated Security property specifies that the connection should be established using the domain credentials of the current user when it is set to True.

Incorrect Answers:

B: The Context Connection property specifies whether the connection should come from the SQL Server context that is hosting the common language runtime (CLR). It does not specify the credentials that should be used to make the connection.

C: The Persist Security Info property specifies whether the security information used to establish the connection should persist in the connection instance. It does not specify the credentials that should be used to make the connection.

D: The User Instance property specifies whether the connection should be made to a database instance that is running under the context of the current user.

QUESTION 78

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains an SQL Server 2005 database server named Certkiller -DB01. A database named CK_Products is hosted in the default instance on Certkiller -DB01. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application that uses the .NET Data Provider for Microsoft SQL Server to access the CK_Products database. You want the Web application to implement connection pooling.

What should you do?

- A. Create a single SqlConnection instance and store the SqlConnection in the Application object.
- B. Create a SqlConnection instance for each request, and specify the same connection string with each call to the Open method.
- C. Create a SqlConnection instance for each request, and do not call the Close method until the Application_End event is raised.
- D. Create a single SqlConnection instance and store the SqlConnection in the Session object.

Answer: B

Explanation: To make use of connection pooling, you must create a SqlConnection instance for each request, and specify the same connection string with each call to the Open method.

Incorrect Answers:

A: You need multiple connection instances of the same connection string to implement connection pooling. Furthermore, connection instances stored in the Application object are open until the Web application is stopped. However, connection instances that are no longer required should be closed so that they can be returned to the connection pool.

C: Connection instances that are no longer required should be closed so that they can be returned to the connection pool.

D: You need multiple connection instances of the same connection string to implement connection pooling. Furthermore, connection instances stored in the Session object are open until the Session ends. However, connection instances that are no longer required should be closed so that they can be returned to the connection pool.

QUESTION 79

You work as an application developer at Certkiller .com. You are in the process of developing a Web application that connects to a Microsoft SQL Server database by using the SqlConnection object.

The connection objects are currently being pooled and as the pool gets full the connection request on the database are queued. As a result, a number of connection requests are being rejected.

You need to minimize the rejection of connection requests and you ensure that your application releases connections back to the pool as quick as possible.

What should you do? (Choose all that apply)

- A. The Max Pool Size value inside the connection string should be increased.
- B. Call the Close method on every connection object after it has finished executing.
- C. The Min Pool Size value inside the connection string should be increased.
- D. The value of the ConnectionTimeout property of the SqlConnection object should be increased.
- E. The connection object needs to be left open after it has finished executing.

Answer: A, B, D

Explanation: The connections should be explicitly closed immediately after use. This is to ensure that it can be reused. By increasing the Max Pool Size the web site will be able to deal with more connection requests. This will reduce the queuing.

Increasing the ConnectionTimeout property of the SqlConnection object will reduce connection failures because the connection will wait for longer before failing.

Incorrect Answers:

C: Increasing the Min Pool Size may have a small initial benefit but the pool size is managed and increased according to needs anyway.

E: By ensuring that the connections are left open will result in a negative impact on the pooling.

QUESTION 80

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

The Certkiller .com network contains an SQL Server 2005 database server named Certkiller -DB01. A database named CK_Products is hosted in the default instance on Certkiller -DB01. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application on Certkiller -WS528 that uses the .NET Data Provider for Microsoft SQL Server to access the CK_Products database.

Certkiller -DB01 does not have file access to the Web application. The Web application uses a stored procedure named sp_GetCategories to return a list of product categories from the CK_Products database. However, the sp_GetCategories stored procedure raises the following error:

RAISERROR('A premise overlap has occurred.',1,1)

You want to write these errors to a custom log on CERTKILLER-WS528.
What should you do?

- A. Attach an event handler to the InfoMessage event of the SqlConnection instance.
Write the value of the Message property to the log file.
- B. Call the xp_logevent extended stored procedure from the sp_GetCategories stored procedure.
Pass the error message as a parameter.
- C. Replace the sp_GetCategories stored procedure with a managed stored procedure.
Use the FileStream class to write the message to the log file.
- D. Use a try/catch block to catch instances of SqlExceptions.
Write the value of the Message property to the log file.

Answer: A

Explanation: Whenever a database error with a severity of 10 or less occurs, an InfoMessage event is raised. Attaching an event handler to the InfoMessage event of the SqlConnection instance will allow you to capture information from these events. The full text information from these events is contained in the Message property.

Incorrect Answers:

- B: The xp_logevent extended stored procedure logs messages to the SQL Server log file. It does not log messages to custom logs on remote computers.
- C: Certkiller _SR15 does not have file access to Certkiller -WS528. Therefore managed stored procedures will not be able to log messages to a custom log on Certkiller -WS528.
- D: SqlExceptions are raised for database error that have a severity higher than 10. The error in this scenario has a severity of 1 and would not raise a SqlException.

QUESTION 81

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains an Oracle database server named Certkiller -DB01. Certkiller -DB01 hosts a database named CK_Products that stores product information for Certkiller .com's e-Commerce Web site. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a product page named Category.aspx for Web application that will be integrated into Certkiller .com's existing e-Commerce Web site. The Category.aspx page accesses data from the CK_Products database. You use a stored procedure named sp_GetProductsByCategory to display data in a GridView control named _gridView. The stored procedure is shown in the following exhibit.

```
CREATE Procedure [dbo].[sp_GetProductsByCategory]
(
    @CategoryID int
)
AS

SELECT *

FROM
    CK_Products

WHERE
    (CategoryID = @CategoryID)

ORDER BY
    ProductName,
    ProductsNumber

GO
```

The Category.aspx page displays products belonging to a particular category that the customers select. The category is passed as a parameter from a DropDownList control.

You want to create a PowerTools.aspx page that displays all power tools in the CK_Products database. The CategoryID for power tools is listed as 102 in the CK_Products database. You want to use a SqlCommand instance to execute the sp_GetProductsByCategory stored procedure to return the appropriate data from the CK_Products database.

What code segment should you add for the PowerTools.vb code-behind page?

- A. Dim paraCategory As SqlParameter =
command.Parameters.AddWithValue("CategoryID",102)
command.ExecuteNonQuery()
- B. Dim paraCategory As SqlParameter =
command.Parameters.AddWithValue("@CategoryID",102)
Dim dataReader As SqlDataReader = command.ExecuteReader()
- C. Dim paraCategory As SqlParameter = new SqlParameter("CategoryID",
SqlDbType.Int)
paraCategory.Direction = ParameterDirection.Output
paraCategory.Value = 102
command.ExecuteNonQuery()
- D. Dim paraCategory As SqlParameter = New SqlParameter("@CategoryID",
SqlDbType.Int);
paraCategory.Direction = ParameterDirection.Output;
paraCategory.Value = 102;
Dim dataReader As SqlDataReader = command.ExecuteReader();

Answer: B

Explanation: You need to declare the @CategoryID input parameter with a value of 102 that must be passed to the stored procedure. You must then call the ExecuteReader method of the SqlCommand class to return the results.

Incorrect Answers:

A: This code declares a CategoryID input parameter but the stored procedure only accepts a @CategoryID parameter. This code also calls the ExecuteNonQuery method of the SqlCommand class. The ExecuteNonQuery method of the SqlCommand class does not return data.

C: This code creates an output parameter. However, you need a parameter to pass a parameter to the stored procedure. Input parameters are passed to a stored procedure. This code also calls the ExecuteNonQuery method of the SqlCommand class. The ExecuteNonQuery method of the SqlCommand class does not return data.

D: This code creates an output parameter. However, you need a parameter to pass a parameter to the stored procedure. Input parameters are passed to a stored procedure.

QUESTION 82

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application that will be integrated into the Certkiller .com e-Commerce Web site. You used the Load method of the XmlDocument class to load data from an XML document. The XML document is shown in the following exhibit.

```
<?xml version="1.0" encoding="UTF-8"?>
<Vendor Name="MS">
  <Certification Name="MCNA">
    <Exams>
      <Preerequisites>None</Preerequisites>
      <Available>8</Available>
      <Required>4</Required>
      <Code Name="60-620">...
      <Code Name="60-621">...
      <Code Name="60-622">...
      <Code Name="60-623">...
      <Code Name="60-624">...
      <Code Name="60-631">...
      <Code Name="60-632">...
      <Code Name="60-633">...
    </Exams>
  </Certification>
</Vendor>
```

You later realize that the required exams should be five and not four. You want to use an XmlDocument instance named doc to change the number of required exams to five.

What code segment should you use?

- A. Dim aNode As XmlNode = doc.DocumentElement.FirstChild.FirstChild;
aNode.ChildNodes(2).InnerText = "5";
- B. Dim aNode As XmlNode = doc.FirstChild.FirstChild;
aNode.ChildNodes(2).Value = "5";
- C. Dim aNode As XmlNode = doc. FirstChild.FirstChild;
aNode.ChildNodes(2).InnerText = "5";
- D. Dim aNode As XmlNode = doc.DocumentElement.FirstChild.FirstChild;
aNode.ChildNodes(2).Value = "5";

Answer: A

Explanation: This code first accesses the document element, which is Vendor. It then accesses the first child of the Vendor element, which is Certification. It then accesses the first child of the Certification element, which is Exams. It then accesses the third child of the Exams element, which is Required - the first element is index 0. It then sets the inner text of the Required element to 5.

Incorrect Answers:

- B: This code attempts to access the first child of the first node of the document, which is <?xml>. You need to access the first document element, which is Vendor.
- C: This code attempts to access the first child of the first node of the document, which is <?xml>. You need to access the first document element, which is Vendor. This code will also throw an InvalidOperationException instance as elements do not have values but have inner text.
- D: This code will access the correct node but will throw an InvalidOperationException instance as elements do not have values but have inner text.

QUESTION 83

You work as an application developer at Certkiller .com. The Certkiller .com network contains an application server named Certkiller -SR33. Microsoft Visual Studio .NET 2005 is installed on Certkiller -SR21.

You create a new Web application that will process several XML documents every second on Certkiller -SR21. The XML documents currently reside on Certkiller -SR21 and will be validated against inline schemas.

You need to read the XML documents from the file system. These documentation needs to be read as fast as possible and all the XML comments should be ignored while reading the XML documents.

What should you do?

- A. You need to create an instance of the XmlDocument class and specify a location for the application schema.
- B. You need to create an instance of the XmlReader class with an instance of the XmlNodeReader class.
- C. You need to create an instance of the XmlReader class by using the XmlReader Create method with an instance of the XmlReaderSettings class.
- D. You need to create an instance of the XmlReader class with an instance of the XmlTextReader class.

Answer: C

Explanation: You should use XmlReader for performance reasons. The XmlReaderSettings permits for validation against inline schemas.

Incorrect Answers:

A, D: In this scenario the XmlReader will not support schema validation.

B: The XmlDocument could be used but will result in hurting the performance.

QUESTION 84

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application that will be integrated into the Certkiller .com e-Commerce Web site. You want to load data from an XML file named ck_parts.xml. The schema for the DataSet is stored in a file named ck_part.xsd. You want to implement code that validates the data that is loaded.

What code segment should you use?

A. Dim ds As DataSet = New DataSet();
ds.ReadXml("ck_parts.xml");
ds.ReadXmlSchema("ck_parts.xsd");
B. Dim ds As DataSet = New DataSet();
ds.ReadXml("ck_parts.xml");
Dim xml As String = ds.GetXml();
Dim sr As StringReader = New StringReader(xml);
ds.InferXmlSchema(sr, Nothing);
C. Dim ds As DataSet = New DataSet();
ds.ReadXml("ck_parts.xml");
Dim xml As String = ds.GetXmlSchema();
Dim sr As StringReader = New StringReader(xml);
ds.InferXmlSchema(sr, Nothing);
D. Dim ds As DataSet = New DataSet();
ds.ReadXmlSchema("ck_parts.xsd");
ds.ReadXml("ck_parts.xml");

Answer: D

Explanation: You must first call the ReadXmlSchema method of the new DataSet instance and then call the ReadXml method of the DataSet instance to validate the data.

Incorrect Answers:

A: You must first call the ReadXmlSchema method of the new DataSet instance and then call the ReadXml method of the DataSet instance to validate the data.

B: You must first call the ReadXmlSchema method of the new DataSet instance and then call the ReadXml method of the DataSet instance to validate the data. Inferring the XML Schema from the loaded XML will result in the data determining the schema. You thus will not be validating the data against the XML Schema file.

C: Inferring the XML Schema from the loaded XML will result in the data determining the schema. You thus will not be validating the data against the XML Schema file.

QUESTION 85

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains an Oracle database server named Certkiller -DB01. Certkiller -DB01 hosts a database named CK_Products that stores product information for Certkiller .com's e-Commerce Web site. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a product page named Category.aspx for Web application that will be integrated into Certkiller .com's existing e-Commerce Web site. You add a user control named Selector on the Category.aspx page. The user control is implemented in ck_Select.ascx and its code-behind file is ck_Select.ascx.vb. Both ck_Select.ascx and ck_Select.ascx.vb exist in the same application as the Category.aspx page. The assembly associated with the project is named ck_Site.dll. You use the following code to declare the Selection user control on the Category.aspx page:

```
<ck:Selector ID="_categorySelector" runat="server" SelectorType="Category" />
```

The register directive for the user control was accidentally deleted from the Category.aspx page. You need to re-register the user control.

What code segment should you use?

- A. <% @ Register TagName="Selector" Src="ck_Select.ascx" Assembly= "ck_Site" %>
- B. <% @ Register TagName="Selector" TagPrefix="ck" Src="ck_Select.ascx" %>
- C. <% @ Register TagName="Selector" TagPrefix="ck" Assembly= "ck_Site" %>
- D. <% @ Register TagName="Selector" Namespace= "ck_Site" %>

Answer: B

Explanation: The TagName and TagPrefix attributes identify the user control on the page while the Src attribute specifies the path to the user control.

Incorrect Answers:

A, C, D: The Assembly attribute and namespace attribute are required when you register a custom Web control. When you register a user control, you need the TagName and TagPrefix attributes, which identify the user control on the page, as well as the Src attribute, which specifies the path to the user control.

QUESTION 86

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses

the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains an Oracle database server named Certkiller -DB01. Certkiller -DB01 hosts a database named CK_Products that stores product information for Certkiller .com's e-Commerce Web site. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

Certkiller .com's e-Commerce Web application contains a page named Products.aspx that uses data source and data-bound server controls. Customers use the server controls to search for products. The Products.aspx page does not have an associated code-behind file. You need to convert the Products.aspx page to a user control so that its functionality can be reused on other pages.

What should you do? (Each correct answer presents part of the solution. Choose two.)

- A. Move the Products.aspx page to the App_Code folder.
- B. Create a code-behind file for the Products.aspx page.
- C. Rename the Products.aspx page to Products.ascx.
- D. Remove all server controls from the Products.aspx page.
- E. Replace the Page directive with a Control directive.

Answer: C, E

Explanation: There are two things that differentiate a user control from an ASP.NET page: the file extension and the directive. User controls have a .ascx file extension while a page has an .aspx file extension and a page has a Page directive while a user control has a Control directive.

Incorrect Answers:

- A: Only code files and files that generate code should be placed in the App_Code folder.
- B: User controls do not require a code-behind file.
- D: Removing the server controls would also remove the functionality that you want to reuse on other pages.

QUESTION 87

You work as a Web application developer at Certkiller .com. Certkiller .com uses Microsoft Visual Studio .NET 2005 as its Web application development platform. You are in the process of developing the Certkiller .com Web site. Users of the Web site will be able to register and log on to a personalized experience.

You are currently creating a custom user control with two TextBox controls and two Button controls that will be used on several Web Forms of the Certkiller .com Web site. You want the controls in the custom user control to be visible only when users are not logged on to the Web site. You also want to reduce the amount of effort in development and maintenance for the Web site.

What should you do? (Choose all that apply)

- A. You need to add a code segment to the Page_Load method of the Web Form that sets

the visibility of the TextBox and Button controls where the control is added.

B. You need to add the OnClick event handler for the Login button to the code that is used in the custom user control.

C. You need to add a code segment to the Page_Load method of the custom user control that sets the visibility of the TextBox and Button controls.

D. You need to add the OnClick event handler for the Login button to the code in the Web Form where the control is added.

Answer: B, C

Explanation: Rory Allen needs to use the Page_Load event of the user control in order to set the visibility of the individual controls based on whether the user is authenticated or not. He should add the same code to the OnClick event handler for the login button within the customer user control.

Incorrect Answers:

A, D: By using the events in the web form when the user control is added, will work but is not centralized and are difficult to maintain. By using the user controls events means that the change only has to be done once.

QUESTION 88

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You have developed a custom control named ProductsGrid and a custom control named DropDownGrid that will be used in the redevelopment of Certkiller .com's e-Commerce Web application. Both custom controls are contained in an assembly named ck_controls.dll. You need to add the two custom controls to the Visual Studio toolbox. However, when you attempt to add the custom controls to the Visual Studio toolbox, you can select the assembly that contains in the Choose Toolbox Item dialog box, only the DropDownGrid control appears in the select list. You need to add an attribute to the ProductsGrid control's class definition so that it is listed in the Choose Toolbox Item dialog box.

What code segment should you use?

A. <ToolboxBitmap(GetType(ProductsGrid))>

B. <ToolboxItem(true)>

C. <ToolboxItemFilter("")>

D. <ToolboxData("<{0}:ProductsGrid></{0}:ProductsGrid>")>

Answer: B

Explanation: The ToolboxItem attribute specifies whether the control should be visible or not. When it is set to True, the control is visible.

Incorrect Answers:

A: The ToolboxBitmap attribute specifies the bitmap image that should be used as the icon for the control. It will not ensure that the control can be added to the Visual Studio Toolbox.

C: The ToolboxItemFilter attribute specifies the filter Visual Studio should use to determine whether the control should be enabled or disabled for a specific designer. It will not ensure that the control can be added to the Visual Studio Toolbox.

D: The ToolboxData attribute specifies the markup that should be created on the page when the control is added to a page. It will not ensure that the control can be added to the Visual Studio Toolbox.

QUESTION 89

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer.

You have developed a custom control named CK_Grid and that will be used in the redevelopment of Certkiller .com's e-Commerce Web site. You want to add the CK_Grid control to the Visual Studio .NET toolbox so that it can be dragged onto a Web Forms page.

What should you do?

A. Create the CK_Grid control as a Web Control Library.

Within the Visual Studio .NET toolbox, click Choose Items.

Then browse to CK_Grid.dll and select it.

B. Create the CK_Grid control as a User Control.

Within the Visual Studio .NET toolbox, click Choose Items.

Then browse to CK_Grid.ascx and select it.

C. Create the CK_Grid control as a Web Control Library.

Right-click Web Project, click Add Reference.

Then browse to CK_Grid.dll and select it.

D. Create the CK_Grid control as a User Control.

Right-click Web Project, click Add Reference.

Then browse to CK_Grid.ascx and select it.

Answer: A

Explanation: The web server control must be compiled as a Web Control Library.

This will create a DLL file. You must then add the DLL file to the Visual Studio .NET toolbox. To accomplish this, you must click on Choose Items in the Visual Studio .NET toolbox and select the DLL.

Incorrect Answers:

B: The web server control must be compiled as a Web Control Library, not as a User Control. User controls cannot be added to the Visual Studio .NET toolbox. Furthermore, adding a reference to the Web Project will not add the control to the Visual Studio .NET toolbox.

C: The web server control must be compiled as a Web Control Library. This will create a

DLL file. You must then add the DLL file to the Visual Studio .NET toolbox. To accomplish this, you must click on Choose Items in the Visual Studio .NET toolbox and select the DLL. Adding a reference to the Web Project will not add the control to the Visual Studio .NET toolbox.

D: The web server control must be compiled as a Web Control Library, not as a User Control. User controls cannot be added to the Visual Studio .NET toolbox.

QUESTION 90

You work as a Web application developer at Certkiller .com. Certkiller .com uses Microsoft Visual Studio .NET 2005 as its Web application development platform. You are in the process of developing the Certkiller .com Web site. Users of the Web site will be able to register and log on to a personalized experience.

You have created a Web control with two labels and two associated text boxes that will be used on several Web Forms of the Certkiller .com Web site. You want to ensure that the Web control has both toolbox and visual designer support.

What should you do?

- A. You need to add a Mobile Web User Control to your solution and then identify a class that inherits from MobileUserControl.
- B. You need to add a Web User Control to your solution and then define a class that inherits from UserControl.
- C. You need to add a Web Control Library project to your solution and then define a class that inherits from CompositeControl.
- D. You need to add a Windows Control Library project to your solution and then define a class that inherits from UserControl.

Answer: C

Explanation: She should create a Web Control Library project to inherit Visual Studio Designer support. She should then identify the web control class to inherit from CompositeControl to permit a single control to be created from a number of individual controls.

Incorrect Answers:

A; B: User or mobile controls could be used. However, it will integrate with the designer.

D: The Windows Control Library is a different kind of control which is not compatible with web forms.

QUESTION 91

You work as a Web application developer at Certkiller .com. Certkiller .com uses Microsoft Visual Studio .NET 2005 as its Web application development platform. Rory Allen is the lead Web application developer at Certkiller .com. You are a member of Rory Allen's team.

You develop a Web Form with a number of UI elements on it. After reviewing your code, Rory Allen suggests that certain UI elements that do not require server-side processing should be grouped into user controls. This will also allow you to programmatically add or remove the UI elements from the page.

You need to create a Web control to group the UI elements that do not require server-side processing but you want to retain the UI elements' style properties. What should you do? (Choose all that apply)

- A. You need to group the UI elements using System.Web.UI.WebControls.Literal.
- B. You need to group the UI elements using System.Web.UI.TemplateControl.
- C. You need to group the UI elements using System.Web.UI.HtmlControls.HtmlControl.
- D. You need to group the UI elements using System.Web.UI.LiteralControl.

Answer: D

Explanation: LiteralControl should be used to group together simple UI elements that does not need server side processing.

Incorrect Answers:

- A: The Literal control is used to dynamically display the text.
- B: TemplateControl is an abstract class that offers base functionality to the Page and UserControl classes.
- C: HtmlControl is a server control. This will thus run on the server.

QUESTION 92

You work as a Web application developer at Certkiller .com. Certkiller .com uses Microsoft Visual Studio .NET 2005 as its Web application development platform. You are in the process of redeveloping the Certkiller .com Web site. You create a custom Web control named CK_Interface for the Certkiller .com Web site. You want the Web control to be added the Microsoft Visual Studio .NET toolbox so that it can be used in future projects. What should you do? (Choose all that apply.)

- A. You need to browse to CK_Interface.ascx inside the Visual Studio .NET toolbox and select it.
- B. You need to browse to CK_Interface.dll inside the Visual Studio .NET toolbox and select it.
- C. You need to create the CK_Interface control as a Web Control Library.
- D. You need to create the CK_Interface control as a Web user control.

Answer: B, C

Explanation: Create the control as a Web Control Library to get designer support. This will mean that the control is created as a DLL which is easily added to the toolbox.

Incorrect Answers:

- A; D: When you create the control as a user control it will not provide designer support.

QUESTION 93

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a custom control named ProductsGrid that will be used in the redevelopment of Certkiller .com's e-Commerce Web applications. The ProductsGrid control contains a TextBox control and a DropDownList control that allows for the editing of product descriptions. You need to derive the ProductsGrid class from the appropriate base class or interface.

What should you do? (Each correct answer represents part of the solution. Choose two.)

- A. Use the CompositeControl base class.
- B. Use the Control base class.
- C. Use the WebControl base class.
- D. Use the INamingContainer interface.

Answer: A, B

Explanation: You must derive the control from the Control class before it can be rendered on the page. You can derive the class from the CompositeControl base class, which is the base class that derives from WebControl and implements INamingContainer. The INamingContainer interface generates unique identifiers for the control's child controls.

Incorrect Answers:

C: If you derive the class from WebControl, you must also implement the INamingContainer interface, which generates unique identifiers for the control's child controls. You must also derive the control from the Control class before it can be rendered on the page but you can only choose two options!

D: The INamingContainer interface unique identifiers for the control's child controls and is used in conjunction with a base class such as WebControl. You must also derive the control from the Control class before it can be rendered on the page but you can only choose two options!

QUESTION 94

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a custom control named ProductsGrid that will be used in the redevelopment of Certkiller .com's e-Commerce Web applications. The ProductsGrid control contains a TextBox control and a DropDownList control that allows for the editing of product descriptions. The code for the ProductsGrid control is shown in the following exhibit.

```
<ParseChildren(True)> Public Class ProductsGrid  
Inherits Control
```

```
Implements INamingContainer
Private _desc As Desc
Private _descTemplate As ITemplate
Public Property Desc() As Desc
Get
Return _desc
End Get
Set(ByVal value As Desc)
_desc = value
End Set
End Property
<TemplateContainer(GetType(DescTemplateContainer))> _
Public Property DescTemplate() As ITemplate
Get
Return _descTemplate
End Get
Set(ByVal value As ITemplate)
_descTemplate = value
End Set
End Property
Protected Overrides Sub CreateChildControls()
'TODO
End Sub
End Class
Public Class DescTemplateContainer
Inherits Control
Implements INamingContainer
Private _desc As Desc
Public Sub New(ByVal desc As Desc)
_desc = desc
End Sub
Public Property Desc() As Desc
Get
Return _desc
End Get
Set(ByVal value As Desc)
_desc = value
End Set
End Property
End Class
```

You need to ensure that the content specified in the DescTemplate() property is rendered by the ProductsGrid control. You need to override the CreateChildControls method to accomplish this. What code segment should you use?

A. If (Me.DescTemplate Is Nothing) Then


```
Me.Controls.Clear()  
Dim templateContainer As DescTemplateConainer = New  
DescTemplateContainer(_desc)  
Me.Controls.Add(templateContainer)  
End If  
B. If (Me.DescTemplate Is Nothing) Then  
Me.Controls.Clear()  
Dim templateContainer As DescTemplateConainer = New  
DescTemplateContainer(_desc)  
Me.DescTemplate.InstantiateIn(templateConainer)  
Me.Controls.Add(templateContainer)  
End If  
C. If (Not Me.DescTemplate Is Nothing) Then  
Me.Controls.Clear()  
Dim templateContainer As DescTemplateConainer = New  
DescTemplateContainer(_desc)  
Me.Controls.Add(templateContainer)  
End If  
D. If (Not Me.DescTemplate Is Nothing) Then  
Me.Controls.Clear()  
Dim templateContainer As DescTemplateConainer = New  
DescTemplateContainer(_desc)  
Me.DescTemplate.InstantiateIn(templateConainer)  
Me.Controls.Add(templateContainer)  
End If
```

Answer: D

Explanation: You must first determine that the DescTemplate property has returned content and then render the content. You can accomplish this by creating an instance of DescTemplateContainer that holds the content and then add the container to the ProductsGrid control for rendering.

Incorrect Answers:

A, B: If the DescTemplate property has returns Nothing then it has no content to render.

C: You need to call the InstantiateIn method of DescTemplate to place the template in the container.

QUESTION 95

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. Certkiller .com has a test lab that contains a Web server named Certkiller -SR21. Certkiller _SR21 is used to test applications before they are deployed to the production environment. All Web applications on Certkiller -SR21 must be hosted in Internet Information Services (IIS). You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer.

You have developed an ASP.NET inventory application named CK_Invtry that will be integrated into Certkiller .com's existing e-Commerce Web site. All source files for the CK_Invtry application are stored in the C:\ck_apps\CK_Invtry folder on TESTING-WS528. You want to copy the CK_Invtry application to Certkiller -SR21 by using the Copy Web Site tool. CK_Invtry must be hosted in IIS on Certkiller -SR21.

What should you do?

- A. Verify that Microsoft FrontPage Extensions are installed on Certkiller -SR21.
- B. Verify that Internet Information Services (IIS) 6.0 is installed on Certkiller -SR21.
- C. Verify the Windows Server 2003 is installed on Certkiller -SR21.
- D. Verify that you have Write access to the wwwroot folder on Certkiller -SR21.

Answer: A

Explanation: Microsoft FrontPage Extensions are used to copy a Web application to IIS. Therefore you should ensure that Microsoft FrontPage Extensions is installed on the test server.

Incorrect Answers:

B, C: IIS 6.0 and Windows Server 2003 are not required to allow you to copy a Web application to IIS. Microsoft FrontPage Extensions is required.

D: You do not require Write access to the wwwroot folder as Microsoft FrontPage Extensions will manage the security aspects of the connection. You only require FrontPage Extensions.

QUESTION 96

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. Certkiller .com has a test lab that contains a Web server named Certkiller -SR21. Certkiller _SR21 is used to test applications before they are deployed to the production environment. All Web applications on Certkiller -SR21 must be hosted in Internet Information Services (IIS). You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer.

You have developed an ASP.NET inventory application named CK_Invtry that will be integrated into Certkiller .com's existing e-Commerce Web site. The CK_Invtry application contains declarative .aspx pages and code-behind files. You want to deploy the CK_Invtry application to Certkiller -SR21. You need to ensure that no human-readable code exists in the CK_Invtry application once it has been deployed to Certkiller -SR21.

What should you do?

- A. Use the Publish Web Site tool to publish the CK_Invtry application to Certkiller -SR21 and select the option that allows the precompiled site to be updatable.
- B. Use the Copy Web Site tool to copy the CK_Invtry application to Certkiller -SR21 and select the option copy only the files required to run the application.

- C. Use the Publish Web Site tool to publish the CK_Invtry application to Certkiller -SR21 and deselect the option that allows the precompiled site to be updatable.
- D. Build the CK_Invtry application in Visual Studio 2005 and use the XCOPY command to copy only the files in the bin folder to Certkiller -SR21.

Answer: C

Explanation: You should publish the application to the test server and specify that the precompiled site must not be updatable. This requires that you clear the option to allow the precompiled site to be updatable. This will ensure that declarative .aspx pages are not human-readable.

Incorrect Answers:

A: You should publish the application to the test server and specify that the precompiled site must not be updatable. This requires that you clear the option to allow the precompiled site to be updatable. This will ensure that declarative .aspx pages are not human-readable.

B, D: The Copy Web Site tool and the XCOPY command do not allow you to precompile declarative .aspx pages. Declarative pages that are not precompiled are human-readable.

QUESTION 97

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a chat forum that will be integrated into Certkiller .com's existing e-Commerce Web application. You create a method that will authenticate users. The code for the authentication method is shown in the following exhibit.

```
Private Sub Authenticate(ByVal uName As String, ByVal pwd As String)
'Code ommitted for brevity
End Sub
```

You also create a class definition as shown in the following exhibit.

```
Private Class LoginFailureEvent
Inherits WebAuthenticationFailureEvent
Public Sub New(ByVal message As String, ByVal eventSource As Object, _
ByVal eventCode As Integer, ByVal uName As String)
MyBase.New(message, eventSource, eventCode, uName)
End Sub
End Class
```

You enable health monitoring in the Web.config file and use the default health monitor provider. You must now write code to log authentication errors to the provider. You code must make provision for a different default provider in the production environment.

What code segment should you use?

A. Dim ex As SecurityException = New SecurityException("Authentication failed")
Throw ex
B. Dim evt As WebAuthenticationFailureAuditEvent = New
WebAuthenticationFailureAuditEvent("Authentication failed", Nothing, _
WebEventCodes.AuditMembershipAuthenticationFailure, uName)
evt.Raise()
C. Dim ex As MembershipPasswordException = _
new MembershipPasswordException("Authentication failed")
Throw ex
D. Dim eLog As EventLog = New EventLog()
eLog.WriteEntry("Authentication failed", _
EventLogEntryType.FailureAudit, _
WebEventCodes.AuditMembershipAuthenticationFailure, uName);

Answer: B

Explanation: This code uses the ASP.NET 2.0 Health Monitoring API to log authentication failure events. It creates a WebAuthenticationFailureAuditEvent and calls its Raise method. It also uses the health monitoring configuration to determine which provider should receive the event.

Incorrect Answers:

A: This code raises an instance of the SecurityException but it does not deliver the error message to the provider.

C: This code raises an instance of the MembershipPasswordException but it does not deliver the error message to the provider.

D: This code is tied to the Microsoft Windows event log and does not allow you to easily change providers.

QUESTION 98

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You have developed a Web application that will be integrated into Certkiller .com's existing e-Commerce Web application. The Web application contains a performance counter that records the number of requests to the Products table in the CK_Products database.

The code for the counter is shown in the following exhibit.

```
Dim cntr As PerformanceCounter = _  
New PerformanceCounter("Table Requests", "Products", False)
```

You need to increase the counter by one.

What code segment should you use?

A. cntr.NextSample()

B. cntr.RawValue = cntr.NextSame().RawValue

- C. cntr.NextValue()
- D. cntr.Increment()

Answer: D

Explanation: The Increment method of the PerformanceCounter class is used to increase the counter by one.

Incorrect Answers:

A: The NextSample method of the PerformanceCounter class returns the next sample of data for the counter. It does not increase the counter by one.

B: This code does not increase the counter by one.

C: The NextValue method of the PerformanceCounter class returns the next value for the counter. It does not increase the counter by one.

QUESTION 99

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are debugging a Web application that has been integrated into the live Certkiller .com e-Commerce Web site. The Web application contains an order processing page named process.aspx. Certkiller .com developers added several Trace.Write and Trace.Warn statements on the process.aspx page.

You need to configure the Web application to display the trace messages but you must ensure that Certkiller .com's customers are not able to view the trace messages.

What should you do?

- A. Add the following element to the Web.config file:
<trace enable="true" pageOutput="false" localOnly="false" />
- B. Add the following Page directive to the process.aspx page:
<% @ Page Trace="true" TraceMode="SortByCategory" %>
- C. Add the following Page directive to the process.aspx page:
<% @ Page Trace="true" TraceMode="SortByTime" %>
- D. Add the following element to the Web.config file:
<trace enable="false" pageOutput="true" localOnly="false" />

Answer: A

Explanation: To enable tracing while preventing trace messages from being displayed on the page, you must enable tracing in the Web.config file and set the pageOutput and localOnly properties to false. This will save trace messages to the Trace.axd file in the Web application's root directory.

Incorrect Answers:

B, D: This Page directive enable tracing at the page level. Tracing will be displayed on the page.

D: You need to enable tracing in the Web.config file in the Web.config file, not disable it.

QUESTION 100

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You want to create a PowerTools.aspx page that displays all power tools in the CK_Products database. You use a SqlCommand instance to execute the sp_GetProductsByCategory stored procedure to return XML data from the Products table in the CK_Products database and load the data into an XmlDocument instance.

The code for the stored procedure is shown in the following exhibit:

```
Dim conString As String = _
"database=CK_Products;server= Certkiller -DB01;Integrated Security=SSPI"
Dim con As SqlConnection = New SqlConnection(conString)
con.Open()
Dim com As SqlCommand = New SqlCommand("sp_GetProductsByCategoryXml",
con)
Dim read As XmlReader = com.ExecuteXmlReader()
Dim doc As XmlDocument = New XmlDocument()
doc.Load(read)
```

You want to cache the XML data until the data in the in the CK_Products database changes.

What code segment should you use?

A. Dim dep As CacheDependency = new SqlCacheDependency("CK_Products",
"Products")

If(Not Cache("Data") Is Nothing)

Cache.Add("Data" ,doc, dep, System.Web.Cache.NoAbsoluteExpiration,
System.Web.Cache.NoSlidingExpiration, CacheItemPriority.Default, Nothing);
End If

B. Dim dep As CacheDependency = new SqlCacheDependency("CK_Products",
"Products")

If(Cache("Data") Is Nothing)

Cache.Add("Data" ,doc, dep, System.Web.Cache.NoAbsoluteExpiration,
System.Web.Cache.NoSlidingExpiration, CacheItemPriority.Default, Nothing);
End If

C. Dim dep As CacheDependency = new SqlCacheDependency("CK_Products",
"Products")

If(Cache("Data") Is Nothing)

Cache.Add("Data" ,read, dep, System.Web.Cache.NoAbsoluteExpiration,
System.Web.Cache.NoSlidingExpiration, CacheItemPriority.Default, Nothing);
End If


```
D. Dim dep As CacheDependency = new SqlCacheDependency("CK_Products",  
"Products")  
If(Not Cache("Data") Is Nothing)  
Cache.Add("Data", read, dep, System.Web.Cache.NoAbsoluteExpiration,  
System.Web.Cache.NoSlidingExpiration, CacheItemPriority.Default, Nothing);  
End If
```

Answer: B

Explanation: This code creates a SqlCacheDependency on the Products table in the CK_Products database that invalidates the cache whenever data in the Products table has changed and updates the XmlDocument with the data.

Incorrect Answers:

A: This code does not invalidate the cache and will update the XmlDocument when no data changes occur at the database level.

C: This code invalidates the cache but it caches the XmlReader and not the XmlDocument.

D: This code does not invalidate the cache. It also caches the XmlReader and not the XmlDocument.

QUESTION 101

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are redeveloping the current ASP.NET 1.1 Certkiller .com Web application to take advantage of the new features in ASP.NET 2.0. The Web application contains a page named layout.aspx that you want to change to a master page.

What should you do?

- A. Set the MasterPageFile attribute of the Page directive to layout.aspx.
- B. Replace the Page directive with a Master directive.
- C. Replace the contents of the layout.aspx page with ContentPlaceHolder controls.
- D. Rename the layout.aspx page to layout.master.

Answer: B, D

Explanation: There are two things that differentiate a master page from an ASP.NET page: the file extension and the directive. Master pages have a .master file extension while a page has an .aspx file extension and a page has a Page directive while a master page has a Master directive.

Incorrect Answers:

A: The MasterPageFile attribute of the Page directive specifies the master page that the content page should merge into. It does not change an .aspx page to a master page.

C: The content that must be added from content pages requires ContentPlaceHolder

controls. Any content on the layout page that must appear on all pages should not be replaced by ContentPlaceHolder controls.

QUESTION 102

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application that makes use of a master page. The master page does not contain nested master pages. You want the header section of the master page to be replaced by page-specific declarative content. What should you do?

- A. Add a WebPart control for the header section on the master page.
- B. Add a Content control for the header section on the master page.
- C. Add a ContentPlaceHolder control for the header section on the master page.
- D. Add a UserControl control for the header section on the master page.

Answer: C

Explanation: The content that must be added from content pages requires ContentPlaceHolder controls.

Incorrect Answers:

- A, D: WebParts and UserControl controls cannot be replaced by declarative content.
 - B: Content controls are added to content pages, not master pages.
-

QUESTION 103

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application that makes use of a master page. The master page does not contain nested master pages. You want the header section of the master page to be replaced declaratively and programmatically by page-specific content. You need to create the markup for the header section. What code segment should you use?

- A. `<div ID="_header">`
`<asp:ContentPalceHolder ID="_headerContent" Runat="Server">`
Certkiller .com
`</asp:ContentPalceHolder>`
`</div>`
- B. `<div ID="_header" Runat="Server">`
Certkiller .com

</div>

C. <div ID="_header">

<asp:Content ID="_headerContent" Runat="Server">

Certkiller .com

</asp:Content>

</div>

D. <div ID="_header">

<asp:Content ID="_headerContent">

Certkiller .com

</asp:Content>

</div>

Answer: A

Explanation: The content that must be added from content pages requires ContentPlaceHolder controls. To be able to replace the ContentPlaceHolder programmatically, you must set the Runat attribute to Server.

Incorrect Answers:

B: The content that must be added from content pages requires ContentPlaceHolder controls.

C, D: The content that must be added from content pages requires ContentPlaceHolder controls. Content controls are added to content pages, not master pages.

QUESTION 104

You work as an application developer at Certkiller .com. Certkiller .com recently switched their application development platform to Microsoft Visual Studio .NET 2005.

You are in the process of redeveloping the Certkiller .com Web application. You want to make use of Visual Studio .NET 2005's nested master pages feature in the redesign of the Certkiller .com Web application. You create a parent master page that consists of a global header and a global footer for the Certkiller .com Web application.

You use the following code segment to add a ContentPlaceHolder to the master page:

```
<asp:ContentPlaceHolder ID="ckbody" runat="server" />
```

You then use the following code segment to create a content page named Content.aspx:

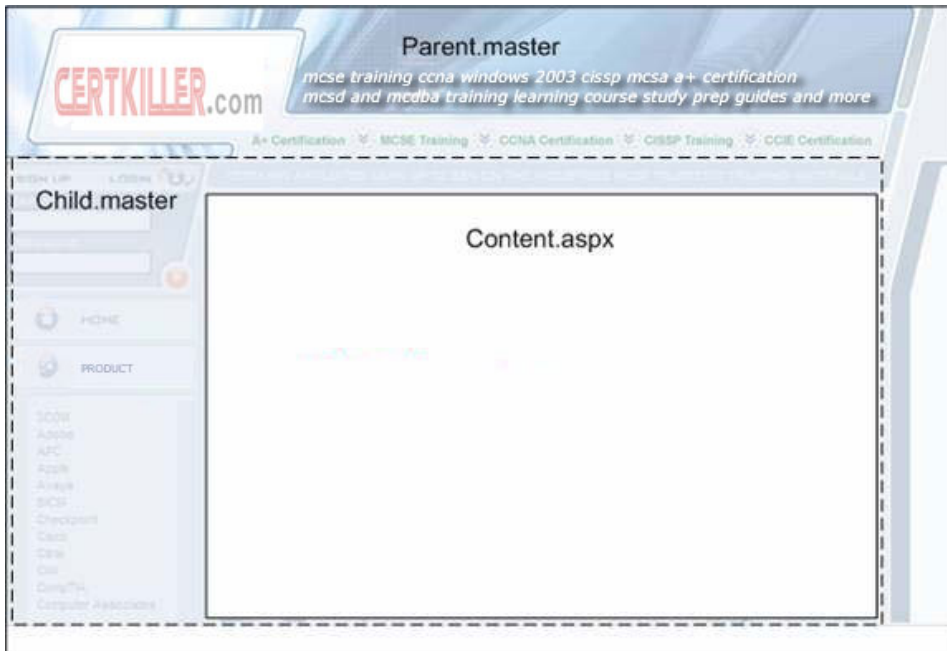
```
<% @ Page Language="VB" MasterPageFile="~/parent.master"%>
```

```
<asp:Content ID="Content1" ContentPlaceHolderID="content"
Runat="Server">
```

Content goes here.

```
</asp:Content>
```

You now need to create a child master page that will hold the menu elements for each page. You must ensure that users are able to see the header, the footer, the menu and the content when they view the page as shown in the exhibit.



Which code segment should you use?

A. `<%@ Master Language="VB" MasterPageFile="~/parent.master"%>`
`<asp:Content runat="server" ContentPlaceHolderID="content">`
`<asp:contentplaceholder id="ckbody" runat="server">`

Menu element

`</asp:contentplaceholder>`
`</asp:Content>`

B. `<%@ Master Language="VB" MasterPageFile="~/parent.master"%>`
`<asp:Content runat="server" ContentPlaceHolderID="ckbody">`
`<asp:contentplaceholder id="content" runat="server">`

Menu

`</asp:contentplaceholder>`
`</asp:Content>`

C. `<%@ Master Language="VB" MasterPageFile="~/parent.master"%>`
`<asp:Content runat="server" ContentPlaceHolderID="ckbody">`

Menu element 1

`<asp:contentplaceholder id="content" runat="server">`
`</asp:contentplaceholder>`
`</asp:Content>`

D. `<%@ Master Language="VB" MasterPageFile="~/parent.master"%>`
`<asp:Content runat="server" ContentPlaceHolderID="content">`

Menu element 1

`<asp:contentplaceholder id="ckbody" runat="server">`
`</asp:contentplaceholder>`
`</asp:Content>`

Answer: C

QUESTION 105

You work as a Web developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains a Web server named Certkiller -SR23.

Certkiller -SR23 hosts the Certkiller .com intranet that consists of several Web sites. You are in the process of redesigning the Web sites to make their pages and controls consistent in design.

You want to implement the style changes to all the Web sites on Certkiller -SR23 without having to edit the individual pages on every Web site.

What should you do? (Choose all that apply.)

- A. You need to assign a theme by setting the `<% @ Page Theme="..." %>` directive to the name of the application theme.
- B. You need to assign a theme by specifying the `<pages theme="..." />` section in the Web.config file.
- C. You need to place a theme in the App_Themes directory. This should be done under the application root directory.
- D. You need to place a theme under an ASP.NETClientFiles folder under the ASP.NET installation directory.

Answer: B, C

Explanation: The theme should be placed in the App_themes folder. Then it can be specified centrally in the web.config file.

Incorrect Answers:

A: It is possible to set the theme on every page using the Page directive. However, it is more convenient and maintainable to set the theme centrally in the web.config file.

D: The App_themes folder is only reserved for storing themes.

QUESTION 106

You work as a Web application developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You are in the process of developing a new Web application for the Certkiller .com Web site.

You want to configure the Web application to store user active themes in user profile objects. You want the users' preferred themes to be apply the as soon as they log on to the Certkiller .com Web site.

What should you do?

- A. You need to set the Theme property of the Page object based on the user profile in the PreLoad event handler.
- B. You need to set the Theme property of the Page object based on the user profile in the InitComplete event handler.
- C. You need to set the Theme property of the Page object based on the user profile in the PreInit event handler.
- D. You need to set the Theme property of the Page object based on the user profile in the

OnLoad event handler.

Answer: C

Explanation: You should use the PreInit event to set the theme.

Incorrect Answers:

A, B, D: The other events happen too late in the lifecycle of the page.

QUESTION 107

You work as an application developer at Certkiller .com. The Certkiller .com Web site makes use of custom Themes based on the Web site user's location. The user's location is set as soon as a user logs on to the web site. The location Theme name is stored in a variable named CK_Themes.

Certkiller .com plans to make its' Web site available in Spanish, Portuguese and French. You need to ensure that the Certkiller .com web site is able to support extra Themes to support users in new locations. You need to use the CK_Themes variable to dynamically set the Web site's Theme.

What should you do?

- A. You should add the code segment `Page.Theme = CK_Theme` to the Load event of every page on the Web site.
- B. You should add the code segment `<% @ Page Theme="CK_Theme" ... %>` to the markup source of every page on the Web site.
- C. You should add the code segment `<pages theme="CK_Theme" />` to the Web site's configuration file.
- D. You should add the code segment `Page.Theme = CK_Theme` to the PreInit event of every page on the Web site.

Answer: D

Explanation: It is essential that the theme is dynamically set for every page. The PreInit event occurs early enough in the lifecycle of a page in order to manipulate the theme.

Incorrect Answers:

A: The Load event takes place too late in the lifecycle of a page.

B, C: You need to use a declarative approach. This is not suitable since the theme has to be set dynamically depending upon the value of a variable.

QUESTION 108

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application that that implements themes. You create a theme named BasicTheme that contains two skin files named default.sik and

alt.skin. The default.skin file represents the default skin file for all controls in the Web application. You want to associate Button controls on the Web application's default.aspx page with a non-default skin.

What should you do?

A. Associate the alt.skin file with a new theme named altTheme.

On the default.aspx page, add a SkinID property with the value "alt.skin" to the definition of each Button control.

B. Associate the alt.skin file with a new theme named altTheme.

On the default.aspx page, add a SkinID property with the value "alt" to the definition of each Button control.

C. Add a SkinID property with the value "alt" to the Button control's definition in alt.skin.

On the default.aspx page, add a SkinID property with the value "alt" to the definition of each Button control.

D. Add a SkinID property with the value "alt" to the Button control's definition in default.skin.

On the default.aspx page, add a SkinID property with the value "alt" to the definition of each Button control.

Answer: C

Explanation:

Both the Button control definition in the non-default skin file on the buttons on the page must have a SkinID property with an identical value.

Incorrect Answers:

A, B: Button control definition in the non-default skin file on the buttons on the page must have a SkinID property with an identical value.

D: The Button control definition in the non-default skin file on the buttons on the page must have a SkinID property with an identical value.

QUESTION 109

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application that enables the administration and management of the existing Certkiller .com Web site. The Web application has a page named subcategories.aspx that makes use of WebParts. The code for the WebPart is shown in the following exhibit.

```
<asp:WebPartZone ID="_webPartZone" Runat="Server">
<ZoneTemplate>
<custom:CategoryWebPart ID="_category" Runat="Server" />
<custom:SubcategoryWebPart ID="_subcat" Runat="Server" />
</ZoneTemplate>
```

</asp:WebPartZone>

The CategoryWebPart control displays a list of product categories from the CK_Products database. The administrator can either select categories from a DropDownList or manually enter a category in a TextBox. The SubcategoryWebPart control displays the subcategories that belong to the category specified in the CategoryWebPart control. You modify the Web.config file to allow the SubcategoryWebPart control to use the category entered or selected in the CategoryWebPart control. You now need to add code to the subcategories.aspx page that connects the two WebPart controls every time the page is loaded. What code segment should you use?

- A. <asp:WebPartManager ID="_webPartManager" Runat="Server">
<StaticConnections>
<asp:WebPartConnection ID="_webPartCon" ProviderID="_subcat"
ConsumerID="_category" />
</StaticConnections>
</asp:WebPartManager>
- B. <asp:WebPartManager ID="_webPartManager" Runat="Server">
<StaticConnections>
<asp:WebPartConnection ID="_webPartCon" ProviderID="_category"
ConsumerID="_subcat" />
</StaticConnections>
</asp:WebPartManager>
- C. <asp:ConnectionsZone ID="_conZone" Runat="Server">
<custom:CategoryWebPart ID="_category" Runat="Server" />
<custom:SubcategoryWebPart ID="_subcat" Runat="Server" />
</asp:ConnectionsZone>
- D. <asp:ConnectionsZone ID="_categoryCon" Runat="Server">
<custom:CategoryWebPart ID="_category" Runat="Server" />
</asp:ConnectionsZone>
<asp:ConnectionsZone ID="_subcatCon" Runat="Server">
<custom:SubcategoryWebPart ID="_subcat" Runat="Server" />
</asp:ConnectionsZone>

Answer: B

Explanation:

The WebPartManager control is used to connect two WebPart controls. The provider WebPart control and the consumer WebPart control must be specified in the StaticConnections element of the WebPartManager control. In this instance, the provider is the _category WebPart control and the consumer is the _subcategory WebPart.

Incorrect Answers:

A: In this instance, the provider is the _category WebPart control and the consumer is the _subcategory WebPart.

C, D: The ConnectionsZones control allows users to configure connections between WebPart controls.

QUESTION 110

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application that enables the administration and management of the existing Certkiller .com Web site. The Web application has a page named subcategories.aspx that contains a WebPart control named _productsWebPart. The _productsWebPart WebPart control has a property named _category of type String. You apply the WebBrowsable attribute to the _category property. You also add an EditorZone control to the subcategories.aspx page. The code for the EditorZone control is shown in the following exhibit.

```
<asp:EditorZone ID="_editorZone" Runat="Server">
<ZoneTemplate>
</ZoneTemplate>
</asp:EditorZone>
```

You must add a control to the ZoneTemplate element of the EditorZone control to allow users to edit the _category property.

What control should you add?

- A. A PropertyGridEditorPart control.
- B. A WebPartManager control.
- C. A TextBox control.
- D. A ConnectionsZone control.

Answer: A

Explanation: The PropertyGridEditorPart control allows users to edit a WebPart control's property that has the WebBrowsable attribute.

Incorrect Answers:

B: The WebPartManager control is used to connect two WebPart controls. It does not allow a WebPart control's properties.

C: A TextBox control cannot be added to a ZoneTemplate element.

D: The ConnectionsZones control allows users to configure connections between WebPart controls. It does not allow a WebPart control's properties.

QUESTION 111

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application that enables the administration and management of the existing Certkiller .com Web site. The Web application has a page named subcategories.aspx that contains several WebPart controls. You must add a zone control to each WebPart control so that users can rearrange the WebParts on the o edit the subcategories.aspx page. What control should you add?

- A. A CatalogZone control.
- B. A WebPartZone control.
- C. An EditorZone control.
- D. A ConnectionsZone control.

Answer: B

Explanation: The WebPartZone control provides a user interface that allows users to move WebPart controls within and between WebPartZone controls.

Incorrect Answers:

A: The CatalogZone control allows users to add available WebPart controls to the page. It does not allow a WebPart controls to be rearranged.

C: An EditorZone control allows users to edit and personalized WebPart control. It does not allow a WebPart controls to be rearranged.

D: The ConnectionsZones control allows users to configure connections between WebPart controls so that they can interact with each other. It does not allow a WebPart controls to be rearranged.

QUESTION 112

You work as a Microsoft ASP.NET developer at Certkiller .com. The Certkiller .com network contains an Oracle database server named Certkiller -DB01.

Certkiller -DB01 hosts a database named CK_WebUsers. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application for Certkiller .com's intranet Web site. You want to implement a login page that authenticates users against their Active Directory user accounts. However, no all pages will require authentication. You also want users to be able to personalize the Web pages and save their personalization settings to the CK_WebUsers database. You need to configure the Web application's Web.cponfig file to meet these requirements.

What code segment should you use?

- A. <AnonymousIdentification Enabled="True" />
<Authentication Mode="Windows" />
- B. <AnonymousIdentification Enabled="False" />
<Authentication Mode="Forms" />
- C. <AnonymousIdentification Enabled="True" />

```
<Authentication Mode="Forms" />  
D. <AnonymousIdentification Enabled="False" />  
<Authentication Mode="Windows" />
```

Answer: C

Explanation: You should implement Forms Authentication as Forms Authentication uses a login page to authenticate users against their Microsoft Windows domain user accounts in Active Directory. You also need to enable anonymous identification as it allows ASP.NET to remember users without requiring them to be authenticated. This allows you to save and retrieve personalization settings for the users.

Incorrect Answers:

A: Windows Authentication requires that users have a Microsoft Windows domain user account in Active Directory. However, Windows Authentication does not make use of a login page. Instead, the domain user account is passed through IIS to the Web application.

B: You need to enable anonymous identification as it allows ASP.NET to remember users without requiring them to be authenticated. This allows you to save and retrieve personalization settings for the users.

C: Windows Authentication requires that users have a Microsoft Windows domain user account in Active Directory. However, Windows Authentication does not make use of a login page. Instead, the domain user account is passed through IIS to the Web application. Furthermore, you also need to enable anonymous identification as it allows ASP.NET to remember users without requiring them to be authenticated. This allows you to save and retrieve personalization settings for the users.

QUESTION 113

You work as a Microsoft ASP.NET developer at Certkiller .com. The Certkiller .com network contains an Oracle database server named Certkiller -DB01.

Certkiller -DB01 hosts a database named CK_WebUsers. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application for Certkiller .com's extranet Web site. The extranet Web site is accessed by Certkiller .com users as well as some of Certkiller .com's suppliers and affiliates. All users that must access the Web application have their credentials stored in the CK_WebUsers database. You want to implement a login page that authenticates users against the CK_WebUsers database.

What should you do?

- A. Set the Authentication Mode in the Web.config file to Passport.
- B. Set the Authentication Mode in the Web.config file to None.
- C. Set the Authentication Mode in the Web.config file to Windows.

D. Set the Authentication Mode in the Web.config file to Forms.

Answer: D

Explanation: The Forms Authentication allows you to use a custom login page to authenticate users against any data store.

Incorrect Answers:

A: Passport authentication requires that users have a Microsoft passport as it is used to authenticate users against the Microsoft Passport system.

B: Setting the Authentication mode to None disables authentication.

C: Windows Authentication requires that users have a Microsoft Windows domain user account in Active Directory. The domain user account is passed through IIS to the Web application.

QUESTION 114

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You have developed a Web application for Certkiller .com's existing Web site. The Web application implements role-based security to allow for the administration and maintenance of the Certkiller .com Web site. It allows certain users to administer the Web site, including the databases used by the Web site, while others are allowed to maintain the Web site by adding and editing product information. Only Web administrators should be able to manually add users to the Web application.

You discover that a user named Rory Allen has added a user account to the Web site. You also suspect that he has added his user account to various roles. You want to retrieve a list of the role of which the roryallen user account is a member.

What code segment should you use?

- A. `Dim uRoles As String() = Roles.GetRolesForUser("roryallen");`
- B. `Dim uRoles As String() = Roles.FindUsersInRole("roryallen");`
- C. `Dim uRoles As String() = Roles.FindUsersInRole("", "roryallen");`
- D. `Dim uRoles As String() = Roles.GetAllRoles();`

Answer: A

Explanation: The GetRolesForUser method of Roles returns a list of roles of which the specified user is a member.

Incorrect Answers:

B: The FindUsersInRole method requires two parameters - the role and the user account.

C: The FindUsersInRole method requires two parameters - the role and the user account. This code will return a list of users named roryallen in an empty role.

D: The GetAllRoles method returns a list of roles supported by the role provider.

QUESTION 115

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You have developed and deployed a Web application for Certkiller .com's intranet Web site. The Web application has been deployed on a Web server named Certkiller -SR34. Internet Information Services (IIS) 6.0 is installed on Certkiller -SR34. The Web application accesses files that are secured by NTFS permissions and are located in a folder named Projects.

Several Certkiller .com users that have permissions to the files and are able to access the files through the corporate network, report that they cannot access the files through the Web application. You open the Web.config file for the Web application and notice the elements shown in the following exhibit.

```
<identity impersonate="true"/>
```

```
<authentication mode="Windows"/>
```

You need to configure IIS to allow user access to the files through the Web application.

What should you do?

- A. Disable anonymous access.
- B. Change Authentication Mode to None.
- C. Change Authentication Mode to Forms.
- D. Change Authentication Mode to Passport.

Answer: A

Explanation: Identity Impersonation allows IIS to run the Web application under the credentials of the identity authenticated by IIS. By default, this is the IUSR_PRODUCTION account. IUSR_PRODUCTION probably does not have the required NTFS permissions to the files. When anonymous access is disabled, IIS is forced to authenticate the user accessing the Web application.

Incorrect Answers:

A: Passport authentication requires that users have a Microsoft passport as it is used to authenticate users against the Microsoft Passport system. However, NTFS permissions make use of Active Directory user accounts.

B: Setting the Authentication mode to None disables authentication. You need to have IIS authenticate users against Active Directory. You should therefore not change Windows authentication.

C: The Forms Authentication allows you to use a custom login page to authenticate users against any data store. This will require a custom login page.

QUESTION 116

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a Web application for Certkiller .com's existing Web site. The Web application implements role-based security to allow for the administration and maintenance of the Certkiller .com Web site. It allows members of the Admins role to administer the Web site, including the databases used by the Web site, while allowing members of the Support role to maintain the Web site by adding and editing product information. Only members of the Admins role should have access to confidential user information.

What code segment should you use?

A. If (Not User.Identity.Name = "Support") Then

Return

End If

'Show user info

B. If (User.IsInRole("Support")) Then

Return

End If

'Show user info

C. If (Not User.Identity.Name = "Admins") Then

Return

End If

'Show user info

D. If (User.IsInRole("Admins")) Then

Return

End If

'Show user info

Answer: D

Explanation: You must determine if the user is a member of the Admins role by calling the IsInRole method and then return the requested information only if the user is a member of the Admins role.

Incorrect Answers:

A, C: This code returns name of the identity that is attached to the current HTTP context. It does not determine whether data should be returned or not.

B: This code determines if the user is a member of the Support role by calling the IsInRole method and then return the requested information if the user is a member of the Support role. Members of support must not have access to user information.

QUESTION 117

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services

(IIS) is installed on Certkiller -WS528.

You are developing a Web application for Certkiller .com's existing Web site. The Web application allows for the administration and maintenance of the Certkiller .com Web site. The Web application contains a users.aspx page that allows administrators to manually create user accounts for the Certkiller .com Web site. You add a CreateUserWizard control to the users.aspx page and you do not alter any of the control's properties.

You must add input controls to the wizard steps. However, the input controls that allow administrators to enter user information must be inserted before the Security Question and Security Answer input controls.

What should you do?

- A. Add a StartNavigationTemplate element to the CreateUserWizard control and add the input controls to the StartNavigationTemplate element.
- B. Add a CustomNavigationTemplate element to the CreateUserWizardStep control and add the input controls to the CustomNavigationTemplate element.
- C. Add a ContentTemplate element to the CreateUserWizardStep control and add the input controls to the ContentTemplate element.
- D. Add a StepNavigationTemplate element to the CreateUserWizard control and add the input controls to the StepNavigationTemplate element.

Answer: C

Explanation: The CreateUserWizardStep control is a part of the CreateUserWizard control that is added by default. The CreateUserWizardStep control has a ContentTemplate element to which you can add and remove input controls from the wizard.

Incorrect Answers:

A: The StartNavigationTemplate element to the CreateUserWizard control specifies the content that appears in the navigation area of each wizard page other than the start page and the completion page. It does not allow you to add or remove input controls from the wizard.

B: The CustomNavigationTemplate element to the CreateUserWizardStep control specifies the content that appears in the navigation area of the start page. It does not allow you to add or remove input controls from the wizard.

D: The StepNavigationTemplate element to the CreateUserWizard control specifies the content that appears in the navigation area of each wizard page other than the start page and the completion page. It does not allow you to add or remove input controls from the wizard.

QUESTION 118

Andy Reid is employed as an application developer at Certkiller .com. He receives instruction from the CIO to create a Web Form that will enable the users to create a new account.

Andy Reid adds a CreateUserWizard control by using the following code segment:

```
<asp:CreateUserWizard id="CreateUser" runat="server"/>
```

Andy Reid needs to make sure that e-mail messages are sent to users automatically as soon as they finished with creating their accounts. This e-mail message needs to be sent via the wizard. He adds a valid <smtp>element to the Web.config file.

Andy Reid now needs to add the appropriate code to the Page_Load event.

What should Andy Reid do?

- A. Add the code segment `SmtpMail.SmtpServer = "mail. Certkiller .com"` to the Page_Load event.
- B. Add the code segment `CreateUser.MailDefinition.From = registration@ Certkiller .com` to the Page_Load event.
- C. Add the code segment `CreateUser.Email = user@ Certkiller .com` to the Page_Load event.
- D. Add the code segment `CreateUser.RequireEmail = True` to the Page_Load event.

Answer: B

Explanation: In order to enable the wizard to send e-mail messages automatically Andy Reid needs to set the MailDefinition.From the properties of the wizard.

Incorrect Answers:

A: The question indicates that information of the SMTP server have already been provided in the web.config file.

C: Andy Reid needs to set the email address of the user to user@ Certkiller .com. This is evidently incorrect because the purpose is to email the specific user that has been created.

D: RequireEmail property to True will have no affect since it is the default value anyway. An exception will be made by the wizard if the RequireEmail property is true and an email for the user is not given.

QUESTION 119

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You have been instructed to develop a Web application that will support mobile devices. You need to create a project for the Web application in Visual Studio .NET 2005. You must be able to test and debug the Web application by using Microsoft Device Emulator 1.0.

What should you do?

- A. Create an ASP.NET Web Site project and choose File System as the location for the project.
- B. Create an ASP.NET Web Site project and choose HTTP as the location for the project.
- C. Create a Smart Device Application project and add mobile ASP.NET pages to the project.
- D. Create a Smart Device Console Application project and add mobile ASP.NET pages to the project.

Answer: A

Explanation: Microsoft Device Emulator 1.0 can only connect to ASP.NET Web applications that are hosted in Internet Information Services (IIS). Therefore you must create an ASP.NET Web Site project and choose HTTP as the location for the project.

Incorrect Answers:

B: Microsoft Device Emulator 1.0 can only connect to ASP.NET Web applications that are hosted in IIS. Projects that are located on File System are not hosted in IIS. You should choose HTTP as the location. HTTP projects are hosted in IIS.

C, D: Smart Device Application and Smart Device Console Application projects only support Windows-based applications. They do not support Web-based applications.

QUESTION 120

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer.

You are developing a Web Form named default.aspx that is part of a mobile Web application intended to render the Certkiller .com Web site to a variety of mobile device. You want the default.aspx page of the Web application to adaptively render content designed for the type of the device that is requesting the page.

What should you do?

- A. Add custom controls that emit WML to the default.aspx page.
- B. Add Mobile controls to the default.aspx page.
- C. Add a Mobile Form to the default.aspx page.
- D. Add Web server controls to the default.aspx page.

Answer: A

Explanation: The wireless markup language (WML) and the XHTML adapter classes can be used to render ASP.NET pages for mobile devices.

Incorrect Answers:

B: Mobile controls can only be added to Mobile Forms. They cannot be added to Web Forms.

C: ASP.NET pages only support one form per page. This can either be a Web Form or a Mobile Form but not both.

D: Web server controls do not render content adaptively.

QUESTION 121

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform.

You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services

(IIS) is installed on Certkiller -WS528.

You are developing a Web application that must support a variety of browser. Your analysis indicates that the majority of users that will access the Web application will use Microsoft Internet Explorer 6.0 and Microsoft Pocket Internet Explorer 4.0.

You are creating the header for the Web application. The header will display the Certkiller .com logo from a file named ck_logo.jpg. You want the logo to appear appropriately on all browsers.

What code segment should you use?

- A. `<asp:Image ID="ckLogo" Runat="server" IE:ImageUrl="Images/ck_logo.jpg" PIE4:ImageUrl="Images/Small/ck_logo.jpg" />`
- B. `<asp:Image ID="ckLogo" Runat="server" ImageUrl="Images/ck_logo.jpg" PIE4:ImageUrl="Images/Small/ck_logo.jpg" />`
- C. `<asp:Image ID="ckLogo" Runat="server" ImageUrl="Images/ck_logo.jpg" />`
`<asp:Image ID="small_ckLogo" Runat="server"`
`PIE4:ImageUrl="Images/Small/ck_logo.jpg" />`
- D. `<asp:Image ID="ckLogo" Runat="server" IE:ImageUrl="Images/ck_logo.jpg" />`
`<asp:Image ID="small_ckLogo" Runat="server" ImageUrl="Images/Small/ck_logo.jpg"`
`/>`

Answer: B

Explanation: You can use adaptive rendering to modify a server control. This allows different browser to render the control differently. To use adaptive rendering, you should prefix the property that must be rendered differently with the ID of that browser. The ID for Microsoft Pocket Internet Explorer 4.0 is PIE4 the ID for Microsoft Internet Explorer 6.0 is IE. However, you should not prefix IE as you would then only have images rendered on Microsoft Internet Explorer 6.0 and Microsoft Pocket Internet Explorer 4.0. By not prefixing one property, that property will become the default and will only be replaced on by the prefixed property Microsoft Pocket Internet Explorer 4.0 browsers.

Incorrect Answers:

- A: You need a default image for browsers, such as Opera and Netscape that are not prefixed. In this code you only have images that will be rendered on Microsoft Internet Explorer 6.0 and Microsoft Pocket Internet Explorer 4.0.
- C: You need to use only one Image control. If you use two Image controls the control without a prefixed property will be rendered on all browsers. While the Image control with the PIE4 prefix will also be rendered on Microsoft Pocket Internet Explorer 4.0, resulting in two logos.
- D: You need to use only one Image control. If you use two Image controls the control without a prefixed property will be rendered on all browsers. While the Image control with the IE prefix will also be rendered on Microsoft Internet Explorer 6.0, resulting in two logos.

QUESTION 122

You work as a Microsoft ASP.NET developer at Certkiller .com. Certkiller .com uses

the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS528 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS528.

You are developing a default.aspx page for Web application that that supports mobile devices. The default.aspx page allows the Certkiller .com CEO to perform searches and reports on the Certkiller .com e-Commerce Web site. Controls for both search and report functionality must exist on the default.aspx page. You want only the search controls to be visible when the CEO runs a search and you want only reporting controls to be visible when the CEO reports information. You cannot use programming to accomplish this task.

What should you do?

- A. Add two mobile Form controls to the page. Add search controls to the one mobile Form and reporting controls to the other.
- B. Add two mobile Panel controls to the page. Add search controls to the one mobile Panel and reporting controls to the other.
- C. Add one mobile Form control to the page. Add two mobile Panel controls to the Form. Add search controls to the one mobile Panel and reporting controls to the other.
- D. Add one ASP.NET Form control to the page. Add two mobile Panel controls to the Form. Add search controls to the one mobile Panel and reporting controls to the other.

Answer: A

Explanation: You must add two mobile Forms to the page but only one will be active at a time. You can thus separate the user interface without using programming.

Incorrect Answers:

B: Adding two mobile Panel controls to the page would require that you use programming to hide one of the Panel controls.

C: Adding two mobile Panel controls to one mobile Form would require that you use programming to hide one of the Panel controls.

D: You cannot add mobile controls to an ASP.NET Web Form. You can only add mobile controls to a mobile Form.

QUESTION 123

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

You are in the process of storing numerical values up to 2,100,000,000 into a variable and may require storing negative values using a .NET Framework 2.0 application. You are required to optimize memory usage

What should you do?

A. Int32

- B. UInt16
- C. UInt32
- D. Int16

Answer: A

Explanation: The Int32 type should be used in the scenario as it can be used to store positive and negative numerical values from -2,147,483,648 to +2,147,483,647.

Incorrect Answers:

B, C: The UInt32 and UInt16 type should not be used in the scenario because they are used to store only unsigned positive numbers.

D: The Int16 type should not be used as you will only be allowed to store values from -32768 to +32768.

QUESTION 124

You work as an application developer at Certkiller .com. you are currently in the process of creating a class that stores data about Certkiller .com's customers. Certkiller .com customers are assigned unique identifiers and various characteristics that may include aliases, shipping instructions, and sales comments. These characteristics can change in both size and data type.

You start by defining the Customer class as shown below:

```
public class Customer
{
    private int custID;
    private ArrayList attributes;
    public int CustomerID
    {
        get {return custID;}
    }
    public Customer (int CustomerID)
    {
        this.custID = CustomerID;
        this.attributes = new ArrayList ();
    }
    public void AddAttribute (object att)
    {
        attributes.Add (att);
    }
}
```

You have to create the FindAttribute method for locating attributes in Customer objects no matter what the data type is.

You need to ensure that the FindAttribute method returns the attribute if found, and you also need to ensure type-safety when returning the attribute.

What should you do?

- A. Use the following code to declare the FindAttribute method:

```
public T FindAttribute (T att)
{
//Find attribute and return the value
}
```

B. Use the following code to declare the FindAttribute method:

```
public object FindAttribute (object att)
{
//Find attribute and return the value
}
```

C. Use the following code to declare the FindAttribute method:

```
public T FindAttribute <T> (T att)
{
//Find attribute and return the value
}
```

D. Use the following code to declare the FindAttribute method:

```
public string FindAttribute (string att)
{
//Find attribute and return the value
}
```

Answer: C

Explanation: This code declares the method FindAttribute and specifies an argument named att using the T placeholder as the argument and return data type. To ensure the FindAttribute method accepts arguments of different types, you should specify an argument using a generic placeholder. The argument att in this generic method will accept any valid data type and ensures type-safety by returning that same data type.

Incorrect Answers:

A: You should not use this code because it does not declare the placeholder T. when declaring a generic method, you have to use the < > brackets to declare the placeholder before using it.

B: You should not use this code because it does not guarantee type-safety.

D: You should not use this code because it will only accept a string argument and return a string argument.

QUESTION 125

You work as an application developer at Certkiller .com. You are creating a custom exception class named ProductDoesNotExistException so that custom exception messages are displayed in a new application when the product specified by users is unavailable.

This custom exception class will take the ProductID as an argument to its constructor and expose this value through the ProductID. You are now in the process of creating a method named UpdateProduct. This method will be used to generate and manage the ProductDoesNotExistException exception if the ProductID variable contains the value 0.

You need to ensure that use the appropriate code for the UpdateProduct method.
What should you do?

A. Make use of the following code:

```
public void UpdateProduct ()
{
    try
    {
        if (ProductID == 0)
            throw new ProductDoesNotExistException (ProductID);
        }
        catch (ProductDoesNotExistException ex)
        {
            MessageBox.Show ("There is no Product" + ex. ProductID);
        }
    }
```

B. Make use of the following code:

```
public void UpdateProduct ()
{
    try
    {
        if (ProductID == 0)
            throw new Exception ("Invalid ProductID");
        }
        catch (ProductDoesNotExistException ex)
        {
            MessageBox.Show (ex.Message);
        }
    }
```

C. Make use of the following code:

```
public void UpdateProduct ()
{
    if (ProductID == 0)
        throw new ProductDoesNotExistException (ProductID);
    }
```

D. Make use of the following code:

```
public void UpdateProduct ()
{
    if (ProductID == 0)
        throw new Exception ("Invalid ProductID");
    }
```

Answer: A

Explanation: This code verifies the value of the ProductID variable by using the if statement. If the ProductID variable contains a value of 0, this code generates an

exception of type `ProductDoesNotExistException`. To explicitly generate an exception, you are required to use the `throw` statement. The exception generated by using the `throw` statement can be handled by the `try...catch` block. This code generates the custom exception by calling the constructor of the custom exception class named `ProductDoesNotExistException`. The constructor argument is the `ProductID` attached to the `ProductDoesNotExistException` object. This code then handles the custom exception named `ProductDoesNotExistException` by using a `catch` block, which handles exceptions by using a variable named `ex` of the type `ProductDoesNotExistException`. This code displays the "There is no Product" error message by using the `MessageBox.Show` method and concatenating the `ex.ProductID` to it.

Incorrect Answers:

B: You should not use the code that generates an exception of the type `Exception` and handles the exception of the type `ProductDoesNotExistException` in the `catch` block. This code is incorrect because you are required to generate a custom exception named `ProductDoesNotExistException`.

C, D: You should not use the codes that do not use a `try...catch` block because the application an unhandled exception.

QUESTION 126

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

You have recently finished development of a class named `TestReward` and package the class in a .NET 2.0 assembly named `TestObj.dll`. After you ship the assembly and it is used by client applications, you decide to move the `TestReward` class from `TestObj.dll` assembly to the `TestRewardObj.dll` Assembly. You are to ensure when you ship the updated `TestObj.dll` and `TestRewardObj.dll` assemblies that the client applications continue to work and do not require recompiling.

What should you do?

- A. The `TypeForwardedTo` attribute should be used
- B. The `TypeConvertor.ConvertTo` method should be used
- C. The `InternalsVisibleTo` attribute should be used
- D. The `Type Converter.ConvertFrom` method should be used

Answer: A

Explanation: The statement used for you to add a type from one assembly into another assembly is the `TypeForwardTo` attribute which enables you not to have the application recompiled.

Incorrect Answers:

B, D: The `TypeConverter` class provides a unified way of converting different types of values to other types and can not be used to move a type.

C: The method in question here specifies all nonpublic types in an assembly are visible to other assemblies but can not be used to move types.

QUESTION 127

You work as an application developer at Certkiller .com. You have recently created a custom collection class named ShoppingList for a local supermarket. This custom class will include ShoppinItem objects that have the public properties listed below.

* Name

* AisleNumber

* OnDiscount

You are required to enable users of your class to iterate through the ShoppingList collection, and to list each product name and aisle number using the foreach statement.

You need to achieve this by declaring the appropriate code.

What code should you use?

A. `public class ShoppingList : ICollection`

```
{  
// Class implementation  
}
```

B. `public class ShoppingList : IEnumerator, IEnumerable`

```
{  
// Class implementation  
}
```

C. `public class ShoppingList : IList`

```
{  
// Class implementation  
}
```

D. `public class ShoppingList : Enum`

```
{  
// Class implementation  
}
```

Answer: B

Explanation: You should implement the IEnumerable and IEnumerator interfaces of the System.Collections namespace to ensure that your collection class supports foreach iteration. The IEnumerable interface defines only one method named GetEnumerator that returns an object of type IEnumerator of the System.Collections namespace and is used to support iteration over a collection. The IEnumerator interface supports methods, such as Current, MoveNext, and Reset to iterate through a collection. The Current method returns the current element of the collection. The Move method positions the enumerator to the next available element of the collection. The

Reset method positions the enumerator before the first element of the collection.

Incorrect Answers:

A: You should not use the code that implements the ICollection interface because this interface is used to define properties in a collection. Implementing this interface will not ensure that your collection class supports foreach iteration because it does not inherit the IEnumerator interface.

C: You should not use the code that implements the IList interface because this interface is used to define properties of a non-generic list of items accessed by index. Implementing this interface will not ensure that your collection class supports foreach iteration because it does not inherit the IEnumerator interface.

D: You should not use the code that inherits the Enum because this structure is used as a base class for those classes that provide enumeration values. Inheriting the Enum structure will not ensure that your collection class supports foreach iteration.

QUESTION 128

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

You are in the process of developing a .NET Framework 2.0 application used to store a type-safe list of names and e-mail addresses. The list will be populated all at once from the sorted data which means you will not always need to perform insertion or deletion operations on the data. You are required to choose a data structure that optimizes memory use and has good performance.

What should you do?

- A. The System.Collections.Generic.SortedList class should be used
- B. The System.Collections.HashTable class should be used
- C. The System.Collections.Generic.SortedList class should be used
- D. The System.Collections.SortedList class should be used

Answer: A

Explanation: The SortedList generic class should be used in the scenario class as it provides type safety compared against the System.Collections.SortedList class.

Incorrect Answers:

B: The System.Collections.HashTable class should not be used as this class provides no type safety.

C, D: Although this is very similar to the SortedList class the SortedList class should be used instead in the scenario.

QUESTION 129

You work as an application developer at Certkiller .com. You are currently in the process of reviewing an application that was created by a fellow developer. The application that you are reviewing includes a declaration for a collection named EmployeeList, which stores Employee objects. The declaration is shown below:

```
public class EmployeeList : Enumerator, IEnumerable
{
```



```
// Class implementation  
}
```

You require the ability to iterate through the EmployeeList with minimum development effort.

What should you do?

- A. Utilize the switch statement
- B. Utilize the dowhile statement
- C. Utilize the foreach statement
- D. Utilize the if statement

Answer: C

Explanation: the IEnumerable and IEnumerator interfaces of the System.Collections namespace are used to ensure that your collection class supports foreach iteration. The IEnumerable interface defines only one method named GetEnumerator that returns an object of type IEnumerator of the System.Collections namespace and is used to support iteration over a collection. The IEnumerator interface supports methods, such as Current, MoveNext, and Reset to iterate through a collection. The Current method returns the current element of the collection. The Move method positions the enumerator to the next available element of the collection. The Reset method positions the enumerator before the first element of the collection.

Incorrect Answers:

A D: These statements will not allow you to iterate through the EmployeeList collection.

B: You should not use this statement because it will require manually calling the MoveNext and Current methods. The scenario states that you need to "...iterate through the EmployeeList with minimum development effort."

QUESTION 130

You work as an application developer at Certkiller .com. Certkiller .com has been contracted to develop an application for the local bank.

You have been given the responsibility of creating this application and need to store each transaction record, which is identified using a complex transaction identifier, in memory. The bank informs you that the total amount of transaction records could reach 200 per day.

To achieve this, you decide to utilize one of the existing collection classes in the .NET 2.0 class library.

You need to ensure that you the collection class you select is the most efficient one for storing transaction records.

What should you do?

- A. Select the ListDictionary collection class.
- B. Select the HashTable collection class.
- C. Select the Queue collection class.
- D. Select the StringCollection collection class.

Answer: B

Explanation: You should select the HashTable class to store transaction records because each element is identified using a unique identifier and the size of the collection is large. Elements in the HashTable collection are stored with a key/value pair where each key is created using a hash code. The default capacity of a HashTable class is zero, and you can use the Add method to add a new element to the collection. The Count property provides the total number of elements in the HashTable collection. An element of the HashTable class can be accessed using the DictionaryEntry class. You can use the Key and Value properties of the DictionaryEntry class to access the key associated with the element and the value of the element, respectively.

Incorrect Answers:

- A: You should not select this collection class because this class is used if the total number of elements to be stored in a collection is less than 10 elements in length.
- C: You should not select this collection class because you need to access transaction records using a transaction identifier, not in sequential order.
- D: You should not select this collection class because this class is used to manage a collection of string values.

QUESTION 131

You work as an application developer at Certkiller .com. Certkiller .com has been hired by a small local private school to develop a class library that will be used in an application named ManageAttendance for the purpose of managing student records.

You are responsible for developing this class library. Certkiller .com has instructed you to create a collection in the application to store learners' results.

The school has informed you that they currently only have seven learners, but that this value will triple in the following year. Due to the limited resources, you need to ensure that the collection you create consumes a minimum amount of resources.

What should you use to create the collection?

- A. The HybridDictionary collection class.
- B. The HashTable collection class.
- C. The ListDictionary collection class.
- D. The StringCollection collection class.

Answer: A

Explanation: You should use the HybridDictionary class to create the collection because this class is useful in scenarios where the number of elements is unknown or could grow in size. A collection of the HybridDictionary type manages the collection depending on the number of elements. The HybridDictionary type collection uses the ListDictionary class to manage the collection when there are only a few elements. When the number of elements exceeds ten, the HybridDictionary type

collection automatically converts the elements into HashTable management.

Incorrect Answers:

B: You should not use this collection class because this class is used if the total number of elements to be stored in a collection is known and is greater than ten elements in length.

C: You should not use this collection class because this class is used if the total number of elements to be stored in a collection is known and is less than ten elements in length.

D: You should not use this collection class because this class is used to manage a collection of string values.

QUESTION 132

You work as an application developer at Certkiller .com. Certkiller .com wants you to develop an application that stores and retrieves client information by means of a unique account number.

You create a custom collection class, which implements the IDictionary interface, named ClientDictionary. The following code have been included into the new application.

```
//Create Client objects
```

```
Client c1 = new Client ("AReid", "Andy Reid", Status.Current);
```

```
Client c2 = new Client ("DAustin", "Dean Austin", Status.New);
```

```
//Create ClientDictionary object
```

```
IDictionary cData = new ClientDictionary ();
```

```
cData.Add ("10001", c1);
```

```
cData.Add ("10002", c2);
```

You use the same method to add other Client objects to the collection. You need to ensure that you are able to retrieve client information associated with the account number 10111.

What should you do?

A. Use the following code:

```
Client foundClient;
```

```
foundClient = (Client) cData.Find ("10111");
```

B. Use the following code:

```
Client foundClient;
```

```
if (cData.Contains ("10111"))
```

```
foundClient = cData ["10111"];
```

C. Use the following code:

```
Client foundClient;
```

```
if (cData.Contains ("10111"))
```

```
foundClient = (Client) cData ["10111"];
```

D. Use the following code:

```
Client foundClient;
```

```
foreach (string key in cData.Keys
```

```
{
```

```
if (key == "10111")
```

```
foundClient = (Client) cData.Values ["10111"];
```

```
}
```

Answer: C

Explanation: This code invokes the Contains method of the IDictionary interface to determine whether a value is associated with the key 10111. If a value exists for that key, then the clientData ["10111"] statement retrieves the client data as a generic object. The code casts the generic object into a Client object, and it is stored in the foundClient variable

Incorrect Answers:

A: You should not use the code that uses the Find method because no such method exists in the IDictionary interface.

B: You should not use the code that assigns the foundClient variable to a generic object because the foundClient variable is declared as a Client type.

D: You should not use the code that iterates through the Keys collection because it is unnecessary and process-intensive.

QUESTION 133

You work as an application developer at Certkiller .com. Certkiller .com has instructed you to create a class named MetricFormula. This class will be used to compare MetricUnit and EnglishUnit objects.

The MetricFormula is currently defined as follows (Line numbers are used for reference purposes only):

```
1. public class MetricFormula
2. {
3.
4. }
```

You need to ensure that the MetricFormula class can be used to compare the required objects.

What should you do? (Choose two)

A. Add the following code on line 1:

```
: IComparable
{
```

B. Add the following code on line 1:

```
: IComparer
{
```

C. Add the following code on line 3:

```
public int Compare (object x, object y)
{
// implementation code
}
```

D. Add the following code on line 3:

```
public int CompareTo (object obj)
{
// implementation code
```

```
}
```

Answer: B, C

Explanation: You should add the code so that it reads as follows:

```
1. public class MetricFormula : IComparer
2. {
3.     public int Compare (object x, object y)
4.     {
5.         // implementation code
6.     }
7. }
```

You have to implement the IComparer interface to create a comparer class for MetricUnit and EnglishUnit objects. The IComparer interface provides only one method named Compare. The Compare method takes two objects and returns an integer value representing whether those objects are equal, greater than, or less than the other. If the return value is negative, then the first object is less than the second. The objects are equal if the return value is zero. The first object is greater than the first if the return value is positive. The IComparer interface is typically used if you want to implement comparison across objects of different classes without having to provide implementation in each comparable class.

Incorrect Answers:

A, D: You should use these two options because this should be implemented by the MetricUnit and EnglishUnit classes.

QUESTION 134

You work as an application developer at Certkiller .com. You are in the process of developing an application that makes use of a Queue class object named MyQueue. This Queue class object will be used to store messages sent by the user during application run time. The application that you are developing provides an interface for administrators and an interface for users to create message reports. You want to ensure that all user messages stored in the MyQueue object are removed when an administrator selects the reset option. What should you do?

- A. Use the Enqueue method of the MyQueue object.
- B. Use the Clear method of the MyQueue object.
- C. Use the Dequeue method of the MyQueue object.
- D. Use the TrimToSize method of the MyQueue object.

Answer: B

Explanation: The clear method sets the Count property of the Queue class object to 0 after removing all the elements from the queue. When you call the Clear method for a Queue object, the capacity of the Queue object is not changed.

Incorrect Answers:

A: You should not use this method because it is used to add a new element at the beginning of a Queue object.

C: You should not use this method because it is used to remove an element at the beginning of a Queue object.

D: You should not use this method because it is used to resize a Queue object.

QUESTION 135

You work as an application developer at Certkiller .com. You are in the process of developing an application that will store user messages collectively and the process the messages in sequence. The order in which the messages are processed will depend on the order in which it is received.

To add messages to the collection, users will specify the message that should be stored in a TextBox control named txtMsg and then click a Button control named btnAdd.

You need to ensure that the appropriate code is used to create the collection.

What should you use? (Choose two)

- A. `Queue msgCollection = new Queue ();`
- B. `Stack msgCollection = new Stack ();`
- C. `msgCollection.Enqueue (txtMSG.Text);`
- D. `msgCollection.Push (txtMSG.Text);`

Answer: A, C

Explanation: In this scenario, you should use the Queue class to create the collection because you are required to process user messages in sequence. The Dim statement creates an object named msgCollection of the Queue class. The second line of code then calls the Enqueue method of the msgCollection object to add the Text property value of the txtMSG control as an element in the collection. To manage elements in the queue, the Queue class provides methods, such as Dequeue and Clear. The Dequeue method is used to remove elements that are at the beginning of the Queue object. The Clear method is used to remove all elements from a Queue object. The Queue class is a data structure for handling elements based on the First In First Out (FIFO) concept.

Incorrect Answers:

B, D: Using these lines of code is incorrect because they use the Stack class to create a collection. Stack objects are used to store elements on the Last In First Out (LIFO) concept.

QUESTION 136

You work as an application developer at Certkiller .com. You are in the process of developing an application that makes use of a Queue class object named MyQueue. This Queue class object will be used to store messages sent by the user during application run time.

You would like to access the message at the beginning of the queue, prior to processing the user messages, without removing it.

What should you do?

- A. Use the Enqueue method of the MyQueue object.
- B. Use the Contains method of the MyQueue object.
- C. Use the Dequeue method of the MyQueue object.
- D. Use the Peek method of the MyQueue object.

Answer: D

Explanation: The Peek method accesses the element at the beginning of the object of the Queue class without removing it from the queue. The Queue class is a data structure for handling elements based on the First In First Out (FIFO) concept. According to this concept, elements that are stored first are processed first.

Incorrect Answers:

- A: You should not use this method of the Queue class because it is used to add a new element at the end of a Queue object.
- B: You should not use this method of the Queue class because it is used to verify whether the specified element exists for the Queue object instance or not.
- C: You should not use this method of the Queue class because it is used to remove the next element at the beginning of a Queue object.

QUESTION 137

You work as an application developer at Certkiller .com. Certkiller .com wants you to develop an application that stores and retrieves employee information by means of a unique staff number.

You create a custom collection class, which implements the type-safe IDictionary interface. This collection class is named EmployeeCollection, and is defined using the following code.

```
public class EmployeeCollection : IDictionary <int, Employee>
{
    // Implementation code
}
```

You need to ensure that an EmployeeCollection object is instantiated and that Employee objects are added to it.

What should you do?

A. Use the following code:

```
Employee e1, e2;
e1 = new Employee (1001, "Andy Reid", "Manager");
e2 = new Employee (1002, "Kara Lang", "Sales Engineer");
EmployeeCollection eData = new EmployeeCollection();
eData.Add (new KeyValuePair <string, Employee> (e1.ID, e1));
eData.Add (new KeyValuePair <string, Employee> (e2.ID, e2));
```

B. Use the following code:

```
Employee e1, e2;
e1 = new Employee (1001, "Andy Reid", "Manager");
```



```
e2 = new Employee (1002, "Kara Lang", "Sales Engineer");
EmployeeCollection eData = new EmployeeCollection();
eData.Add ((string) e1.ID, e1);
eData.Add ((string) e2.ID, e2);
C. Use the following code:
Employee e1, e2;
e1 = new Employee (1001, "Andy Reid", "Manager");
e2 = new Employee (1002, "Kara Lang", "Sales Engineer");
EmployeeCollection eData = new EmployeeCollection();
eData.Add (e1.ID, e1);
eData.Add (e2.ID, e2);
D. Use the following code:
Employee e1, e2;
e1 = new Employee (1001, "Andy Reid", "Manager");
e2 = new Employee (1002, "Kara Lang", "Sales Engineer");
EmployeeCollection eData = new EmployeeCollection();
eData.Add (new KeyValuePair (e1.ID, e1));
eData.Add (new KeyValuePair (e2.ID, e2));
```

Answer: C

Explanation: This code instantiates two Employee objects and an EmployeeCollection object, and it adds those two Employee objects to the EmployeeCollection object. The EmployeeCollection class implements the generic IDictionary interface specifying the CKey and TValue placeholders as Integer and Employee data types, respectively. Like the non-generic IDictionary interface, the key is used to retrieve the value. Unlike the non-generic IDictionary interface, the key does not have to be a string and the value does not have to be a generic object. Unlike the non-generic IDictionary interface, the Add method of the generic IDictionary interface can accept either a KeyValuePair structure with the appropriate data types specified or in this case two arguments, an integer and Employee object.

Incorrect Answers:

- A: If you use this code fragment, the EmployeeCollection class accepts an integer for the CKey placeholder and an Employee object for the TValue placeholder.
- B: You should not use the code that casts the ID property from an integer into a string, because the key value should match the integer data type defined by CKey placeholder of the generic IDictionary interface.
- D: You should not use the code that does not specify the CKey and TValue placeholders when using the KeyValuePair structure because the data types must be declared explicitly.

QUESTION 138

You work as an application developer at Certkiller .com. Certkiller .com wants you to develop an application that stores and retrieves staff information by means of a unique staff number.

You have already written the following code for the purpose of storing Employee objects.

```
Employee e1 = new Employee (1001, "Andy Reid", "Manager");  
Employee e2 = new Employee (1002, "Kara Lang", "Sales Engineer");  
Dictionary <int, Employee> eData = new Dictionary <int, Employee> ();  
eData.Add (e1.ID, e1);  
eData.Add (e2.ID, e2);
```

All other Employee objects have been added in the same way. You are required to display all key/value pairs within the Dictionary collection.

What should you do?

A. Use the following code:

```
foreach (KeyValuePair<int, Employee> keyPair in eData)  
Console.WriteLine (" {0} key : {1} value", keyPair.Key, keyPair.Value);
```

B. Use the following code:

```
foreach (string key in eData.Keys)  
Console.WriteLine (" {0} key : {1} value", Key, (Employee) eData [key]);
```

C. Use the following code:

```
foreach (KeyValuePair keyPair in eData)  
Console.WriteLine (" {0} key : {1} value", keyPair.Key, keyPair.Value);
```

D. Use the following code:

```
foreach (object value in eData.Values)  
Console.WriteLine (" {0} key : {1} value", eData [value], value);
```

Answer: A

Explanation: This code iterates through each KeyValuePair structure in the generic DictionaryData, and it displays the Key and Value properties. Like the non-generic IDictionary interface, the key is used to retrieve the value. Unlike the non-generic IDictionary interface, the key does not have to be a string and the value does not have to be a generic object. You must specify the CKey and TValue placeholders when specifying a KeyValuePair structure. Because the eDataDictionary collection is instantiated with the integer and Employee data types for the CKey and TValue placeholders, respectively, the KeyValuePair structure should also use these data types. During each iteration, the KeyValuePair object is assigned to the keyPair variable, and the Console.WriteLine method is used to display the Key and Value properties to the console.

Incorrect Answers:

B: Like the non-generic IDictionary interface, the key is used to retrieve the value. Unlike the non-generic IDictionary interface, the key does not have to be a string and the value does not have to be a generic object. You must specify the CKey and TValue placeholders when specifying a KeyValuePair structure.

C: You should not use the code that does not specify the CKey and TValue placeholders when using the KeyValuePair structure because the data types must be declared explicitly.

D: You should not use the code that specifies a value when accessing items in the

Dictionary collection because you should use a key to access a value and you cannot guarantee that only one key exists for a value, as there might be duplicate values in a Dictionary collection

QUESTION 139

You work as an application developer at Certkiller .com. Certkiller .com wants you to develop an application that handles passes for Certkiller .com's parking lot. The application has to store and retrieve vehicle information using a vehicle identification number (VIN).

You need to use the correct code to ensure type-safety.

What should you do?

A. Use the following code:

```
Vehicle v1, v2;
```

```
v1 = new Vehicle ("1M2567871Y91234574", "Nissan Silvia", 1996);
```

```
v2 = new Vehicle ("1F2569122491234574", "Mitsubishi Lancer", 2005);
```

```
ArrayList vList = new ArrayList ();
```

```
vList.Add (v1);
```

```
vList.Add (v2);
```

B. Use the following code:

```
Vehicle v1, v2;
```

```
v1 = new Vehicle ("1M2567871Y91234574", "Nissan Silvia", 1996);
```

```
v2 = new Vehicle ("1F2569122491234574", "Mitsubishi Lancer", 2005);
```

```
SortedList <string, Vehicle> vList = new SortedList <string, Vehicle> ();
```

```
vList.Add (v1.VIN, v1);
```

```
vList.Add (v2.VIN, v2);
```

C. Use the following code:

```
Vehicle v1, v2;
```

```
v1 = new Vehicle ("1M2567871Y91234574", "Nissan Silvia", 1996);
```

```
v2 = new Vehicle ("1F2569122491234574", "Mitsubishi Lancer", 2005);
```

```
List vList = new List ();
```

```
vList.Add (v1);
```

```
vList.Add (v2);
```

D. Use the following code:

```
Vehicle v1, v2;
```

```
v1 = new Vehicle ("1M2567871Y91234574", "Nissan Silvia", 1996);
```

```
v2 = new Vehicle ("1F2569122491234574", "Mitsubishi Lancer", 2005);
```

```
SortedList vList = new SortedList ();
```

```
vList.Add (v1.VIN, v1);
```

```
vList.Add (v2.VIN, v2);
```

Answer: B

Explanation: This code instantiates two Vehicle objects and a SortedList collection, and it adds those two Vehicle objects to the SortedList collection. The SortedList collection class implements the generic IDictionary interface specifying the CKey

and TValue placeholders. Like the non-generic IDictionary interface, the key is used to retrieve the value. Unlike the non-generic IDictionary interface, the key does not have to be a string and the value does not have to be a generic object. This allows flexibility and type-safety.

Incorrect Answers:

A: You should not use the code fragments that specify the ArrayList or generic List collections because these collection classes do not implement the IDictionary interface and only allow element access by index, not by key.

C, D: You should not use the code fragments that specify the List or non-generic SortedList collections because you must use generic collection classes to guarantee type-safety.

QUESTION 140

You work as an application developer at Certkiller .com. Certkiller .com wants you to develop an application that handles passes for Certkiller .com's parking lot. The application has to store and retrieve vehicle information in a contiguous list that allows for advanced navigation techniques.

You have already written and executed the following code:

```
Vehicle v1, v2, v3, v4, v5;
v1 = new Vehicle ("1M2567871Y91234574", "Nissan Silvia", 1996);
v2 = new Vehicle ("1H2569122493456960", "Honda Civic", 1999);
v3 = new Vehicle ("1F2569106891234589", "Mitsubishi Lancer", 2001);
v4 = new Vehicle ("1F7969122491234589", "Mazda MX7", 1998);
v5 = new Vehicle ("1T2569122493456123", "Toyota Supra", 2000);
LinkedList <Vehicle> vList = new LinkedList < Vehicle > ();
LinkedListNode < Vehicle > vNode;
vNode = vList.AddFirst (v1);
vNode = vList.AddLast (v2);
vNode = vList.AddAfter (vNode, v3);
vNode = vList.AddAfter (vNode, v4);
vList.AddLast (v5);
foreach (Vehicle v in vList)
{
    Console.WriteLine ("{0} {1} ({2})", v.MakeModel, v.Year, v.Vin);
}
```

What output will be produced in the console?

- A. Nissan Silvia 1996 (1M2567871Y91234574)
- Honda Civic 1999 (1H2569122493456960)
- Mitsubishi Lancer 2001 (1F2569106891234589)
- Mazda MX7 1998 (1F7969122491234589)
- Toyota Supra 2000 (1T2569122493456123)
- B. Nissan Silvia 1996 (1M2567871Y91234574)
- Mazda MX7 1998 (1F7969122491234589)
- Mitsubishi Lancer 2001 (1F2569106891234589)
- Honda Civic 1999 (1H2569122493456960)

Toyota Supra 2000 (1T2569122493456123)
C. Nissan Silvia 1996 (1M2567871Y91234574)
Mazda MX7 1998 (1F7969122491234589)
Mitsubishi Lancer 2001 (1F2569106891234589)
Toyota Corolla 2002 (1T2569122493456123)
Honda Civic 1999 (1H2569122493456960)
D. Nissan Silvia 1996 (1M2567871Y91234574)
Mitsubishi Lancer 2001 (1F2569106891234589)
Mazda MX7 1998 (1F7969122491234589)
Honda Civic 1999 (1H2569122493456960)
Toyota Supra 2000 (1T2569122493456123)

Answer: B

Explanation: The LinkedList collection class is a doubly-linked list that allows advanced navigation techniques when accessing its elements. An element pointer is provided by the LinkedListNode class with the Previous and Next properties. The LinkedList collection class has a few methods of insertion, including AddFirst, AddLast, AddBefore, and AddAfter methods. The AddFirst and AddLast methods accept an element argument and return a LinkedListNode object as a pointer reference. The AddBefore and AddAfter methods also return a LinkedListNode object, but they accept another LinkedListNode indicating which node before or after to insert the element.

In this scenario, there are five Vehicle objects added to the LinkedList collection named vList. The v1 object is added to the beginning of vList collection by invoking the AddFirst method. The v2 object is added to the end of the vList collection by invoking the AddLast method. The v3 object is added by invoking the AddAfter method. The v4 object is added before the v3 object by invoking the AddBefore method. Finally, the v5 object is added at the end of the vList collection by invoking the AddLast method.

Incorrect Answers:

A, C, D: These options do not represent the output that will be produced by the code you wrote.

QUESTION 141

You work as an application developer at Certkiller .com. You are in the process of developing a collection class named ClientCollection, which is to be used for storing the names of Certkiller .com's clients that are situated in various geographical areas. These client names are represented by the Client class. You are planning to create a method named SortClients in the ClientCollection class to arrange Client objects in ascending order.

You need to ensure that the appropriate interface is implemented by the Client class to allow sorting.

What interface should be used?

- A. IDictionary
- B. IComparable

- C. IComparer
- D. IEqualityComparer

Answer: B

Explanation: The IComparable interface provides only one method named CompareTo, which takes on generic object, compares it to the current instance, and returns an Integer value representing whether the current instance is equal to, greater than, or less than the object. The IComparable interface is typically used when you want to create a class whose objects can be sorted in either a list or collection.

Incorrect Answers:

A: This interface should not be implemented because it is used to create a collection that is managed by key/value pairs.

C: This interface should not be implemented because it should be implemented by collection or comparer classes, not comparable classes.

D: This interface should not be implemented because it provides methods to compare two objects for equality only.

QUESTION 142

You work as an application developer at Certkiller .com. You have been given the responsibility of creating a class named CalcSalary that will determine the salaries of Certkiller .com's staff.

The CalcSalary class includes methods to increment and decrement staff salaries.

You would like to invoke the IncrementSalary and DecrementSalary methods dynamically at runtime from the sales manager application when needed. After viewing the information displayed in the exhibit, you decide to use the Salary delegate to invoke these methods.

using System;

public delegate bool Salary (Employee Emp, double Amount);

public class CalcSalary

{

// for promotions

public static bool IncrementSalary (Employee Emp, double Amount)

{

// implementation details

}

// for demotions

public static bool DecrementSalary (Employee Emp, double Amount)

{

// implementation details

}

What code should you use?

A. public void Review (Employee emp, double amount)

{

```
Salary salaryDel;
if (emp.Status == QuarterlyReview.OnTarget || emp.Status ==
QuarterlyReview.AboveGoals)
salaryDel.Invoke (CalcSalary.IncrementSalary (emp, amount));
else
salaryDel.Invoke (CalcSalary.DecrementSalary (emp, amount));
}
B. public void Review (Employee emp, double amount)
{
Salary salaryDel;
if (emp.Status == QuarterlyReview.OnTarget || emp.Status ==
QuarterlyReview.AboveGoals)
salaryDel.Method = CalcSalary.IncrementSalary;
else
salaryDel.Method = CalcSalary.DecrementSalary;
salaryDel.Invoke (emp, amount);
}
C. public void Review (Employee emp, double amount)
{
Salary salaryDel;
if (emp.Status == QuarterlyReview.OnTarget || emp.Status ==
QuarterlyReview.AboveGoals)
salaryDel.IncrementSalary (emp, amount);
else
salaryDel.DecrementSalary (emp, amount);
}
D. public void Review (Employee emp, double amount)
{
Salary salaryDel;
if (emp.Status == QuarterlyReview.OnTarget || emp.Status ==
QuarterlyReview.AboveGoals)
salaryDel = CalcSalary.IncrementSalary;
else
salaryDel = CalcSalary.DecrementSalary;
salaryDel.Invoke (emp, amount);
}
```

Answer: D

Explanation:

This code declares a delegate variable and, based upon the value of the Status property, assigns the delegate variable to the correct method. If the Status property is QuarterlyReview.OnTarget or QuarterlyReview.AboveGoals, then the Salary delegate variable is assigned to the IncrementSalary method of the CalcSalary class. If not, then the Salary delegate variable is assigned to the DecrementSalary method of the CalcSalary class. Delegates are method pointers and must be assigned to a

method so that a delegate variable can invoke it. The Invoke method takes those arguments specified by the delegate declaration.

Incorrect Answers:

A, B, C: You should not use these code fragments because they are syntactically incorrect and will result in a compilation error if used.

QUESTION 143

You work as an application developer at Certkiller .com. You have been given the responsibility of creating a class named CalcSalary that will determine the salaries of Certkiller .com's staff.

The CalcSalary class includes methods to increment and decrement staff salaries.

The following code is included in the CalcSalary class:

```
public class CalcSalary
{
// for promotions
public static bool IncrementSalary (Employee Emp, double Amount)
{
if (Emp.Status == QuarterlyReview.AboveGoals)
Emp.Salary += Amount;
return true;
}
else
return false;
}
//for demotions
public static bool DecrementSalary (Employee Emp, double Amount)
{
if (Emp.Status == QuarterlyReview.AboveGoals)
Emp.Salary -= Amount;
return true;
}
else
return false;
}
}
```

You would like to invoke the IncrementSalary and DecrementSalary methods dynamically at runtime from the sales manager application, and decide to create a delegate named SalaryDelegate to invoke them.

You need to ensure that you use the appropriate code to declare the SalaryDelegate delegate.

What is the correct line of code?

- A. public delegate bool Salary (Employee Emp, double Amount);
- B. public bool Salary (Employee Emp, double Amount);
- C. public event bool Salary (Employee Emp, double Amount);
- D. public delegate void Salary (Employee Emp, double Amount);

Answer: A

Explanation: The signatures of the delegate and the attached method(s) should be identical. When you declare a delegate, you use the delegate keyword followed by the return type. If you bind the delegate to a method with a return type, you should specify that. If you bind the delegate to a method that does not return a data type, you should use the void keyword. After that, you should specify the name of the delegate and declare the arguments expected. In this scenario, the IncrementSalary and DecrementSalary methods accept an Employee object and a double value, and return a Boolean value. You should, therefore, accept an Employee object and a double value, and return a Boolean value when you declare the SalaryDelegate delegate.

Incorrect Answers:

B: You should not use the code that does not use the delegate keyword.

C: You should not use the code that declares an event named SalaryDelegate.

D: You should not use the code that uses the void keyword because both the IncrementSalary and DecrementSalary methods return a Boolean value.

QUESTION 144

You work as an application developer at Certkiller .com. You have recently created a Windows service application and need to define a Windows service class. What should you do?

A. Use the following code:

```
public class TestService : System.ServiceProcess.WindowsService
{
//Implementation details
}
```

B. Use the following code:

```
public class TestService : System.ServiceProcess.IWindowsService
{
//Implementation details
}
```

C. Use the following code:

```
public class TestService : System.ServiceProcess.ServiceBase
{
//Implementation details
}
```

D. Use the following code:

```
public class TestService : System.ServiceProcess.IService
{
//Implementation details
}
```

Answer: C

Explanation: The ServiceBase class contains event methods, such as OnStart, OnStop, and Run, for controlling Windows service classes.

The OnStart method code is executed when a Windows service is either manually started or when the system is booted if the Startup type is set to Automatic. The OnStop method code is executed when a Windows service is either manually stopped or when the system is shut down. The Main method is the first point of execution when running any windows application (.exe). For a Windows service to run in an application process, you must invoke the Run method on the ServiceBase class. The Run method is overloaded to accept either a single ServiceBase object or an array of ServiceBase objects.

Incorrect Answers:

A, B, D: You should not use either of the code fragments from the WindowsService class or implement the IService and IWindowsService interfaces because no such class or interfaces exist in the System.ServiceProcess namespace.

QUESTION 145

You work as an application developer at Certkiller .com. You have been given the task of developing a Windows service application that regularly monitors other Windows services on the same computer.

This Windows service application must also log any abnormal file system activity.

You have added the following class to the Windows service application:

```
public class EnumerateService : ServiceBase
{
    public static EnumerateService ()
    {
        this.ServiceName = "Enumerate Service";
        this.CanStop = true;
    }
    protected override void OnStart (string[] args)
    {
        // Enumerate all services and initialize the FileSystemWatcher
    }
    protected override void OnStop ()
    {
        // Stop the FileSystemWatcher and perform cleanup
    }
    public static void Main ()
    {
        EnumerateService service = new EnumerateService();
    }
}
```

You then create the installer for the Windows service application, and install the Windows service application. You have configured the Windows service Startup type to Automatic, and rebooted the system. You then test the new Windows service application, and find that it is not working.

You need to ensure that the service is working properly.

What should you do?

A. Override the OnBoot method instead of the OnStart method.

B. Replace the Main method code with the following code:

```
EnumerateService service = new EnumerateService ();  
Service.Run ();
```

C. Override the OnLoad method instead of the OnStart method.

D. Replace the Main method code with the following code:

```
EnumerateService service = new EnumerateService ();  
Run (service);
```

Answer: D

Explanation: For a Windows service to run in an application process, you have to invoke the Run method on the ServiceBase class. The Run method is overloaded to accept either a single ServiceBase object or an array of ServiceBase objects. The OnStart method code is executed when a Windows service is either manually started or when the system is booted if the Startup type is set to Automatic. The OnStop method code is executed when a Windows service is either manually stopped or when the system is shut down. The Main method is the first point of execution when running any windows application (.exe).

Incorrect Answers:

A C: You should not override the OnBoot or OnLoad method because there are no such methods in the ServiceBase class.

B: For a Windows service to run in an application process, you have to invoke the Run method on the ServiceBase class. The Run method is overloaded to accept either a single ServiceBase object or an array of ServiceBase objects. This code will not compile because the Run method is a class member and does not take zero arguments.

QUESTION 146

You work as an application developer at Certkiller .com. Certkiller .com has asked you to develop an application allows administrators to control Windows services dynamically without using the Services MMC.

You start by creating a class named LocalServiceController. You need to add the correct code to the LocalServiceController class to ensure that administrators are able to start local Windows services.

What code should you use?

A. public static bool StartService (string serviceName)

```
{  
try {  
ServiceBase.Run (serviceName);  
return true;  
}  
catch  
{
```

```
return false;
}
}
B. public static bool StartService (string serviceName)
{
ServiceController controller = new ServiceController (serviceName);
if (controller.Status != ServiceControllerStatus.Running)
{
controller.Start ();
return true;
}
else
return false;
}
C. public static bool StartService (string serviceName)
{
ServiceManager manager = new ServiceManager (serviceName);
if (manager.Status != ServiceManagerStatus.Running)
{
manager.Start ();
return true;
}
else
return false;
}
D. public static bool StartService (string serviceName)
{
ServiceBase service = new ServiceBase ();
service.ServiceName = serviceName;
if (service.CanStart)
{
ServiceBase.Run (service);
return true;
}
else
return false;
}
```

Answer: B

Explanation: This code first instantiates a ServiceController object using the ServiceName variable. Then, the Status property is compared to the enumeration value ServiceControllerStatus.Running. If the Windows service is not currently running, then the Start method is invoked on the ServiceController object, and the method returns true. If the Windows service is running, the method returns false.

Incorrect Answers:

A, D: You should not add the code that uses the ServiceManager class because there is no such class in the ServiceControllerStatus.Running namespace.

C: You should not add either of the code fragments that use the ServiceBase class because this is the base class for Windows service classes.

QUESTION 147

You work as an application developer at Certkiller .com. Certkiller .com has asked you to develop an application that monitors and controls the activities of a Windows service.

You need to use the appropriate class to meet Certkiller .com's requirements. What should you do?

- A. Use the ServiceBase class.
- B. Use the ServiceInstaller class.
- C. Use the ServiceManager class.
- D. Use the ServiceController class.

Answer: D

Explanation: To monitor and control the behavior of a Windows service, you should use the ServiceController class.

Incorrect Answers:

A: The ServiceBase class is the base class for Windows service classes.

B: The ServiceInstaller class is used to install a Web service application.

C: There is no such class in the ServiceControllerStatus.Running namespace.

QUESTION 148

You work as an application developer at Certkiller .com. Certkiller .com has asked you to create a multi-threaded application, which executes a critical database backup operation on an hourly basis. You define this operation with the following code:

```
public void BackupDB ()  
{  
    //Implementation code  
}
```

You then create a Thread object for the purpose of invoking this method.

You need to ensure that the thread is scheduled for execution before any other thread at runtime.

What should you do?

A. Use the following code:

```
Thread th = new Thread (BackupDB);  
th.Scheduled = ThreadScheduled.Before;  
th.Start ();
```

B. Use the following code:

```
Thread th = new Thread (BackupDB);
```

```
th.Priority = ThreadPriority.AboveNormal;  
th.Start ();  
C. Use the following code:  
Thread th = new Thread (BackupDB);  
th.Priority = ThreadPriority.Highest;  
th.Start ();  
D. Use the following code:  
Thread th = new Thread (BackupDB);  
th.Scheduled = ThreadScheduled.First;  
th.Start ();
```

Answer: C

Explanation: This code instantiates a Thread object that will execute the BackupDB method, specifies the highest priority level for scheduling threads for execution, and starts the thread running. When instantiating a Thread object, you must specify the name of the method it will invoke. The Priority property indicates the relative position of a thread in the wait queue when being scheduled for execution. If two threads arrive in the wait queue at relatively the same time, the higher priority thread will receive the time slice before the other. The Priority property is a ThreadPriority enumeration value, which can be Lowest, BelowNormal, Normal, AboveNormal, and Highest. By default, the Priority property is set to ThreadPriority.Normal.

Incorrect Answers:

A D: You should not use the code fragments that set the Scheduled property with the ThreadSchedule enumeration because no such property or enumeration exists in the System.Threading namespace.

B: You should not use the code that specifies the value ThreadPriority.AboveNormal for the Priority property because this will not schedule the thread for execution before any other thread.

QUESTION 149

You work as an application developer at Certkiller .com. You have recently created a multithreaded application to manage Certkiller .com's inventory system.

The fulfillment task has to be executed on a regular basis, while other tasks are performed in the application. The task does not need any input to start.

You are required to create and start the fulfillment thread using the appropriate code.

What code should you use?

```
A. ThreadStart work = new  
ThreadStart (Fulfill);  
Thread thFulfill = new Thread (work);  
B. ParameterizedThreadStart work = new  
ParameterizedThreadStart (Fulfill);  
Thread thFulfill = new Thread (work);
```


C. ThreadStart work = new
ThreadStart (Fulfill);
Thread thFulfill = new Thread (work);
thFulfill.Start ();
D. ParameterizedThreadStart work = new
ParameterizedThreadStart (Fulfill);
Thread thFulfill = new Thread (work);
thFulfill.Start ();

Answer: C

Explanation: This code creates a ThreadStart delegate that references the Fulfill method, creates a Thread object named thFulfill, and invokes the Start method to begin the thread execution.

Incorrect Answers:

A: You should not use the code that uses the ThreadStart delegate but does not call the Start method because you are required to create and start the fulfillment thread.
B: You should not use the code that uses the ParameterizedThreadStart delegate and does not call the Start method. You have to invoke the Start method to begin thread execution.
D: You should not use the code that uses the ParameterizedThreadStart delegate and calls the Start method. The ParameterizedThreadStart delegate is used to reference a method that takes a generic object as an argument and, in this scenario, the fulfill method takes no arguments

QUESTION 150

You work as an application developer at Certkiller .com. You are currently in the process of developing a business logic component that requires long calculations. You have identified numerous tasks within this application that can be done asynchronously. You notice that these tasks are mutually dependent and require complex synchronization techniques so that it can manage efficiently. You decide to use Microsoft .NET 2.0 to take advantage of its new thread management features. You need to create and start the application threads. What should you do?

A. Use the following code:
ThreadPool thPool = new ThreadPool ("Current Application");
Thread th1 = new Thread (Task1);
Thread th1 = new Thread (Task2);
Thread th1 = new Thread (Task3);
th1.StartInPool (thPool);
th2.StartInPool (thPool);
th3.StartInPool (thPool);
B. Use the following code:
ThreadPool thPool = new ThreadPool ("Current Application");
thPool.QueueUserWorkItem (Task1);
thPool.QueueUserWorkItem (Task2);

```
thPool.QueueUserWorkItem (Task3);
```

C. Use the following code:

```
ThreadPool.QueueUserWorkItem (Task1);
```

```
ThreadPool.QueueUserWorkItem (Task2);
```

```
ThreadPool.QueueUserWorkItem (Task3);
```

D. Use the following code:

```
Thread th1 = new Thread (Task1);
```

```
Thread th1 = new Thread (Task2);
```

```
Thread th1 = new Thread (Task3);
```

```
th1.Start ();
```

```
th2.Start ();
```

```
th3.Start ();
```

Answer: C

Explanation: This code uses the QueueUserWorkItem method of the ThreadPool class to add tasks to the current application domain's thread pool. The QueueUserWorkItem method takes a WaitCallback delegate as an argument and manages the tasks using background threads. This allows the developer to concentrate on business logic and requires minimal synchronization code.

Incorrect Answers:

A D: You should not use either of the code fragments that instantiate the Thread objects explicitly because it will require excessive synchronization code to manage effectively.

B: You should not use the code that instantiates a ThreadPool object because the ThreadPool class is a static class and cannot be instantiated.

QUESTION 151

You work as an application developer at Certkiller .com. You have created a Windows service application for the purpose of monitoring the number of active service requests running on Certkiller .com's server.

You want to configure this Windows service application to produce a report every ten minutes. You start by placing the reporting logic in the GenerateReport method of this Windows service.

You want to create a Timer object that invokes this method every ten minutes.

What should you do?

A. Use the following code:

```
Timer tmrReport = new Timer  
(new TimerCallback (GenerateReport), null, 600000, 0);
```

B. Use the following code:

```
Timer tmrReport = new Timer  
(new TimerCallback (GenerateReport), null, 10, 0);
```

C. Use the following code:

```
Timer tmrReport = new Timer  
(new TimerCallback (GenerateReport), null, 0, 600000);
```

D. Use the following code:

```
Timer tmrReport = new Timer  
(new TimerCallback (GenerateReport), null, 0, 10);
```

Answer: C

Explanation: This code creates a Timer object named tmrReport that will invoke the GnerateReport every ten minutes. The first argument of the Timer constructor is a TimerCallback delegate that points to the method to be invoked. The second argument is the object that will be sent to the callback method. The third and fourth arguments are integers that specify delay and interval in milliseconds, respectively. Because the interval is in milliseconds, the following conversion must be made:
 $10 \text{ minutes} = 10 * 60 \text{ seconds} = 600 * 1000 \text{ milliseconds} = 600,000 \text{ milliseconds}$
Therefore, the delay is set to 0, and the interval is set to 600,000 milliseconds.

Incorrect Answers:

A: This option is incorrect because the delay and the interval arguments are reversed. If you use this option, then the tmrReport will invoke the GnerateReport method only once in ten minutes.

B: This option is incorrect because the delay and the interval arguments are reversed. Also, the interval argument is incorrectly specified. It should be specified in milliseconds.

D: The interval argument is incorrectly specified. It should be specified in milliseconds, not minutes. This code would set the interval to ten milliseconds instead of ten minutes.

QUESTION 152

You work as an application developer at Certkiller .com. You have recently created an application that includes the code shown below.

```
public delegate stringGetFileContentsDel ();  
public stringGetFileContents ()  
{  
    //Process file and return results  
}
```

You now need to invoke the GetFileContents method asynchronously.

You have to ensure that the code you use to invoke the GetFileContents method will continue to process other user instructions, and displays the results as soon as the GetFileContents method finishes processing.

What should you do?

A. Use the following code:

```
GetFileContentsDel delAsync = new  
GetFileContentsDel (GetFileContents);  
IAsyncResult result = delAsync.BeginInvoke (null, null);  
while (!result.IsCompleted)  
{  
    //Process other user instructions  
}  
string strFile = delAsync.EndInvoke (result);
```

B. Use the following code:

```
GetFileContentsDel delAsync = new  
GetFileContentsDel (GetFileContents);  
string strFile = delAsync.Invoke ();
```

C. Use the following code:

```
string strFile = GetFileContents.Invoke ();
```

D. Use the following code:

```
GetFileContentsDel delAsync = new  
GetFileContentsDel (GetFileContents);  
IAsyncResult result = delAsync.BeginInvoke (null, null);  
//Process other user instructions  
string strFile = delAsync.EndInvoke (result);
```

Answer: A

Explanation: This code instantiates a GetFileContentsDel delegate that references the GetFileContents method. Then, the BeginInvoke method is invoked to implicitly create and start the worker thread. The BeginInvoke method takes the same arguments as the method it references but also includes an AsyncCallack delegate and a generic object. The AsyncCallack delegate references the method that the worker thread will invoke when its processing is complete. In this scenario, there is no AsyncCallack delegate specified. Then, the code polls the IAsyncResult object to determine if it's processing is complete using the IsCompleted property. Once the processing is complete, the loop is exited and the EndInvoke method returns the result from the GetFileContents method.

Incorrect Answers:

B, C: You should not use either of the code fragments that use the Invoke method because this is not a technique in asynchronous processing.

D: you should not use the code that does not poll the IAsyncResult object by retrieving the IsCompleted property.

QUESTION 153

You work as an application developer at Certkiller .com. You have been asked by you superiors at Certkiller .com to create a child application domain. The new child application domain has to specify a different assembly path than that of the parent application domain. You need to ensure that your solution meets Certkiller .com's requirements. What should you do?

A. Use the following code:

```
AppDomainSetup domainSetup = new AppDomainSetup ();  
domainSetup.ApplicationName = @"C:\Program Files\ChildApp";  
AppDomain.CreateDomain ("ChildDomain", AppDomain.CurrentDomain.Evidence,  
domainSetup);
```

B. Use the following code:

```
AppDomainSetup domainSetup = new AppDomainSetup ();
```

```
domainSetup.ApplicationBase = @"C:\Program Files\ChildApp";  
AppDomain.CreateDomain ("ChildDomain", AppDomain.CurrentDomain.Evidence,  
domainSetup);
```

C. Use the following code:

```
AppDomainSetup domainSetup = new AppDomainSetup ();  
domainSetup.ConfigurationFile = @"C:\Program Files\ChildApp";  
AppDomain.CreateDomain ("ChildDomain", AppDomain.CurrentDomain.Evidence,  
domainSetup);
```

D. Use the following code:

```
AppDomainSetup domainSetup = new AppDomainSetup ();  
domainSetup.CachePath = @"C:\Program Files\ChildApp";  
AppDomain.CreateDomain ("ChildDomain", AppDomain.CurrentDomain.Evidence,  
domainSetup);
```

Answer: B

Explanation: The CreateDomain method of the AppDomain class is an overloaded method that you can use to create an application domain. This code creates a child application domain named ChildDomain, which uses the same evidence as its parent domain and specifies an AppDomainSetup object. In this version of CreateDomain, the first argument passed to the CreateDomain method is a String that represents the name of the application domain to be created. The second argument of the CreateDomain method specifies an Evidence object. The Evidence object represents the identity information used for Code Access Security (CAS) in the Microsoft .NET Framework to determine the permissions granted to an assembly. The third argument of the CreateDomain method specifies an AppDomainSetup object. The AppDomainSetup object represents application domain settings such as the application name, base directory, and configuration file path. You have to specify a different assembly path than that of the parent application domain, so the ApplicationBase property of the AppDomain object has to be set. The ApplicationBase property defines the base directory of an application. Any runtime references will be resolved using this directory for assembly probing.

Incorrect Answers:

A: You should not use the code that sets the ApplicationName property of the AppDomainSetup object because this should be the friendly name of the application domain.

C: You should not use the code that sets the ConfigurationFile property of the AppDomainSetup object because this should be the directory where the configuration file is located.

D: You should not use the code that sets the CachePath property of the AppDomainSetup object because this should be the location where shadow copies of assemblies and other resources are stored.

QUESTION 154

You work as an application developer at Certkiller .com. You have recently created an application domain for Certkiller .com.

A few weeks later you are asked to retrieve information from this application domain, which is the current application domain.

What can you do to achieve this objective? (Choose two)

A. Use the following code:

```
AppDomain appInfo = ApplicationDomain.Current;
```

B. Use the following code:

```
AppDomain appInfo = AppDomain.CurrentDomain ();
```

C. Use the following code:

```
AppDomain appInfo = Thread.GetDomain ();
```

D. Use the following code:

```
AppDomain appInfo = MainThread.GetDomain ();
```

Answer: B, C

Explanation: The CurrentDomain property of the AppDomain class is a read-only property that contains the application domain for the current thread. You can also use the GetDomain method of the Thread class to return the application domain for the thread that is currently running. Using either of these lines of code will return an AppDomain object for the currently running application from which you can retrieve information.

Incorrect Answers:

A, D: If you use any of these codes it will result in a syntax error because the .NET class libraries do not provide an ApplicationDomain or MainThread class.

QUESTION 155

You work as an application developer at Certkiller .com. You have recently created an application domain for Certkiller .com.

A few weeks later, you are required to determine if assembly references in this application domain, which is the current application domain, are being cached.

What property should you use to achieve this objective?

A. AppDomain.CurrentDomain.ShadowCopyFiles

B. AppDomain.CurrentDomain.CachePath

C. AppDomain.CurrentDomain.ConfigurationFile

D. AppDomain.CurrentDomain.Evidence

Answer: A

Explanation: The ShadowCopyFiles property of the AppDomain class contains a Boolean value that indicates whether assembly references are being cached or not.

Incorrect Answers:

B, C: These options are properties of the AppDomainSetup class.

D: This property is not used in caching.

QUESTION 156

You work as an application developer at Certkiller .com. You are required to dynamically load assemblies into a custom child application domain. You need to ensure that the assemblies loaded into the child application domain have the same permissions as the applications that are accessed across the local intranet.

What should you do?

A. Use the following code to create the child application domain:

```
Evidence childEvidence = new Evidence (new object [ ] { SecurityZone.Intranet }, null);  
AppDomain.CreateDomain ("ChildDomain", childEvidence);
```

B. Use the following code to create the child application domain:

```
AppDomain.CreateDomain ("ChildDomain", SecurityZone.Intranet);
```

C. Use the following code to create the child application domain:

```
AppDomain domain = new AppDomain ("ChildDomain", SecurityZone.Intranet);
```

D. Use the following code to create the child application domain:

```
Evidence childEvidence = new Evidence (new object [ ] { SecurityZone.Intranet }, null);  
AppDomain domain = new AppDomain ("ChildDomain", childEvidence);
```

Answer: A

Explanation: The CreateDomain method of the AppDomain class is an overload method that can be used to create an application domain. This code creates a child application domain named ChildDomain with the default permissions of applications that are accessed across the local intranet.

Incorrect Answers:

B: You should not use the code that specifies SecurityZone.Intranet as an argument to the CreateDomain method because no such method signature exists.

C, D: You should not use the code fragments that instantiate an AppDomain object because the AppDomain class does not have any constructors.

QUESTION 157

You work as an application developer at Certkiller .com. You are required to dynamically load assemblies into an application domain.

You are using the Load method of the AppDomain class.

What types of files can you use this method for?

A. Library application files (.dll).

B. All assembly files, no matter what their file extensions are.

C. Application configuration files (.config).

D. Standalone application files (.exe).

Answer: B

Explanation: An assembly specified in the Load method can use a valid extension, an invalid extension, or no extension at all. As long as the Microsoft Intermediate

Language (MSIL) code is valid, the extension is immaterial.

Incorrect Answers:

A, D: Although .dll and .exe are common extensions for .NET assemblies, they are not required when you use the Load method of the AppDomain class.

C: You cannot use the Load method to load application configuration files (.config) because these have no MSIL code to execute and cannot be loaded into an application domain.

QUESTION 158

You work as an application developer at Certkiller .com. Certkiller .com has given you the task of creating medical billing application that will deal with various insurance vendors.

The appropriate assemblies have to be loaded and unloaded dynamically based on the patient's insurance provider. All of these insurance assemblies are located in C:\Insurance Assemblies.

You have to ensure that when the new application first loads, it has to load all assemblies into a separate application domain. You need to create the child application domain and load all assemblies it using the correct code.

What should you do?

A. Use the following code:

```
AppDomain domain = AppDomain.CreateDomain ("InsuranceDomain");  
foreach (string assembly in Directory.GetFiles (@ "C:\Insurance Assemblies", "*.dll"))  
domain.LoadAssembly (assembly);
```

B. Use the following code:

```
AppDomain domain = AppDomain.CreateDomain ("InsuranceDomain");  
foreach (string assembly in Directory.GetFiles (@ "C:\Insurance Assemblies", "*.dll"))  
domain.Load (assembly);
```

C. Use the following code:

```
AppDomain domain = AppDomain.CreateDomain ("InsuranceDomain");  
foreach (string assembly in Directory.GetFiles (@ "C:\Insurance Assemblies", "*.dll"))  
domain.LoadFrom (assembly);
```

D. Use the following code:

```
AppDomain.CreateDomain ("InsuranceDomain",  
Directory.GetFiles (@ "C:\Insurance Assemblies", "*.dll"))
```

Answer: B

Explanation: First, the CreateDomain method of the AppDomain class is used to create an application named InsuranceDomain. Then, the foreach construct is used to iterate through the C:\Insurance Assemblies directory to retrieve the insurance assemblies in that location. The GetFiles method takes two String arguments, a directory path and a search string. In this code, the GetFiles method will retrieve the names of all files in C:\Insurance Assemblies that end in .dll. the Load method of the AppDomain class is used to load each assembly into the current application domain.

Incorrect Answers:

A, C: The LoadAssembly and LoadFrom methods do not exist in the AppDomain class.

D: The CreateDomain method does not allow the loading of assemblies into the new domain.

QUESTION 159

You work as an application developer at Certkiller .com. You have recently completed creating an application that uses an application configuration file.

This configuration file contains a section named EmployeeSection, which contains Employee elements.

You are required to view the contents of the EmployeeSection element.

You need to ensure that the EmployeeSection element outputs its contents to the console.

What should you do?

A. Use the following code:

```
Configuration config = ConfigurationManager.OpenExeConfiguration  
(ConfigurationUserLevel.None);
```

```
ConfigurationSection section = Config.GetSection ("EmployeeSection");
```

```
Console.WriteLine (section.Contents);
```

B. Use the following code:

```
ConfigurationSection section = Config.GetSection ("EmployeeSection");
```

```
Console.WriteLine (section.SectionInformation.GetRawXml ());
```

C. Use the following code:

```
string section = ConfigurationSettings.AppSettings ["EmployeeSection"];
```

```
Console.WriteLine (section);
```

D. Use the following code:

```
Configuration config = ConfigurationManager.OpenExeConfiguration  
(ConfigurationUserLevel.None);
```

```
ConfigurationSection section = Config.GetSection ("EmployeeSection");
```

```
Console.WriteLine (section.SectionInformation.GetRawXml ());
```

Answer: D

Explanation: This code opens the application configuration file, retrieves the EmployeeSection element and outputs the contents as raw XML. The OpenExeConfiguration method takes a ConfigurationUserLevel enumeration value to indicate the visibility of the configuration settings. The value None means that the settings apply to all users. The OpenExeConfiguration method returns a Configuration object representing the current configuration settings. The GetSection method of the

Configuration object can then be used to retrieve a specified section of the configuration file. The GetSection method accepts a section name and returns a ConfigurationSection object representing the specified section, if it is found. In this scenario, you pass the GetSection method the name of the EmployeeSection, and it returns a ConfigurationSection representing theEmployeeSection. You can then use

this ConfigurationSection object to access information about the section of the configuration file. The SectionInformation property of the ConfigurationSection object retrieves section-specific settings, including contents. The GetRawWml method returns the XML content of the EmployeeSection. The WriteLine method then outputs the contents of the console.

Incorrect Answers:

A: You should not use the code that accesses the Contents property of the ConfigurationSection class because the ConfigurationSection class contains no such property.

B: You should not use the code that does not specify the ConfigurationManager because the GetSection method is an instance member.

C: You should not use the code that specifies the ConfigurationSettings class because this class is provide only for backwards compatibility.

QUESTION 160

You work as an application developer at Certkiller .com. You are in the process of creating an application for Certkiller .com's Human Resources department that tracks employee benefits.

You have to store current employee data without recompiling the application. You elect to store this employee data as a custom section in the application configuration file. The relevant portion of the application configuration file is shown in the following exhibit:

```
<?xml version="1.0" encoding="utf-8" ?>
<configuration>
<configSections>
</configSections>
<!-- Begin Custom Section -->
<EmployeeSection type="fulltime">
<Employee name="Rory Allen" />
</EmployeeSection>
<!-- End Custom Section -->
</configuration>
```

You want to use the .NET 2.0 Configuration API to access the custom section.

You need to ensure that programmatic access of the EmployeeSection element is enabled.

What should you do? (Choose two)

A. Create a custom section handler class that inherits the ConfigurationSection interface.

B. Add a section element to the EmployeeSection element of the application configuration file.

C. Create a custom section handler class that implements the IConfigurationSectionHandler interface.

D. Add an EmployeeSection element to the configSections element of the application configuration file.

E. Create a custom section handler class that implements the IApplicatioSettingsProvider

interface.

F. Add a section element to the configSections element of the application configuration file.

Answer: A, F

Explanation: To enable programmatic access of the EmployeeSection element, you should create a custom section handler class that inherits the ConfigurationSection class and add a section element to the configSections element of the application configuration file.

Incorrect Answers:

B, D: These options violate the application configuration schema and will cause a run-time error when attempted.

C: This interface is deprecated in .NET 2.0 and requires more development effort.

E: This interface should be implemented if a custom storage solution other than application configuration files is required.

QUESTION 161

You work as an application developer at Certkiller .com. You have recently created a business application, which requires complex installation logic.

You add the following code to your project after electing to create a custom installer for the business application.

```
public class ApplicationInstaller : Installer
{
    public override void Install(IDictionary stateSaver)
    {
        //Install the application
        Base.Install (stateSaver);
    }
    public override void Commit (IDictionary savedState)
    {
        //Commit the application
        Base.Commit (savedState);
    }
    public override void Rollback (IDictionary savedState)
    {
        //Rollback the application
        Base.Rollback (savedState);
    }
    public override void Uninstall (IDictionary savedState)
    {
        //UnInstall the application
        Base.Uninstall (savedState);
    }
}
```

What should be done NEXT?

- A. The assembly should be compiled and the Install.exe tool should be run.
- B. The RunInstaller attribute should be added to the business application assembly and it should be set to true.
- C. The assembly should be compiled and should be run as normal.
- D. The RunInstaller attribute should be added to the ApplicationInstaller class and it should be set to true.

Answer: D

Explanation:

Incorrect Answers:

- A: This option should be executed after applying the RunInstaller attribute and setting it to true.
- B: You should not add the RunInstaller attribute to the assembly because the RunInstaller attribute is applied to a class, not the entire assembly.
- C: You should not use this option because the installer class will be invoked without applying the RunInstaller attribute with a value of true.

QUESTION 162

You work as an application developer at Certkiller .com. You have recently created and deployed an application using the .NET 1.1 CLR to all Certkiller .com users. After a Certkiller .com administrator updates all user computers with the .NET 2.0 CLR, you run preliminary tests and find that the application you created using the .NET 1.1 CLR is not compatible with the .NET 2.0 CLR. You need to ensure that the application can be run with the .NET 1.1 CLR. What should you do?

- A. Use the following element in the application configuration file:

```
<configuration>
<startup>
<bindingRedirect oldVersion="1.0.0.0" newVersion="1.1.0.0" />
</startup>
</configuration>
```

- B. Use the following element in the application configuration file:

```
<configuration>
<startup>
<requiredRuntime version="v1.1.4322" safemode="true" />
</startup>
</configuration>
```

- C. Use the following element in the application configuration file:

```
<configuration>
<startup>
<supportedRuntime version="v1.1.4322" />
<supportedRuntime version="v1.0.3705" />
</startup>
```

</configuration>

D. Use the following element in the application configuration file:

<configuration>

<startup>

<unsupportedRuntime version="v2.0.50727" />

</startup>

</configuration>

Answer: C

Explanation: This configuration element instructs the host system to launch the application using either .NET 1.1 CLR or .NET 1.0 CLR rather than defaulting to the .NET 2.0 CLR. The

supportedRuntime element identifies the versions of the CLR with which the application can be run. The supportedRuntime element is only supported in assemblies built using .NET 1.1 or later.

Incorrect Answers:

A: There is no such subelement as bindingRedirect that exists for the startup element.

B: The requiredRuntime element should only be used by assemblies built by using the .NET 1.0 Framework.

D: There is no such element as the unsupportedRuntime element that exists in the application configuration schema.

QUESTION 163

You work as an application developer at Certkiller .com. You have recently created a business application that references another strong-named assembly named library.dll, and deployed it to all Certkiller .com users.

Subsequent to testing the application's performance, you elect to upgrade the assembly's version to 1.1.0.0.

You need to ensure that the new version of will not affect any of Certkiller .com's current users by adding the appropriate element to the assemblyBinding element in the application configuration file.

What element should you add?

A. <dependentAssembly>

<assemblyIdentity name="Library" publicKeyToken="32ab4bc45e90a1" culture="neutral" />

<redirect oldVersion="1.0.0.0" newVersion="1.1.0.0" />

</dependentAssembly>

B. <dependyAssembly>

<assemblyIdentity name="Library" publicKeyToken="32ab4bc45e90a1" culture="neutral" />

<bindingRedirect oldVersion="1.0.0.0" newVersion="1.1.0.0" />

</dependyAssembly>

C. <dependyAssembly>

<assemblyIdentity name="Library" publicKeyToken="32ab4bc45e90a1"

```
culture="neutral"  
oldVersion="1.0.0.0" newVersion="1.1.0.0" />  
</dependentAssembly>  
D. <dependentAssembly>  
<bindingRedirect oldVersion="1.0.0.0" newVersion="1.1.0.0" />  
</dependentAssembly>
```

Answer: B

Explanation: This dependentAssembly element specifies the assembly identity information using the assemblyIdentity element. The name attribute of the assemblyIdentity element indicates the common name of the assembly. The publicKeyToken attribute specifies the strong-named key, and the culture attribute indicates the localization type. The bindingRedirect element is a subelement of the dependentAssembly element that specifies the oldVersion and newVersion attributes. Setting the oldVersion attribute to 1.0.0.0 and the newVersion attribute to 1.1.0.0 means that any users referencing the 1.0.0.0 version of the Library will now be referencing the 1.1.0.0 version.

Incorrect Answers:

A: You should not use the element that specifies the redirect element because there is no such subelement of the assemblyBinding element.

C: You should not use the element that specifies the assemblyIdentity element because this is required information when adding dependentAssembly elements.

D: You should not use the element that specifies the bindingRedirect element because there are no such attributes as oldVersion and newVersion attributes for the assemblyIdentity element.

QUESTION 164

You work as an application developer at Certkiller .com. You are currently in the process of creating a shared assembly.

You are required to perform many integration tests to make sure the assembly works properly with multiple applications. You want to avoid constantly updating each application's reference when the assembly is updated.

You have set the DEVPATH environmental variable to the default build location for the shared assembly.

You need to ensure that the Common Language Runtime (CLR) uses DEVPATH to locate the shared assembly.

What should you do?

A. Add the following element to each application's application configuration file:

```
<dependentAssembly>  
<assemblyIdentity name="SharedAssembly" />  
<codeBase version="1.0.0.0" DEVPATH = "true" />  
</ dependentAssembly >
```

B. Add the following element to the machine.config file in the development computer:

```
<dependentAssembly>
```



```
<assemblyIdentity name="SharedAssembly" />  
<codeBase version="1.0.0.0" DEVPATH="true" />  
</dependentAssembly >
```

C. Add the following element to each application's application configuration file:

```
<configuration>  
<runtime>  
<developmentMode developerInstallation="true" />  
</runtime>  
</configuration>
```

D. Add the following element to the machine.config file in the development computer:

```
<configuration>  
<runtime>  
<developmentMode developerInstallation="true" />  
</runtime>  
</configuration>
```

Answer: D

Explanation: The developmentMode element instructs the CLR to use the DEVPATH environmental variable to locate assemblies. If you do not add this element to the machine.config file, the DEVPATH environmental variable will be ignored.

Incorrect Answers:

A, C: Application configuration files are used for application-specific settings only

B: The codeBase element does not have a DEVPATH attribute.

QUESTION 165

You work as an application developer at Certkiller .com. You have been asked to profile a business application that can be accessible using the Event Log API.

You have started by adding the following code to create a custom event log:

```
if (EventLog.SourceExists ("Application1"))  
EventLog.DeleteEventSource ("Application1");  
//Create new event log  
EventLog.CreateEventSource ("Application1", "Profile");
```

You need to write an event to the Application1 event log.

What code must you use?

- A. EventLog log = new EventLog ();
log.Source = "Application1";
log.Log = "Profile";
log.WriteEvent ("Writing to event log.");
- B. EventLog log = new EventLog ();
log.Source = "Profile";
log.Log = "Application1";
log.WriteEvent ("Writing to event log.");
- C. EventLog log = new EventLog ();

```
log.Source = "Application1";  
log.Log = "Profile";  
log.WriteEntry ("Writing to event log.");  
D. EventLog log = new EventLog ();  
log.Source = "Profile";  
log.Log = "Application1";  
log.WriteEntry ("Writing to event log.");
```

Answer: C

Explanation: This code instantiates an EventLog object, sets the Source and Log properties, and invokes the WriteEntry method to output the message to the event log. The EventLog object allows you to create, delete, read from, or write to Windows event logs. In this scenario, you use the CreateEventSource method to create a custom event log. When calling the CreateEventSource method, you pass the method two arguments. The first argument represents the source name for the event log, and the second represents the name of the event log. Next, you want to write an entry to the Application1 event log. To write to an event log, you must first identify the event source and the name of the event log to which you want to write. The Source property specifies the event source, and the Log property specifies the name of the event log. There are two methods to write to the EventLog object: WriteEntry and WriteEvent. The WriteEntry method is an overloaded method used to write a text message to an event log. The WriteEvent method is used to write localized resources and event instances to an event log.

Incorrect Answers:

A, B: The WriteEvent method is used to write localized resources and event instances to an event log.

D: You should not use the code fragments that specify a value of "Profile" for the Source property and a value "Application1" for the Log property because they would attempt to write the entry to an event log named Application1.

QUESTION 166

You work as an application developer at Certkiller .com. The Certkiller .com network contains an application server named Certkiller -SR07.

You have been asked to profile a business application that can be accessible using the Event Log API. You want to achieve this by creating a custom event log on Certkiller -SR07.

What should you do?

A. Use the following code:

```
EventLog.CreateEventSource ("Application1", "Profile", " Certkiller -SR07");
```

B. Use the following code:

```
EventLog.CreateEventSource ("Application1", "Profile");
```

C. Use the following code:

```
EventSourceCreationData sourceData = new EventSourceCreationData ("Application1",
```

```
"Profile");
sourceData.MachineName = " Certkiller -SR07";
EventLog.CreateEventSource (sourceData);
D. Use the following code:
EventSourceCreationData sourceData = new EventSourceCreationData ("Application1",
"Profile");
EventLog.CreateEventSource (sourceData);
```

Answer: C

Explanation: This code instantiates an EventSourceCreationData object, sets the MachineName property of the EventSourceCreationData object, and invokes the CreateEventSource method, passing the EventSourceCreationData object as an argument, to create the custom event log.

The EventSourceCreationData object is used to configure a new event log source. You can then pass the EventSourceCreationData object to the CreateEventSource method of an EventLog to register the event log source and corresponding event log so that you can write entries to it. The EventSourceCreationData object's constructor accepts two String arguments: Source and Log. The Source argument specifies the event source, and the Log argument specifies the name of the event log. After creating an instance of EventSourceCreationData, you can set the EventSourceCreationData object's properties to further configure the event source. The MachineName property represents the computer on which you want to create the event source. In this scenario, you create a new EventSourceCreationData object named sourceData and then set its MachineName property to Certkiller -SR07. Then, you call the CreateEventSource method, passing the method sourceData. This creates an event log source on the computer named Certkiller -SR07.

Incorrect Answers:

A: The CreateEventSource method that takes three String arguments is obsolete in the .NET 2.0 Framework.

B, D: Both of these code fragments would create an event log on the local computer by default, but the scenario states that you should explicitly specify the machine name because the computer on which the code is running is unknown.

QUESTION 167

You work as an application developer at Certkiller .com. You are required to retrieve and display the names of all processes that are currently running in memory.

What should you do?

A. Use the following code:

```
foreach (Process curProcess in Process.GetSystemProcesses ())
Console.WriteLine (curProcess.ProcessName);
```

B. Use the following code:

```
foreach (Process curProcess in Process.GetAllProcesses ())
Console.WriteLine (curProcess.ProcessName);
```

C. Use the following code:

```
foreach (Process curProcess in Process.GetProcesses ())  
Console.WriteLine (curProcess.ProcessName);
```

D. Use the following code:

```
foreach (Process curProcess in Thread.GetProcesses ())  
Console.WriteLine (curProcess.ProcessName);
```

Answer: C

Explanation: The GetProcesses method creates and returns an array of Process objects representing all currently running processes in memory. Because this method invocation does not contain a computer name, the local machine is assumed. The curProcess variable is reassigned to a Process object with each iteration. The ProcessName property of the Process object retrieves the system name of the process. The WriteLine method of the Console class outputs the process name to the console. Because the WriteLine method outputs a line return, each process name will be on a separate line in the Console window.

Incorrect Answers:

A, B: The GetProcesses and GetAllProcesses methods do not exist in the Process class.

D: There is no such method as the GetProcesses method in the Thread class.

QUESTION 168

You work as an application developer at Certkiller .com. Certkiller .com is currently using a performance counter named HitCounter.

You are required to increment each time a user accesses the UI classes within the application. To do this, you start by creating performance counters using the following code:

```
CounterCreationDataCollection colCounters =  
    new CounterCreationDataCollection();  
CounterCreationData counterHit =  
    new CounterCreationData("HitCounter", "Number of hits",  
        PerformanceCounterType.NumberOfItems32);  
CounterCreationData counterFile = new CounterCreationData  
    ("FileCounter", "Number of files access attempts",  
        PerformanceCounterType.NumberOfItems32);  
  
colCounters.Add(counterHit);  
colCounters.Add(counterFile);  
  
PerformanceCounterCategory.Create( "ApplicationPerformance",  
    "ApplicationPerformanceHelp",  
    PerformanceCounterCategoryType.SingleInstance,  
    colCounters );
```

You have to adjust the HitCounter performance counter when a hit occurs.
What should you do?

A. Use the following code:

```
PerformanceCounter hitCounter = new PerformanceCounter ("ApplicationPerformance",
```

```
"HitCounter");  
hitCounter.ReadOnly = false;  
hitCounter.Increment ();  
B. Use the following code:  
PerformanceCounter hitCounter = new PerformanceCounter ("ApplicationPerformance',  
"HitCounter");  
hitCounter.Increment ();  
C. Use the following code:  
PerformanceCounter hitCounter = new PerformanceCounter ("ApplicationPerformance',  
"HitCounter");  
hitCounter ++;  
D. Use the following code:  
PerformanceCounter hitCounter = new PerformanceCounter ("ApplicationPerformance',  
"HitCounter");  
hitCounter.ReadOnly = false;  
hitCounter ++;
```

Answer: A

Explanation: This code creates a new PerformanceCounter object that references the ApplicationPerformance category and the HitCounterperformance counter. By default, a performance counter is read-only, so this code sets the ReadOnly property to False. Then, the Increment method is called to increase the counter by one. The PerformanceCounter class also provides an IncrementBy method, which increments the performance counter by the value specified in a provided argument.

Incorrect Answers:

B: You should not use the code fragments that fail to set the ReadOnly property to False because by default, all performance counter objects are read-only.

C, D: You should not use the code fragments that use the ++ operator to increment the PerformanceCounter object because this will cause a compile-time error.

QUESTION 169

You work as an application developer at Certkiller .com. You would like to create a custom performance counter for an application that you created recently.

To do this, you decide to create a custom category named ApplicationPerformance and a performance counter named HitNumber.

You need to ensure that this counter is shared across numerous applications.

What should you do?

A. Use the following code:
PerformanceCounterCategory.Create ("ApplicationPerformance",
"ApplicationPerformanceHelp",
PerformanceCounterCategoryType.MultiInstance, "HitNumber", "HitNumberHelp");
B. Use the following code:
PerformanceCounterCategory.Create ("HitNumber", "HitNumberHelp",
PerformanceCounterCategoryType.SingleInstance,

"ApplicationPerformance" "ApplicationPerformanceHelp");

C. Use the following code:

```
PerformanceCounterCategory.Create ("HitNumber", "HitNumberHelp",
```

```
PerformanceCounterCategoryType.MultiInstance,
```

```
"ApplicationPerformance" "ApplicationPerformanceHelp");
```

D. Use the following code:

```
PerformanceCounterCategory.Create ("ApplicationPerformance",
```

```
"ApplicationPerformanceHelp",
```

```
PerformanceCounterCategoryType.SingleInstance,
```

```
"HitNumber", "HitNumberHelp");
```

Answer: D

Explanation: This code invokes the Create method of the PerformanceCounterCategory class. This method registers a custom category on the local computer. The first two arguments specify the name of the category and category help string, respectively. The third argument specifies a PerformanceCounterCategoryType enumeration value indicating how many counters can be in use within the specified category. The value PerformanceCounterCategoryType.SingleInstance indicates that only a single instance can exist for the entire category. The last two arguments specify the name of the performance counter and the counter's help string, respectively.

Incorrect Answers:

A, C: The code fragments that specify the MultiInstance value should not be used because the scenario requires you to share the same counter across multiple applications.

B: This code fragment incorrectly assigns the value HitNumber to the category name and ApplicationPerformance to the counter name.

QUESTION 170

You work as an application developer at Certkiller .com.

You are required to launch the App.exe process, and specify sample.txt as the input file. App.exe will then use the contents of sample.txt to establish the environment's current settings.

You need to ensure that the code you use meets these requirements.

What should you do?

A. Use the following code:

```
Process myProcess = new Process ();
```

```
myProcess.StartInfo = new ProcessStartInfo ("App.exe sample.txt");
```

```
myProcess.Start ();
```

B. Use the following code:

```
Process myProcess = new Process ();
```

```
myProcess.StartInfo = new ProcessStartInfo ("App.exe");
```

```
myProcess.ProcessStartArgs ("sample.txt");
```

```
myProcess.Start ();
```

C. Use the following code:

```
Process myProcess = new Process ();  
myProcess.StartInfo = new ProcessStartInfo ("App.exe");  
myProcess.Start ("sample.txt");  
D. Use the following code:  
Process myProcess = new Process ();  
myProcess.StartInfo = new ProcessStartInfo ("App.exe");  
myProcess.StartInfo.FileName = "sample.txt"  
myProcess.Start ();
```

Answer: D

Explanation: This code creates a new Process object, sets the application to run using the StartInfo property, and uses the FileName property to specify the file to use as input. The StartInfo property of a Process object stores startup information for the process. This includes the application to run and any command-line arguments to be used by the application. The FileName property must be set, and can be set by either explicitly setting the FileName property or by passing the name of the file to the ProcessStartInfo constructor. The Start method launches the application process with the values specified in the StartInfo property. In this scenario, the code declares a new Process object named myProcess and then sets the StartInfo property of this process. The code passes the constructor of the ProcessStartInfo a single argument representing the name of the application, App.exe. Next, the FileName property is explicitly set with an assignment statement to the value of "sample.txt". Then, the code call the Start method to launch the application using the values specified in the customized startup settings.

Incorrect Answers:

A: You should not use the code that passes a single string containing the application and input file to the ProcessStartInfo constructor.

B: You should not use the code that invokes the ProcessStartArgs method because no such method exists in the Process class.

C: You should not use the code that invokes the Start method of the Process object specifying the input file because no such method signature exists.

QUESTION 171

You work as an application developer at Certkiller .com. Certkiller .com uses an application that calculates monthly payments based upon client input. You are currently debugging this application using the Microsoft Visual Studio 2005 IDE. The application contains the following code:

```
public double CalculateMonthlyPayment (Single rate, double principal)  
{  
//Implementation code  
}
```

You have discovered that unexpected results are being returned by the application. You would like to pause execution and display a message box containing an error message in the event of a negative or zero rate value is Passed to the CalculateMonthlyPayment method.

You need to ensure that this only occurs during debugging mode.
What should you do?

- A. Add the following code to the beginning of the CalculateMonthlyPayment method:
`Debug.Assert (rate > 0, "Rate Error", "Rate must be > zero");`
- B. Add the following code to the beginning of the CalculateMonthlyPayment method:
`if (rate <= 0)
MessageBox.Show ("Rate is" + rate, Error);`
- C. Add the following code to the beginning of the CalculateMonthlyPayment method:
`if (rate <= 0)
Debug.WriteLine ("Error Rate is" + rate);`
- D. Add the following code to the beginning of the CalculateMonthlyPayment method:
`Debug.WriteLineIf (rate <= 0, "Error Rate is" & rate);`

Answer: A

Explanation: This code makes the debugging assertion that the rate argument is greater than zero. If it is not, then a message box will be display with the message Rate Error along with the detailed description "Rate must be > zero". The Assert method of the debug class is an overloaded method that provides you the ability to test assumptions made in your programming logic. The Assert method accepts three arguments, the first of which is required. This first argument represents a condition that is assumed to be true for your programming logic and will evaluate to a Boolean value. The other two arguments represent optional string messages. When the Assert method is invoked with three arguments, the condition is evaluated. If the condition evaluates to true, then the program continues to execute. If the condition evaluates to false, the program execution is halted, and by default a modal dialog box is displayed. This dialog box displays the first string on a single line, the second string on the second line, and then the location at which the assertion failed. From this dialog box, you can invoke the debugger, continue execution, or exit the application. Output generated using the Debug class is stripped out when creating a release version build of an application.

Incorrect Answers:

B: In this scenario, you want the dialog box to display only for debug builds of the application. Using this code, the message box would display in a release build of the application.

C, D: The output of these options will not display in a message box.

QUESTION 172

You work as an application developer at Certkiller .com. You are preparing to run diagnostics on an application by using TraceSwitch objects.

You start by adding the following elements to the application configuration file:

```
<system.diagnostics>
  <switches>
    <add name="DataTraceSwitch" value="1" />
    <add name="MessageTraceSwitch" value="3" />
  </switches>
</system.diagnostics>
```

You then test the TraceSwitch settings by using the code displayed in the exhibit below:

```
1 using System;
2 using System.Diagnostics;
3
4 public class MainApp {
5
6     private static TraceSwitch dataSwitch;
7     private static TraceSwitch messageSwitch;
8
9     public static void Main ( string[] args ) {
10         dataSwitch = new TraceSwitch( "DataTraceSwitch",
11         "Displays argument information." );
12         messageSwitch = new TraceSwitch( "MessageTraceSwitch",
13         "Displays method calling information." );
14         TestTraceSwitches( 0 );
15     }
16
17     private static void TestTraceSwitches ( int Input ) {
18         Trace.WriteLineIf( messageSwitch.Level == TraceLevel.Info,
19         "Entering TestTraceSwitches method." );
20         Trace.WriteLineIf( dataSwitch.Level == TraceLevel.Info,
21         "Input: " + Input );
22         if ( Input <= 0 ) {
23             Trace.WriteLine( dataSwitch.Level == TraceLevel.Error,
24             "Input cannot be less than or equal to 0." );
25             Trace.WriteLine( messageSwitch.Level == TraceLevel.Error,
26             "Exception thrown in TestTraceSwitches method." );
27             throw new ArgumentException( "Invalid value.", "Input" );
28         }
29         Trace.WriteLineIf( messageSwitch.Level == TraceLevel.Info,
30         "Exiting TestTraceSwitches method." );
31     }
32 }
```

What represents the output that will be displayed by this test?

- A. Entering TestTraceSwitches method.
Input: 0
Input cannot be less than or equal to 0.
Exception thrown in TestTraceSwitches method.
Exiting TestTraceSwitches method.
- B. Entering TestTraceSwitches method.
Input cannot be less than or equal to 0.
Exception thrown in TestTraceSwitches method.
- C. Entering TestTraceSwitches method.
Input cannot be less than or equal to 0.

Exception thrown in TestTraceSwitches method.
Exiting TestTraceSwitches method.
D. Input cannot be less than or equal to 0.
Exception thrown in TestTraceSwitches method.

Answer: B

Explanation: In this scenario, the DataTraceSwitch is set to 1, or TraceLevel.Error, and the MessageTraceSwitch is set to 3, or TraceLevel.Info. The Trace.WriteLineIf method invocations check the TraceLevel of each switch. In this way, only error messages will be in the output if the DataTraceSwitch.TraceLevel property is evaluated. All messages except verbose will be in the output if the MessageTraceSwitchTraceLevel property is evaluated. The reason that the last trace message is not in the output is because an exception is thrown before that statement can be executed.

Incorrect Answers:

A, C, D: These options are all incorrect because they do not indicate the correct output based on the TraceLevel settings of the TraceSwitch object.

QUESTION 173

You work as an application developer at Certkiller .com. You have recently created an application, and want to capture all debugging text messages generated by it. You would like these debugging messages to display on the command line. The application that you created contains the following code:

```
Debug.WriteLine ("Start the processing");  
Console.WriteLine ("Generated by Console.WriteLine");  
Debug.WriteLine ("End the processing");
```

You need to ensure that you are able to capture all debugging messages to the command line.

What should you do?

A. Use the following code:

```
Debug.Listeners.Add (new TextWriterTraceListener (Console.Out));  
Debug.AutoFlush = true;
```

B. Use the following code:

```
Debug.Listeners.Add (new StreamWriter (Console.Out));  
Debug.AutoFlush = true;
```

C. Use the following code:

```
Debug.Listeners.Add (new ConsoleTraceListener ());  
Debug.AutoFlush = true;
```

D. Use the following code:

```
Debug.Listeners.Add (new DefaultTraceListener ());  
Debug.AutoFlush = true;
```

Answer: C

Explanation: Listeners are used to capture trace and debug messages. Both the Trace and Debug objects share the same Listeners collection, which includes a DefaultTraceListener that will capture trace and debug messages in the Output window. You are able to override this behavior by using the Add method to add another listener to the Listeners collection. The ConsoleTraceListener is used to route trace and debug messages to the console. The AutoFlush property should be set to true for immediate capture. This specifies that after each message is written, the buffer is flushed and the output is written to the listener.

Incorrect Answers:

A: You should use the code that instantiates a TextWriterTraceListener object that specifies the Console's output stream because this is less efficient than specifying a ConsoleTraceListener object.

B: You should use the code that instantiates a StreamWriter object that specifies the Console's output stream because the Listeners collection allows only Listener object streams.

D: You should use the code that instantiates a DefaultTraceListener object because this will capture the debugging messages to the Output window in the Visual Studio .NET 2005 IDE. Also, each Listeners collection will contain a DefaultTraceListener by default.

QUESTION 174

You work as an application developer at Certkiller .com. You have created an application to interface with an inventory storage system, and want to enable tracing in the application to track stock shortages and surpluses.

The application should not, however, trace inventory levels if no shortages or surpluses exist. In addition, you do not want recompile every time to switch tracing capabilities on or off.

What should you do?

- A. Specify a command-line argument named InventoryTrace, and configure the application to read the argument.
- B. Specify a system-wide environmental variable named InventoryTrace, and configure the application to read the environmental variable.
- C. Specify a registry key named InventoryTrace, and configure the application to read the registry key setting.
- D. Specify a BooleanSwitch named InventoryTrace, and configure it in the application configuration file.

Answer: D

Explanation: The BooleanSwitch class is used to toggle trace messages on and off. The application configuration is intended to manage any application-specific settings, including tracing. The value of the Enabled property determines whether the BooleanSwitch is turned on or off. This value is set in the application configuration file. If the value is 0, then the BooleanSwitch object is turned off and the Enabled property returns false. If the value is any other value, the BooleanSwitch object is turned on and the Enabled

property returns true.

Incorrect Answers:

A: This option requires the application to run from the command-line.

B: This option requires EnvironmentPermission and is intended for more complex application settings.

C: This option requires RegistryPermission and is intended for system-wide settings, not for application-specific settings.

QUESTION 175

You work as an application developer at Certkiller .com. Certkiller .com has a server named Certkiller -SR05 that has numerous processors installed.

You have been given the task of developing an application that displays certain clock speed statistics on all processors installed on Certkiller -SR05.

You need to ensure that this requirement is fully satisfied.

What should you do?

A. Use the following code:

```
ManagementObjectSearcher processorSearcher = new ManagementObjectSearcher ();
foreach (ManagementObject obj in processorSearcher.Get ("SELECT * FROM Win32_Processor"))
{
    Console.WriteLine (" {0}", obj ["Name"]);
    Console.WriteLine (" {0} / {1}", obj ["CurrentClockSpeed"], Obj ["MaxClockSpeed"]);
}
```

B. Use the following code:

```
ManagementObjectSearcher processorSearcher = new ManagementObjectSearcher (
"SELECT * FROM Win32_Processor");
foreach (ManagementObject obj in processorSearcher.Get ())
{
    Console.WriteLine (" {0}", obj ["Name"]);
    Console.WriteLine (" {0} / {1}", obj ["CurrentClockSpeed"], Obj ["MaxClockSpeed"]);
}
```

C. Use the following code:

```
ManagementObjectQuery processorQuery = new ManagementObjectQuery ();
foreach (ManagementObject obj in processorQuery.Get ("SELECT * FROM Win32_Processor"))
{
    Console.WriteLine (" {0}", obj ["Name"]);
    Console.WriteLine (" {0} / {1}", obj ["CurrentClockSpeed"], Obj ["MaxClockSpeed"]);
}
```

D. Use the following code:

```
ManagementObjectQuery processorQuery = new ManagementObjectQuery (
"SELECT * FROM Win32_Processor");
foreach (ManagementObject obj in processorQuery.Get ())
{
    Console.WriteLine (" {0}", obj ["Name"]);
}
```

```
Console.WriteLine (" {0} / {1}", obj ["CurrentClockSpeed"], Obj ["MaxClockSpeed"]);  
}
```

Answer: B

Explanation: This code retrieve all Win32_Processor objects on the local machine, iterates through each Win32_Processor object, and displays the Name, CurrentClockSpeed, and MaxClockSpeed properties for each Win32_Processor object. First, the ManagementObjectSearcher object is instantiated with the WQL query string on which to search. WQL is a subset of SQL, and it is specifically designed for WMI. The WQL string specified in this code returns any 32-bit processors available on the local machine. The Get method returns a ManagementObjectCollection object. On each iteration, a ManagementObject object is assigned to the variable obj. the Console.WriteLine method display the Name, ClockSpeed, and MaxClockSpeed properties on the command-line using a string indexer.

Incorrect Answers:

A: You should not use the code that specifies the WQL query string as an argument of the Get method of the ManagementObjectSearcher object because the Get method does not accept a string data type.

C D: You should not use the code that specifies the ManagementObjectQuery class because there is no such class in the .NET 2.0 class library.

QUESTION 176

You work as an application developer at Certkiller .com. You have developed an application that simplifies hard drive management for Certkiller .com's administrators.

The application that you created logs all modifications made to physical hard drives on an hourly basis. You now need to create an EventQuery object for this application.

What should you do?

A. Use the following code:

```
EventQuery query = new EventQuery ();  
query.QueryString = "SELECT InstanceModificationEvent FROM 'Win32_DiskDrive'" +  
"WITHIN 3600";
```

B. Use the following code:

```
EventQuery query = new EventQuery ();  
query.QueryString = "SELECT * FROM InstanceModificationEvent WITHIN 3600" +  
"WHERE TargetInstance ISA 'Win32_DiskDrive'";
```

C. Use the following code:

```
EventQuery query = new EventQuery ();  
query.QueryString = "SELECT * FROM 'Win32_DiskDrive' WITHIN 3600" +  
"WHERE TargetInstance ISA InstanceModificationEvent";
```

D. Use the following code:


```
EventQuery query = new EventQuery ();  
query.QueryString = "SELECT * FROM _InstanceModificationEvent WITHIN 3600" +  
"WHERE Instance = 'Win32_DiskDrive';
```

Answer: B

Explanation: This code creates a new EventQuery object that queries all disk drive events every hour. The QueryString property contains a string that follows the syntax of WQL. WQL is a subset of SQL, and it is specifically designed for WMI. The SELECT clause indicates retrieval, where the asterisk (*) represents all properties associated with the event. The FROM clause indicates the event, which in this case is _InstanceModificationEvent. The WITHIN clause specifies the polling interval in seconds. The WHERE clause specifies the condition that must be met. In this scenario, the TargetInstance field is compared to the value Win32_DiskDrive. This limits the _InstanceModificationEvent events to only those that modify hard drives.

Incorrect Answers:

A: InstanceModificationEvent is not a valid event property and Win32_DiskDrive is not a valid event.

C: The FROM clause should specify the event InstanceModificationEvent and the ISA operator should use the Win32_DiskDrive class.

D: Instance is not a valid field name and the equal sign (=) is not valid for class comparisons.

QUESTION 177

You work as an application developer at Certkiller .com.

Certkiller .com has given you the task of serializing an object and writing it to a data file using binary serialization.

You need to ensure that you meet these requirements.

What should you do?

A. Use the following code:

```
object obj = new object ();  
Stream objStream = File.Open ("DataFile.dat", FileMode.Create);  
BinaryFormatter objFormatter = new BinaryFormatter ();  
objFormatter.Serialize (objStream, obj);
```

B. Use the following code:

```
object obj = new object ();  
BinaryFormatter objFormatter = new BinaryFormatter ();  
objFormatter.Serialize (obj);
```

C. Use the following code:

```
Stream objStream = File.Open ("DataFile.dat", FileMode.Create);  
BinaryFormatter objFormatter = new BinaryFormatter ();  
objFormatter.Serialize (objStream);
```

D. Use the following code:

```
object obj = new object ();
```



```
Stream objStream = File.Open ("DataFile.dat", FileMode.Create);  
BinaryFormatter objFormatter = new BinaryFormatter ();  
objFormatter.Serialize (obj, objStream);
```

Answer: A

Explanation: This code instantiates an object named obj, opens a file stream, instantiates a BinaryFormatter object, and serializes the obj object to the DataFile.dat file. The File.Open method takes a file path string and FileMode enumeration value as arguments and returns a FileStream object. The Serialize method of the BinaryFormatter class takes two arguments: a stream and the object to be serialized. The Serialize method uses the stream to write the object to the destination.

Incorrect Answers:

B, C, D: If you use these options it will cause a compile-time error.

QUESTION 178

You work as an application developer at Certkiller .com. You have recently created a serializable class named Vehicle.

The class is shown below:

```
[Serializable]  
public class Vehicle  
{  
    public string VIN;  
    public string Make;  
    public string Model;  
    public string Year;  
}
```

You are planning to create a custom formatter class to control the formatting of Vehicle objects when they are serialized. You need to ensure that is achieved with as little development effort as possible.

What should you do?

A. Use the following code:

```
public class VehicleFormatter : Formatter  
{  
    //Implementation omitted  
}
```

B. Use the following code:

```
public class VehicleFormatter : IGenericFormatter  
{  
    //Implementation omitted  
}
```

C. Use the following code:

```
public class VehicleFormatter : IFormatConverter  
{
```

```
//Implementation omitted
}  
D. Use the following code  
public class VehicleFormatter : IFormatter  
{  
//Implementation omitted  
}
```

Answer: D

Explanation: When implementing the IFormatter interface, you must provide implementation for two methods and three properties. The two methods, Serialize and Deserialize control how objects will be stored from memory and loaded into memory, respectively. Both methods accept a Stream object as an argument. The Serialize method also takes a generic object as its second argument and uses the Stream argument to write the object. The Deserialize method returns the object using the Stream argument. The Binder, Context, and Surrogate Selector properties must also be implemented.

Incorrect Answers:

A: The Formatter class requires more development effort than necessary.

B: The IGenericFormatter interface does not exist.

C: The IFormatConverter interface does not control formatting during serialization.

QUESTION 179

You work as an application developer at Certkiller .com. You develop a serializable class for persisting objects as files.

Every time an object is serialized, you have to update the database with the name of the object and location of that file. You elect to employ the OnSerialized attribute to achieve this objective.

You now need to apply the OnSerialized attribute to a certain method.

What should you do?

A. Apply the OnSerialized attribute to the following method:

```
public void AfterSerialization (object sender, SerializationEventArgs e)  
{  
//Update database  
}
```

B. Apply the OnSerialized attribute to the following method:

```
public void AfterSerialization (object sender  
{  
//Update database  
}
```

C. Apply the OnSerialized attribute to the following method:

```
public void AfterSerialization (StreamingContext context)  
{  
//Update database
```

```
}
```

D. Apply the OnSerialized attribute to the following method:

```
public StreamingContext AfterSerialization ()  
{  
    //Update database  
}
```

Answer: C

Explanation: This method contains the correct method signature to have the OnSerialized attribute applied. The method must accept a StreamingContext as an argument for accessing the read/write stream during serialization/deserialization.

Incorrect Answers:

A, B, D: You should not apply the OnSerializedattribute to these methods because they do not accept a StreamingContext as an argument.

QUESTION 180

You work as an application developer at Certkiller .com. You have recently created a point of sale application that serializes sales products into XML, which will then be consumed by Certkiller .com's partner company.

The following exhibit shows the appropriate serializable classes that you have created.

```

1 using System;
2 using System.IO;
3 using System.Xml.Serialization;
4 using System.Runtime.Serialization;
5
6 public class Product {
7     private int ID;
8     public string Name;
9 }
10
11 public class SalesProduct : Product {
12     [XmlAttribute( "Taxable" )]
13     public bool IsTaxable;
14 }
15
16 public class Region {
17     [XmlAttribute( "Area" )]
18     public string Name;
19     [XmlArrayItem( typeof( Product ),
20         ElementName = "Product" )]
21     [XmlArrayItem( typeof( SalesProduct ),
22         ElementName = "SalesProduct" )]
23     public Product[] Products;
24 }

```

You then test the serialization process by creating code in the exhibit below:

```

public void Serialize ( string filename ) {
    XmlSerializer serializer = new XmlSerializer( typeof( Region ) );
    StreamWriter writer = new StreamWriter( filename );
    SalesProduct product1 = new SalesProduct();
    product1.Name = "Sofa";
    product1.IsTaxable = true;
    Product productDisplay = new Product();
    productDisplay.Name = "Television";
    Region region = new Region();
    region.Name = "East";
    region.Products = new Product[] { product1, productDisplay };
    serializer.Serialize( writer, region );
    writer.Close();
}

```

What will be in the file if you invoke the Serialize method?

A. <?xml version="1.0" encoding="utf-8"?>
 <Region xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema">
 <Products>
 <Product IsTaxable="true">Sofa</Product>
 <Product>Television</Product>

```
</Products>
</Region>
B. <?xml version="1.0" encoding="utf-8"?>
<Region xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd= "http://www.w3.org/2001/XMLSchema">
<Products>
<SalesProduct Taxable="true">
<Name>Sofa</Name>
</SalesProduct>
<Product>
<Name>Television</Name>
</Product>
</Products>
</Region>
C. <?xml version="1.0" encoding="utf-8"?>
<Region xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd= "http://www.w3.org/2001/XMLSchema">
<Products>
<SalesProduct>
<IsTaxable>true</IsTaxable >
<Name>Sofa</Name>
</SalesProduct>
<Product>
<Name>Television</Name>
</Product>
</Products>
</Region>
D. <?xml version="1.0" encoding="utf-8"?>
<Region xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd= "http://www.w3.org/2001/XMLSchema" Area="East">
<Products>
<SalesProduct Taxable="true">
<Name>Sofa</Name>
</SalesProduct>
<Product>
<Name>Television</Name>
</Product>
</Products>
</Region>
```

Answer: B

Explanation: This code is generated because of the inclusion and exclusion of XML serialization attributes. The Product class contains no XML-specific attributes, so the Name field will translate into the Name element. The ID field will not serialize because it is a private member. The XmlElement attribute can specify the element

name if it is different from the field name. The SalesProduct class inherits the Product class and adds the IsTaxable field. The XmlAttribute attribute specifies the Taxable element to store the IsTaxable field value. The Region class contains the Name field, which has the XmlAttribute applied as well. The XmlAttribute attribute indicates the serialization schema to use for the Products array. Because both generic Product objects and SalesProduct objects can be stored in the array, you must specify the XmlArrayItem for each serializable type. If you do not, the serialization process will throw an InvalidOperationException runtime error.

Incorrect Answers:

A, C, D: The serialize method would not generate the output of the other options because they do not reflect the XML serialization attributes specified in the Product, SalesProduct, and Region classes.

QUESTION 181

You work as an application developer at Certkiller .com. You have recently created a serializable class named Vehicle.

The class is shown below:

[Serializable]

```
public class Vehicle
{
    public string VIN;
    public string Make;
    private string Model;
    private int Year;
    private string Owner;
}
```

Certkiller .com does not want the Owner field to be persisted when a Vehicle object is serialized, for security reasons.

You need to ensure that this objective is fulfilled.

What should you do?

- A. Apply the OptionalField attribute to the Owner field.
- B. Apply the NonSerialized attribute to the Owner field.
- C. Have the Vehicle class implement the IFormatter interface for custom serialization.
- D. Do nothing because, when using binary serialization, Private fields are never persisted.

Answer: B

Explanation: This will ensure that the Owner field will not be serialized, but it will allow all other fields to be serialized normally.

Incorrect Answers:

A: This option would be used for deserialization.

C: This option would require excessive developer effort.

D: This is incorrect because all fields marked private or otherwise are persisted when using binary serialization.

QUESTION 182

You work as an application developer at Certkiller .com. You have just completed the creation of an application that receives order data from Certkiller .com's partner company in XML format.

The XML has to be utilized to create an Order object that is consumed by the new application.

The following exhibit displays an example of Certkiller .com's partner company's XML data:

```
<?xml version="1.0" encoding="utf-8"?>
<Order id="101">
  <Shipping>
    <Instructions>
      Come to front door and ring door bell.
      No other options.
    </Instructions>
    <Address>
      <Street>345 Microsoft Way</Street>
      <City>Atlanta</City>
      <State>GA</State>
      <Zip>30350</Zip>
    </Address>
  </Shipping>
  <Date>2006-05-12T00:00:00-04:00</Date>
  <Details>
    <SalesProduct InStock="true" Taxable="true">
      <Name>Sofa</Name>
      <Quantity>1</Quantity>
      <Price>349.99</Price>
    </SalesProduct>
    <Product InStock="false">
      <Name>Television</Name>
      <Quantity>2</Quantity>
      <Price>230.89</Price>
    </Product>
  </Details>
</Order>
```

You plan to use the XmlSerializer class to deserialize the XML data into an Order object. When you learn that Certkiller .com's partner company's XML also contains Shipping object data, you decide to deserialize the shipping object after the Shipping element is detected during deserialization.

To achieve this, you need to use a certain event of the XmlSerializer class.

What event should you use?

- A. UnknownElement
- B. UnknownNode
- C. UnreferencedObject
- D. UnknownAttribute

Answer: B

Explanation: The UnknownNodeevent is fired when an unexpected element or node is detected that does not map to the XmlSerializer object's expected type. The UnknownNode event included the XmlNodeEventArgs, which allows access to the entire node of the XML data. This would allow easy deserialization for the Shipping object.

Incorrect Answers:

A, C, D: These options would not allow easy deserialization for the Shipping object.

QUESTION 183

You work as an application developer at Certkiller .com. You have recently written the code shown below:

```
Hashtable emailAddresses = new Hashtable ();  
emailAddresses.Add ("Mia", "mia@ Certkiller .com");  
emailAddresses.Add ("Andy", "andy@ Certkiller .com");  
emailAddresses.Add ("Kara", "kara@ Certkiller .com");  
FileStream stream = new FileStream ("Email.dat", FileMode.Create);  
BinaryFormatter formatter = new BinaryFormatter ();  
formatter.Serialize (stream, emailAddresses);
```

You need to ensure that you are able to load the emailAddresses object from the Email.dat file into your application.

What should you do?

A. Use the following code:

```
FileStream readStream = new FileStream ("Email.dat", FileMode.Open);  
HashTable loadEmails = readStream.Deserialize ();
```

B. Use the following code:

```
FileStream readStream = new FileStream ("Email.dat", FileMode.Open);  
BinaryFormatter readFormatter = new BinaryFormatter ();  
HashTable loadEmails = readFormatter.Deserialize (readStream);
```

C. Use the following code:

```
FileStream readStream = new FileStream ("Email.dat", FileMode.Open);  
BinaryFormatter readFormatter = new BinaryFormatter ();  
HashTable loadEmails = (HashTable) readFormatter.Deserialize (readStream);
```

D. Use the following code:

```
FileStream readStream = new FileStream ("Email.dat", FileMode.Open);  
HashTable loadEmails = (HashTable) readFormatter.ReadObject ();
```

Answer: C

Explanation: This instantiates a BinaryFormatter object, and deserializes the emailAddresses object from the Email.dat file. the FileStream constructor takes a file path string and FileMode enumeration value as arguments. The Deserialize method of the BinaryFormatter class takes the stream of the object to be deserialized and returns a generic object. This generic object must be cast or converted to the HashTable data type.

Incorrect Answers:

A, D: You should not use the code fragments that do not instantiate the BinaryFormatter object because the ReadObject and Deserialize methods do not exist in the FileStream class.

B: You should not use the code that does not cast or convert the return value of the Deserialize method because the Deserialize method returns a generic object.

QUESTION 184

DRAG DROP

You work as an application developer at Certkiller .com. You define a serializable class named Employee, which is shown in the exhibit below.

```
1 using System;
2 using System.IO;
3 using System.Runtime.Serialization;
4
5 [Serializable()]
6 public class Employee {
7     public string Name;
8
9     public Employee() {
10         New();
11     }
12
13     public void New() {
14         //Implementation code
15     }
16
17     [OnDeserializing()]
18     public void OnDeserializingMethod( StreamingContext context ) {
19         //Implementation code
20     }
21
22     [OnDeserialized()]
23     public void OnDeserializedMethod( StreamingContext context ) {
24         //Implementation code
25     }
26
27     [OnSerializing()]
28     public void OnSerializingMethod( StreamingContext context ) {
29         //Implementation code
30     }
31
32     [OnSerialized()]
33     public void OnSerializedMethod(StreamingContext context) {
34         //Implementation code
35     }
36 }
```

To execute serialization on an Employee object, you write the code shown in the exhibit (line numbers are used for reference only).

```
01 public class Serialization {
02 public static void Main() {
03 Employee empObj = new Employee();
04 empObj.Name = "Derrin Mickels";
05 //Create formatter
06 BinaryFormatter formatter = new BinaryFormatter();
07 //Create stream
08 FileStream stream = new FileStream("empObj.emp", FileMode.Create);
09 formatter.Serialize(stream, empObj);
10 stream.Close();
11 Employee empObjCopy;
12 stream = new FileStream("empObj.emp", FileMode.Open);
13 empObjCopy = (Employee) formatter.Deserialize(stream);
14 stream.Close();
15 stream = null;
16 formatter = null;
17 }
18 }
```

A trainee developer named Amy Wilson asks you which Employee class methods will be called and in what order they will be invoked.

What should you tell Amy Wilson?

To answer, select the methods to be used and arrange them in the correct order on invocation.

Methods, Select from these

OnDeserializingMethod
OnDeserializedMethod
OnSerializingMethod
OnSerializedMethod
New

Methods, place here

Place first step here
Place second step here
Place third step here
Place fourth step here
Place fifth step here

Answer:

Methods, Select from these	Methods, place here
	New
	OnSerializingMethod
	OnSerializedMethod
	OnDeserializingMethod
	OnDeserializedMethod

Explanation:

: Line 03 shows that the Employee object is instantiated, invoking the constructor. The constructor, in turn, invokes the New method.

Line 09 shows that the Employee object is serialized using a FileStream object. Because the OnSerializingMethod and OnSerializedMethod methods have the OnSerializing and OnSerialized attributes applied to them, respectively, the OnSerializingMethod will be invoked while serializing the Employee object, and the OnSerializedMethod will be invoked after the object is completely serialized.

Line 11 shows that a variable of type Employee is declared and the next line instantiates the FileStream object for reading the serialized data in the empObj.emp file. Because the new keyword is not used, neither the constructor nor the New method is invoked.

Because the OnDeserializingMethod and OnDeserializedMethod methods have the OnDeserializing and OnDeserialized attributes applied to them, respectively, the code on line 13 will invoke the OnDeserializing and OnDeserialized methods next. The OnDeserializing method will be invoked while deserializing the Employee object from a file. The OnDeserialized method will be invoked after the object is completely deserialized into memory.

QUESTION 185

You work as an application developer at Certkiller .com. you have recently written the code shown below:

```
Hashtable emailAddresses = new Hashtable ();  
emailAddresses.Add ("Mia", "mia@ Certkiller .com")  
emailAddresses.Add ("Andy", "andy@ Certkiller .com")  
emailAddresses.Add ("Kara", "kara@ Certkiller .com")
```

You need to ensure that these e-mail addresses are stored in the Email.dat file so that you can load them again when the user restarts the application.

What should you do?

A. Add the following code:

```
FileStream stream = new FileStream ("Email.dat", FileMode.Create);  
BinaryFormatter formatter = new BinaryFormatter ();  
formatter.Deserialize (stream, emailAddresses);
```

B. Add the following code:

```
FileStream stream = new FileStream ("Email.dat", FileMode.Create);  
BinaryFormatter formatter = new BinaryFormatter ();  
formatter.Serialize (stream, emailAddresses);
```

C. Add the following code:

```
FileStream stream = new FileStream ("Email.dat", FileMode.Create);  
stream.Serialize (emailAddresses);
```

D. Add the following code:

```
FileStream stream = new FileStream ("Email.dat", FileMode.Create);  
stream.WriteObject (emailAddresses);
```

Answer: B

Explanation: This code instantiates a file stream, instantiates a BinaryFormatter object, and serializes the emailAddresses object to the Email.dat file. The FileStream constructor takes a file path string and FileMode enumeration as arguments. The Serialize method of the BinaryFormatter class takes two arguments, a stream and the object to be serialized. The Serialize method uses the stream to write the object to the destination.

Incorrect Answers:

A: You should not add the code that invokes the Deserialize method of the BinaryFormatter class because you must serialize the object first.

C D: You should not add the code fragments that do not instantiate the BinaryFormatter object because the WriteObject and Serialize methods do not exist in the FileStream class.

QUESTION 186

You work as an application developer at Certkiller .com. You have recently completely creating a new application for Certkiller .com.

This new application has to load an instance of the Inventory class from a large file named Inventory.dat. You need to ensure that the application executes the loading process in as little time as possible.

What should you do?

A. Use the following code:

```
FileStream readStream = new FileStream ("Inventory.dat", FileMode.Open);  
BinaryFormatter readFormatter = new BinaryFormatter ();  
Inventory currentInventory = (Inventory)  
readFormatter.FastDeserialize (readStream);
```

B. Use the following code:

```
FileStream readStream = new FileStream ("Inventory.dat", FileMode.Open);  
BinaryFormatter readFormatter = new BinaryFormatter ();  
Inventory currentInventory = (Inventory)  
readFormatter.Deserialize (readStream);
```

C. Use the following code:

```
FileStream readStream = new FileStream ("Inventory.dat", FileMode.Open);
```

```
BinaryFormatter readFormatter = new BinaryFormatter ();
Inventory currentInventory = (Inventory)
readFormatter.UnsafeDeserialize (readStream);
D. Use the following code:
FileStream readStream = new FileStream ("Inventory.dat", FileMode.Open);
BinaryFormatter readFormatter = new BinaryFormatter ();
Inventory currentInventory = (Inventory)
readFormatter.SafeDeserialize (readStream);
```

Answer: C

Explanation: This code instantiates a file stream, instantiates a BinaryFormatter object, and deserializes an Inventory object to the Inventory.dat file. The UnsafeDeserialize and Deserialize methods perform the same operation, but the UnsafeDeserialize method uses unmanaged code and requires more permission. Because the UnsafeDeserialize method uses unmanaged code, your code should be granted full trust to execute properly. The UnsafeDeserialize method of the BinaryFormatter class takes two arguments, the stream of the object to be deserialized and the HeaderHandler object to deal with any binary headers. The UnsafeDeserialize method returns a generic object that must be cast or converted to the Inventory data type.

Incorrect Answers:

A, D: You should not use the code that invokes the FastDeserialize and SafeDeserialize methods because no such methods exist for the BinaryFormatter class.

B: You should not use the code that invokes the Deserialize method because the UnsafeDeserialize method yields better performance.

QUESTION 187

You work as an application developer at Certkiller .com. Certkiller .com has asked you to develop an application that displays the properties for all Certkiller .com's network drives.

The information generated by this application will be utilized by Certkiller .com's network administrators to verify client setups.

You need to ensure that these requirements are fully satisfied.

What should you do?

A. Use the following code:

```
public void EnumerateNetworkDrives ()
{
foreach (Drive netDrive in Drive.GetDrives ())
{
if (netDrive.DriveType == DriveType.Network)
Console.WriteLine (" {0} ( {1} ) : {2} bytes", netDrive.Name, netDrive.VolumeLabel,
netDrive.TotalSize);
}
}
```

B. Use the following code:

```
public void EnumerateNetworkDrives ()
{
    foreach (DriveInfo netDrive in DriveInfo.GetDrives ())
    {
        Console.WriteLine ("{0} ({1}) : {2} bytes", netDrive.Name, netDrive.VolumeLabel,
            netDrive.TotalSize);
    }
}
```

C. Use the following code:

```
public void EnumerateNetworkDrives ()
{
    foreach (DriveInfo netDrive in DriveInfo.GetDrives ())
    {
        if (netDrive.DriveType == DriveType.Network)
        Console.WriteLine ("{0} ({1}) : {2} bytes", netDrive.Name, netDrive.VolumeLabel,
            netDrive.TotalSize);
    }
}
```

D. Use the following code:

```
public void EnumerateNetworkDrives ()
{
    foreach (DriveInfo netDrive in DriveInfo.GetDrives (DriveType.Network))
    {
        Console.WriteLine ("{0} ({1}) : {2} bytes", netDrive.Name,
            netDrive.VolumeLabel, netDrive.TotalSize);
    }
}
```

Answer: C

Explanation: The GetDrives method is invoked and returns an array of DriveInfo objects representing the available drives. The DriveType property is used to verify that the netDrive variable is a network drive. The DriveType property returns a DriveType enumeration value that can be Network, Fixed, CDRom, or Removable. If the DriveType property is DriveType.Network, then the Console.WriteLine method displays the Name, VolumeLabel, and TotalSize properties of the DriveInfo object to the console.

Incorrect Answers:

A: You should not use the code that uses the Disk class because there is no such class in the System.IO namespace.

B D: You should not use the code fragments that do not retrieve the DriveType property of the DriveInfo object because there is no such signature for the GetDrives method and no such method as GetNetworkDrives.

QUESTION 188

You work as an application developer at Certkiller .com.

Certkiller .com has asked you to create an application to display all of the top directories based on the drive path. You need to ensure that the application displays the number of files within top-level directories.

What should you do?

A. Use the following code:

```
public void DisplayDriveDirectories (string drivePath)
{
    if (Directory.Exists (drivePath))
    {
        foreach (String dirPath in Directory.GetDirectories (drivePath))
        {
            DirectoryInfo dir = new DirectoryInfo (drivePath);
            int numFiles = dir.TotalFiles;
            Console.WriteLine( "{0} : {1} files.", dir.Name, numFiles);
        }
    }
}
```

B. Use the following code:

```
public void DisplayDriveDirectories (string drivePath)
{
    if (Directory.Exists (drivePath))
    {
        foreach (String dirPath in Directory.GetDirectories (drivePath))
        {
            DirectoryInfo dir = new DirectoryInfo (drivePath);
            int numFiles = dir.Length;
            Console.WriteLine( "{0} : {1} files.", dir.Name, numFiles);
        }
    }
}
```

C. Use the following code:

```
public void DisplayDriveDirectories (string drivePath)
{
    if (Directory.Exists (drivePath))
    {
        foreach (String dirPath in Directory.GetDirectories (drivePath))
        {
            DirectoryInfo dir = new DirectoryInfo (drivePath);
            int numFiles = dir.GetFiles().Length;
            Console.WriteLine( "{0} : {1} files.", dir.Name, numFiles);
        }
    }
}
```

D. Use the following code:

```
public void DisplayDriveDirectories (string drivePath)
{
    if (Directory.Exists (drivePath))
    {
        foreach (String dirPath in Directory.GetDirectories (drivePath))
        {
            DirectoryInfo dir = new DirectoryInfo (drivePath);
            int numFiles = dir.Size;
            Console.WriteLine( "{0} : {1} files.", dir.Name, numFiles);
        }
    }
}
```

Answer: C

Explanation: This code iterates through each top level of a given drive path and displays the Name property and number of files. First, the Exists method verifies that the drive path exists. Then, the GetDirectories method is invoked and returns a string array of directory paths. GetDirectories takes a directory path as an argument. Then a DirectoryInfo object is instantiated using the dirPath variable as it is updated with each iteration. The number of files in the directory is evaluated by using the GetFiles method, which returns an array of FileInfo objects and retrieves the Length Property of the array. The value is assigned to the numFiles variable. The DirectoryInfo object represents metadata about a directory instance. The Console.WriteLine method displays the Name property of the DirectoryInfo object and the numFiles variable.

Incorrect Answers:

A, B, D: The TotalFiles, Length, and Size properties do not exist in the DirectoryInfo class.

QUESTION 189

You work as an application developer at Certkiller .com. Certkiller .com has asked you to create a file management application to monitor the hosts file. Certkiller .com has instructed you to change the hosts file if it has been changed. You, therefore, need to display the size and whether the hosts file is set to read-only. What should you do?

A. Use the following code:

```
FileInfo hosts = new FileInfo (@"C:\Windows\system32\drivers\etc\hosts");
Console.WriteLine ("ReadOnly?" + hosts.IsReadOnly);
Console.WriteLine ("Size?" + hosts.Length);
```

B. Use the following code:

```
File hosts = new File (@"C:\Windows\system32\drivers\etc\hosts");
Console.WriteLine ("ReadOnly?" + hosts.IsReadOnly);
Console.WriteLine ("Size?" + hosts.Length);
```

C. Use the following code:

```
File hosts = new File (@"C:\Windows\system32\drivers\etc\hosts");  
Console.WriteLine ("ReadOnly?" + hosts.GetReadOnly);  
Console.WriteLine ("Size?" + hosts.GetLength);
```

D. Use the following code:

```
FileInfo hosts = new FileInfo (@"C:\Windows\system32\drivers\etc\hosts");  
Console.WriteLine ("ReadOnly?" + hosts.IsReadOnly);  
Console.WriteLine ("Size?" + hosts.Size);
```

Answer: A

Explanation: This code instantiates a FileInfo object using a file path string and outputs the IsReadOnly and Length properties to the command line. The FileInfo object represents the information about a system file. The FileInfo class contains common properties and methods for reading and setting file metadata and contents. The IsReadOnly property returns a Boolean value indicating whether the file is set to read-only. The Length property returns the size of the file in bytes.

Incorrect Answers:

B C: You should not use the code that instantiate a File object because the File class does not contain an IsReadOnly or Length property and is a static class. Also, you should not use the code fragments that specify the Size property because no such property exists.

D: You should not use the code fragments that specify the GetReadOnly and GetLength methods because no such methods exist.

QUESTION 190

You work as an application developer at Certkiller .com. You have recently completed the creation of a new application.

Certkiller .com requires you to ensure that this new application creates a file that contains an array of bytes.

What should you do?

A. Use the following code:

```
public void WriteBytes (byte [] bytes)  
{  
    FileStream fs = new FileStream ("C:\\file.txt", FileMode.Create);  
    for (int i = 0; i < bytes.Length - 1; i++)  
        fs.Write (bytes [i]);  
    fs.Close ();  
}
```

B. Use the following code:

```
public void WriteBytes (byte [] bytes)  
{  
    FileStream fs = new FileStream ("C:\\file.txt", FileMode.Create);  
    for (int i = 0; i < bytes.Length - 1; i++)  
        fs.WriteByte (bytes [i]);  
}
```

```
fs.Close ();  
}
```

C. Use the following code:

```
public void WriteBytes (byte [] bytes)  
{  
    FileStream fs = new FileStream ("C:\\file.txt", FileMode.Create);  
    fs.WriteBytes (bytes, 0, bytes.Length);  
    fs.Close ();  
}
```

D. Use the following code:

```
public void WriteBytes (byte [] bytes)  
{  
    FileStream fs = new FileStream ("C:\\file.txt", FileMode.Create);  
    fs.Write (bytes, 0, bytes.Length);  
    fs.Close ();  
}
```

Answer: D

Explanation: The FileStream constructor accepts a string argument as the file path and a FileMode enumeration value. The FileMode enumeration value indicates the file stream will be used, and includes the values Append, Create, CreateNew, Open, and Truncate. The FileMode.Create value indicates a new file will be created or, if one already exists, that it will be overwritten. The FileStream class includes a Write method for writing an array of bytes. The Write method takes a byte array, offset value, and total number of bytes as arguments. The other method, WriteByte, takes a single argument of the type of byte, and it requires manual iteration to write an array. Like all streams, the FileStream object has a Close method, which should be called after work is done with the stream.

Incorrect Answers:

A, C: You should not use the code fragments that invokes the Write method or the WriteBytes method with only one argument because no such signatures exists in the FileStream class.

B: This code is unnecessary because the FileStream class also contains a Write method that takes a byte array as an argument.

QUESTION 191

You work as an application developer at Certkiller .com. You are currently in the process of creating an application that reads binary information from a file.

You need to ensure that the only the first kilobyte of data is retrieved.

What should you do?

A. Use the following code:

```
FileStream fs = new FileStream("C:\\file.txt", FileMode.Open);  
BufferedStream bs = new BufferedStream (fs);  
byte [ ] bytes = new byte [1023];
```

```
bs.Read (bytes, 0, bytes.Length);
bs.Close ();
for (int i = 0; i < bytes.Length-1; i++)
Console.WriteLine (" {0} : {1}", I, bytes [i]);
B. Use the following code:
FileStream fs = new FileStream("C:\\file.txt", FileMode.Open);
byte [ ] bytes = new byte [1023];
fs.Read (bytes, 0, bytes.Length);
fs.Close ();
for (int i = 0; i < bytes.Length-1; i++)
Console.WriteLine (" {0} : {1}", I, bytes [i]);
C. Use the following code:
FileStream fs = new FileStream("C:\\file.txt", FileMode.Open);
BufferedStream bs = new BufferedStream (fs);
byte [ ] bytes = new byte [1023];
bytes = bs.ReadAllBytes (0, 1023);
bs.Close ();
for (int i = 0; i < bytes.Length-1; i++)
Console.WriteLine (" {0} : {1}", I, bytes [i]);
D. Use the following code:
FileStream fs = new FileStream("C:\\file.txt", FileMode.Open);
BufferedStream bs = new BufferedStream (fs);
byte [ ] bytes = new byte [1023];
bs.Read (bytes);
bs.Close ();
for (int i = 0; i < bytes.Length-1; i++)
Console.WriteLine (" {0} : {1}", I, bytes [i]);
```

Answer: B

Explanation: The FileStream constructor accepts a string argument as the file path and a FileMode enumeration value. The FileMode enumeration value indicates the file stream will be used, and includes the values Append, Create, CreateNew, Open, and Truncate. The FileMode.Open value indicates a file will be opened if existing, or else a FileNotFoundException object will be thrown. An array of 1024 bytes is instantiated. The Read method takes the byte array, offset value, and total number of bytes as arguments. The other method ReadByte returns a single byte at a time, but it requires manual iteration to write an array. Like all streams, the FileStream object has a Close method, which should be called after work is done with the stream. The Console.WriteLine method is invoked to display the byte index and byte value.

Incorrect Answers:

A, C, D: You should not use the code that specifies a buffered stream because the FileStream class is already a buffered stream. Also, you should not use the code fragments that invoke the ReadAllBytes method and the Read method with the incorrect arguments because no such method signatures exist.

QUESTION 192

You work as an application developer at Certkiller .com. You are in the process of creating a new application.

This new application has to be able to read all data from a text file.

What should you do?

A. Use the following code:

```
FileStream fs = new FileStream("C:\\file.txt", FileMode.Open);
```

```
StreamReader sr = new StreamReader (fs);
```

```
string data = new sr,ReadToEnd ();
```

```
sr.Close ();
```

```
Console.WriteLine (data);
```

B. Use the following code:

```
FileStream fs = new FileStream("C:\\file.txt", FileMode.Open);
```

```
string data = new sr,ReadToEnd ();
```

```
fs.Close ();
```

```
Console.WriteLine (data);
```

C. Use the following code:

```
FileStream fs = new FileStream("C:\\file.txt", FileMode.Open);
```

```
StringBuilder data = new StringBuilder ();
```

```
string data;
```

```
while (sr.Peek () > -1)
```

```
data += sr.ReadLine ();
```

```
sr.Close ();
```

```
Console.WriteLine (data);
```

D. Use the following code:

```
FileStream fs = new FileStream("C:\\file.txt", FileMode.Open);
```

```
StreamReader sr = new StreamReader (fs);
```

```
StringBuilder data = new StringBuilder ();
```

```
while (sr.Peek () > -1)
```

```
data.Append (sr.ReadLine ());
```

```
sr.Close ();
```

```
Console.WriteLine (data.ToString ());
```

Answer: A

Explanation: The FileStream constructor accepts a string argument as the file path and a FileMode enumeration value. The FileMode enumeration value indicates the file stream will be used, and includes the values Append, Create, CreateNew, Open, and Truncate. The FileMode.Open value indicates a file will be opened if existing, or else a FileNotFoundException object will be thrown. A StreamReader object is instantiated using the FileStream object as input. The ReadToEnd method returns a string representing all data from that position to the end of the file. There are two other read methods, ReadLine and ReadBlock. The ReadLine method returns a string representing all data from that position to the end of a line return. The

ReadBlock method takes a character array, offset value and total number of characters as arguments. Like all streams, the StreamReader object has a Close method, which should be called after work is done with the stream. The Console.WriteLine method is invoked to display the data to the console.

Incorrect Answers:

B: You should not use the code that does not specify the StreamReader class because the FileStream class does not contain a ReadToEnd method.

C: You should not use the code that specifies a string object when invoking the ReadLine method rather than a StringBuilder object. The string object is less efficient than StringBuilder objects when performing concatenation operations.

D: This code should not be used because it manually iterates through the file using the ReadLine method, whereas the ReadToEnd method is more efficient.

QUESTION 193

You work as an application developer at Certkiller .com. You are currently in the process of creating a new application for Certkiller .com.

You are required to read compressed data files that has been sent by Certkiller .com's sales offices. These data files are less than 4 GB in size, but was compressed without cyclic redundancy.

You want to write a method that receives the compressed files and return the uncompressed data as a byte array.

What should you do?

A. Use the following code:

```
public byte [] DecompressFile (string file)
{
    FileStream fs = new FileStream (file, FileMode.Open);
    DeflateStream cs = new DeflateStream (fs, CompressionMode.Decompress, true);
    byte [ ] data = new byte [fs.Length - 1];
    cs.Read (data, 0, data.Length);
    cs.Close ();
    return data;
}
```

B. Use the following code:

```
public byte [] DecompressFile (string file)
{
    FileStream fs = new FileStream (file, FileMode.Open);
    GZipStream cs = new GZipStream (fs, CompressionMode.Decompress)
    byte [ ] data = new byte [fs.Length - 1];
    cs.Read (data, 0, data.Length);
    return data;
}
```

C. Use the following code:

```
public byte [] DecompressFile (string file)
{
    FileStream fs = new FileStream (file, FileMode.Open);
```



```
DeflateStream cs = new DeflateStream (fs, CompressionMode.Decompress)
byte [ ] data = new byte [fs.Length - 1];
cs.Read (data, 0, data.Length);
return data;
}
```

D. Use the following code:

```
public byte [] DecompressFile (string file)
{
    FileStream fs = new FileStream (file, FileMode.Open);
    GZipStream cs = new GZipStream (fs, CompressionMode.Decompress, true);
    byte [ ] data = new byte [fs.Length - 1];
    cs.Read (data, 0, data.Length);
    cs.Close ();
    return data;
}
```

Answer: A

Explanation: The DeflateStream uses the LZ77 and Huffman coding algorithms for lossless compression and decompression without cyclic redundancy. The DeflateStream constructor takes a stream (in this case an input stream), a CompressionMode enumeration value, and a Boolean value indicating whether to keep the stream open. The CompressionMode enumeration value indicates whether to compress or decompress the specified stream using the values Compress and Decompress, respectively. The Read method takes the byte array, offset value, and total number of bytes as arguments. In this code, the compressed data is read from the FileStream object associated with the DeflateStream object, and it is stored in the byte array. Like all streams, the DeflateStream object has a Close method, which should be called after work is done with the stream. Finally, the resulting byte array is returned.

Incorrect Answers:

B, D: You should not use the code fragments that specify the GZipStream class because this data format includes a data corruption check during decompression.

C: You should not use the code fragments that instantiates the Stream objects and invoke the Read method with the wrong arguments.

QUESTION 194

You work as an application developer at Certkiller .com. Certkiller .com has a file server named Certkiller -SR07 that stores old inventory files.

Certkiller .com has given you the task of creating an application to archive these old inventory files. The inventory files have to be compressed prior to being uploaded to Certkiller .com's Web server.

You are currently writing a method that will receive a byte array and compress it into a new file. You need to ensure that a data corruption check takes place during the decompression process.

What should you do?

A. Use the following code:

```
public void CompressFileWrite (string file, byte[] data)
{
    FileStream fs = new FileStream (file, FileMode.Create);
    DeflateStream cs = new DeflateStream( fs, Compressionmode.Compress, true);
    cs.Write (data, 0, data.Length);
    cs.Close ();
}
```

B. Use the following code:

```
public void CompressFileWrite (string file, byte[] data)
{
    FileStream fs = new FileStream (file, FileMode.Create);
    GZipStream cs = new GZipStream( fs, Compressionmode.Compress, true);
    cs.Compress (data, 0, data.Length);
    cs.Close ();
}
```

C. Use the following code:

```
public void CompressFileWrite (string file, byte[] data)
{
    FileStream fs = new FileStream (file, FileMode.Create);
    DeflateStream cs = new DeflateStream( fs, Compressionmode.Compress, true);
    cs.Compress (data, 0, data.Length);
    cs.Close ();
}
```

D. Use the following code:

```
public void CompressFileWrite (string file, byte[] data)
{
    FileStream fs = new FileStream (file, FileMode.Create);
    GZipStream cs = new GZipStream( fs, Compressionmode.Compress, true);
    cs.Write (data, 0, data.Length);
    cs.Close ();
}
```

Answer: D

Explanation:

Incorrect Answers:

A, B, C: You should not use the code fragments that specify the DeflateStream class because this data format does not ensure that a data corruption check occurs during decompression. You should also not use the code that invokes the Compress method because no such method exists in the GZipStream or the DeflateStream classes.

QUESTION 195

You work as an application developer at Certkiller .com. You are in the process of creating an assembly that will be used to manage file content on Certkiller .com's

user computers.

Certkiller .com wants you to ensure that the users who use the assembly you are creating should not be able to access classes in your assembly if they do not have access to the local file system.

To do this, you need to add certain code fragments to your classes.

What should you use? (Choose two)

- A. [FileIOPermission (SecurityAction.RequestMinimum)]
- B. FileIOPermission perm = New FileIOPermission (PermissionState.Unrestricted);
Perm.Assert
- C. [FileIOPermission (SecurityAction.RequestOptional)]
- D. FileIOPermission perm = New FileIOPermission (PermissionState.Unrestricted);
Perm.Request
- E. [FileIOPermission (SecurityAction.Demand)]
- F. FileIOPermission perm = New FileIOPermission (PermissionState.Unrestricted);
Perm.Demand

Answer: E, F

Explanation: The .NET Framework security system allows permission requests, overrides, and demands using declarative security and imperative security. Declarative security makes use of attributes to place security data into the metadata of the assembly. The permission attributes take a SecurityAction enumeration and other optional arguments. The SecurityAction enumeration includes the values Assert, Demand, Deny, RequestMinimum, RequestOptional, and RequestRefuse. The SecurityAction.Demand value indicates that all callers must have the permission to access the resource.

Incorrect Answers:

- A, C: You should not use the code fragments that specify the SecurityAction.RequestMinimum and SecurityAction.RequestOptional values because attributes with these values can only be applied to the entire assembly.
- B: You should not use the code fragment that invokes the Assert method because all users must have permission to access the file system.
- D: You should not use the code fragment that invokes the Request method because no such method exists in the CodeAccessPermission or FileIOPermission class.

QUESTION 196

You work as an application developer at Certkiller .com. A fellow developer named Amy Walsh recently created an assembly that implements a custom permission set. Certkiller .com has asked you to test this assembly. You start by copying the assembly to a test server named Certkiller -SR15 that has the Microsoft .NET 2.0 Framework installed. You then log on to the Certkiller -SR15 as a member of the local Administrators Windows group.

You run the assembly, and receive a security exception. You perform a brief analysis of the security issues involved, and find that the assembly has not been assigned the appropriate permissions to run.

You need to ensure that this assembly runs.
What should you do?

- A. Use the permview.exe tool to modify the assembly's granted permissions.
- B. Use the sn.exe tool to modify the assembly's granted permissions.
- C. Use the caspol.exe tool to modify the assembly's granted permissions.
- D. Use the gacutil.exe tool to modify the assembly's granted permissions.

Answer: C

Explanation: The caspol.exe command-line tool allows users to modify security permissions, permission sets, and code groups for an assembly at the machine, user, and enterprise policy levels.

Incorrect Answers:

- A: The permview.exe tool only allows users to view declarative security of an assembly.
- B: The sn.exe tool allows developers to create a strong-named asymmetric key pair for strong-named assemblies.
- D: The gacutil.exe tool allows users to manage the contents of the global assembly and download cache.

QUESTION 197

You work as an application developer at Certkiller .com. Certkiller .com has a test server named Certkiller -SR09 that is frequently used by other Certkiller .com developers to test assemblies and applied security policies.

You have just completed creating an assembly and want to test it on Certkiller -SR09.you need to ensure that all security policies on Certkiller -SR09 are reset to their default settings.

What should you do?

- A. Execute the caspol all -rollback command.
- B. Execute the caspol all -reset command.
- C. Execute the machine all -rollback command.
- D. Execute the machine all -reset command.

Answer: B

Explanation: The caspol.exe command-line tool allows users to modify security permissions, permission sets, and code groups for an assembly at the machine, user, and enterprise policy levels. The reset switch will set the specified security policy or policies back to their default state. The all switch refers to machine, user, and enterprise policy levels.

Incorrect Answers:

- A, C: The rollback switch does not exist for the caspol.exe tool.
- D: This option will not set all security policies back to their default state.

QUESTION 198

You work as an application developer at Certkiller .com. Certkiller .com has asked you to create an application that copies file content from one file on a client computer named Certkiller -WS007 to a new file on a server named Certkiller -SR15.

The method displayed in the following exhibit is included in the new application:

```
public void Copy(string oFile , string dFile) {  
    FileInfo file1 = new FileInfo(oFile);  
    FileInfo file2 = new FileInfo(dFile);  
    StreamReader fs1 = new StreamReader(  
        file1.Open(FileMode.Open));  
    StreamWriter fs2 = new StreamWriter(  
        file2.Open(FileMode.Create));  
    fs2.Write(fs1.ReadToEnd());  
    fs1.Close();  
    fs2.Close();  
    //Add code here  
}
```

You have to ensure that the application copies all permissions on the original file to the new file. You should also make sure that the new file does not inherit its permissions from the destination directory on Certkiller -SR15. What should you do?

- A. Add the following code to the Copy method:
file2.SetAccessControl (file1.GetAccessControl ());
- B. Add the following code to the Copy method:
FileSecurity acl = file1.GetAccessControl ();
acl. SetAccessRuleProtection (true, true);
file2.SetAccessControl (acl);
- C. Add the following code to the Copy method:
file2.SetAccessControl (file1.GetAccessControl (), false);
- D. Add the following code to the Copy method:
FileSecurity acl = file1.GetAccessControl ();
acl. SetAccessRuleProtection (true, false);
file2.SetAccessControl (acl);

Answer: B

Explanation: This code retrieves the FileSecurity object from the original file, copies and protects the ACL settings from directory inheritance, and copies the ACL settings to the destination file. The GetAccessControl method returns a FileSecurity object representing the ACL of the original file. The SetAccessRuleProtection method sets or removes ACL protection from the parent objects through inheritance. The SetAccessRuleProtection method accepts two Boolean arguments, the first of which indicates whether settings are protected from inheritance, and the second of which indicates whether to preserve the existing inherited access rule. In this scenario, the value true for both arguments indicates that the ACL is protected from inheritance, but the current ACL settings are copied. The SetAccessControl

method takes a FileSecurity object and applies the ACL to the destination folder.

Incorrect Answers:

A, C: You should not use the code fragments that do not invoke the SetAccessRuleProtection method because this will not protect the destination file's ACL settings from inheritance.

D: This code will protect the ACL from inheritance, but it does not copy the existing inherited ACL settings.

QUESTION 199

You work as an application developer at Certkiller .com. Certkiller .com has been contracted by a local doctor's clinic to develop a client application using Microsoft .NET 2.0 that sends patient visit information to a remote server at the clinic's main office.

This data must be transmitted via a secure network stream because it contains patient protected health information (PHI). The data will be sent from a windows application client on the doctor's notebook computer to a windows service hosted on a remote server. Both of these applications employ a certificate store for network identification.

You need to create a secure data stream by adding certain classes to the client application.

What classes should you add? (Choose three)

- A. The MD5CryptoServiceProvider class.
- B. The X509Certificate class.
- C. The NetworkStream class.
- D. The SslStream class.
- E. The TcpListener class.
- F. The TcpClient class.

Answer: B, D, F

Explanation: You should use the X509Certificate class to store the server certificate and encrypt data, the SslStream class to create a secure channel, and the TcpClient class to establish the connection with the server application.

Incorrect Answers:

A: Using this option would only hash the data using the MD5 algorithm.

C: Using this option would not necessarily create a secure channel.

E: This class is used by the server application.

QUESTION 200

You work as an application developer at Certkiller .com. Certkiller .com has been contracted by the local hospital to create an application that forwards private patient information to various insurance providers.

The hospital informs you that the amount and frequency of the patient data is high.

You need to ensure that data confidentiality is guaranteed, with as little overhead as possible.

You now need to encrypt the patient information.
What should you do?

A. Use the following code:

```
public byte [] EncryptData (byte [] PatientInfo, RSACryptoServiceProvider SecretKey)
{
    CryptoStream cs = new CryptoStream (SecretKey);
    cs.Encrypt (PatientInfo, 0, PatientInfo.Length);
    byte [] data = cs.ToArray ();
    cs.Close ();
    return data;
}
```

B. Use the following code:

```
public byte [] EncryptData (byte [] PatientInfo, RSACryptoServiceProvider SecretKey)
{
    MemoryStream ms = new MemoryStream ();
    CryptoStream cs = new CryptoStream (ms, SecretKey.CreateEncryptor (),
    CryptoStreamMode.Write);
    cs.Write (PatientInfo, 0, PatientInfo.Length);
    cs.Close ();
    byte [] data = ms.ToArray ();
    ms.Close ();
    return data;
}
```

C. Use the following code:

```
public byte [] EncryptData (byte [] PatientInfo, DESCryptoServiceProvider SecretKey)
{
    CryptoStream cs = new CryptoStream (SecretKey);
    cs.Encrypt (PatientInfo, 0, PatientInfo.Length);
    byte [] data = cs.ToArray ();
    cs.Close ();
    return data;
}
```

D. Use the following code:

```
public byte [] EncryptData (byte [] PatientInfo, DESCryptoServiceProvider SecretKey)
{
    MemoryStream ms = new MemoryStream ();
    CryptoStream cs = new CryptoStream (ms, SecretKey.CreateEncryptor (),
    CryptoStreamMode.Write);
    cs.Write (PatientInfo, 0, PatientInfo.Length);
    cs.Close ();
    byte [] data = ms.ToArray ();
    ms.Close ();
    return data;
}
```


Answer: D

Explanation: This code instantiates a CryptoStream object, specifies the ICryptoTransform object to encrypt data, encrypts the PatientInfo byte array, and returns the encrypted byte array. The DESCryptoServiceProvider class represents a managed cryptographic provider of the DataEncryption Standard (DES) symmetric algorithm. The DES symmetric algorithm is commonly used for data confidentiality, and it supports 64-bit keys. When you instantiate a DESCryptoServiceProvider object, a secret key for encryption and an initialization vector (IV) are created. Because the same key and IV are needed for encryption and decryption, the CreateEncryptor and CreateDecryptor methods generate the appropriate ICryptoTransform object to alter the data.

Incorrect Answers:

A, B: You should not use the code fragments that specify the RSACryptoServiceProvider because this implements an asymmetric algorithm.

C: You should not use the code fragments that invoke the Encrypt method because no such method exists in the CryptoStream class.

QUESTION 201

You work as an application developer at Certkiller .com. Certkiller .com stores data in a byte array named dataArray.

You have been given the task of ensuring that this data is protected against corruption and tampering. You are planning to employ a HashAlgorithm object to achieve this objective.

What should you do?

A. Use the following code to generate a hash value for the dataArray object:

hash.GenerateHash (dataArray);

B. Use the following code to generate a hash value for the dataArray object:

hash.ComputeHash (dataArray);

C. Use the following code to generate a hash value for the dataArray object:

hash. Hash (dataArray);

D. Use the following code to generate a hash value for the dataArray object:

hash.Compute (dataArray);

Answer: B

Explanation: This option will return a byte array representing the hash value. The HashAlgorithm abstract class is the base class for all hash algorithm provider classes, including the MD5CryptoServiceProvider and SHA1CryptoServiceProvider classes. They all inherit the ComputeHash method from the HashAlgorithm class.

Incorrect Answers:

A, C, D: These options are incorrect because these methods do not exist in the HashAlgorithm class.

QUESTION 202

You work as an application developer at Certkiller .com. Certkiller .com has been contracted by the local hospital to create an application that forwards private patient information to various insurance providers.

The patient information is sent via a secured VPN to ensure confidentiality. You also need to guarantee data integrity, and verify that the patient data originated from the local hospital. To achieve this objective, you elect to utilize asymmetric encryption and a digital signature technology.

What code would you use to complete your task?

- A. `public byte [] SignAndHash (byte [] PatientInfo, RSAParameters RSAInfo)`
{
 RSCryptoServiceProvider RSAProvider = new RSCryptoServiceProvider ();
 RSAProvider.ImportParameters (RSAInfo);
 Return RSAProvider.Encrypt (PatientInfo, true);
}
- B. `public byte [] SignAndHash (byte [] PatientInfo, DSAParameters DSAInfo)`
{
 DSACryptoServiceProvider DSAProvider = new DSACryptoServiceProvider ();
 DSAProvider.ImportParameters (DSAInfo);
 Return DSAProvider.SignHash (PatientInfo);
}
- C. `public byte [] SignAndHash (byte [] PatientInfo, RSAParameters RSAInfo)`
{
 RSCryptoServiceProvider RSAProvider = new RSCryptoServiceProvider ();
 RSAProvider.ImportParameters (RSAInfo);
 Return RSAProvider.SignEncrypt (PatientInfo, true);
}
- D. `public byte [] SignAndHash (byte [] PatientInfo, DSAParameters DSAInfo)`
{
 DSACryptoServiceProvider DSAProvider = new DSACryptoServiceProvider ();
 DSAProvider.ImportParameters (DSAInfo);
 Return DSAProvider.SignData (PatientInfo);
}

Answer: D

Explanation: The DSACryptoServiceProvider class represents a managed cryptographic provider of the Digital Signature Algorithm (DSA) asymmetric algorithm. The DSA asymmetric algorithm is commonly used for digital signatures and data integrity, supporting 1024 bit keys. When instantiating a DSACryptoServiceProvider object, a public/private key pair is generated and a default hash is assigned. Thus, to use a particular private key to sign data, a public key to verify data, or a particular hash, you must invoke the ImportParameters method for the current DSACryptoServiceProvider to load custom settings. The SignData method takes a byte array representing the original data and returns the

hashed and then signed byte array.

Incorrect Answers:

A, C: You should not use the code fragments that specify the RSACryptoServiceProvider object because the method invocations are incorrect.

B: The SignHash method is used to sign a message digest, not the original data.

QUESTION 203

You work as an application developer at Certkiller .com. A fellow developer named Andy Booth has recently created an application.

The application receives confidential transaction data from Certkiller .com's clients, which it secures using the TripleDESCryptoServiceProvider class. You are currently reviewing this application, and need to decrypt a byte array of cipher text. What code should you use to achieve this objective?

A. public byte [] DecryptData (byte [] cipherText, TripleDESCryptoServiceProvider secretKey)

```
{  
    MemoryStream ms = new MemoryStream (cipherText);  
    CryptoStream cs = new CryptoStream (ms, SecretKey, CryptoStreamMode.Read);  
    byte [] data = new byte [ms.Length - 1];  
    cs.Read (data, 0, data.Length);  
    cs.Close ();  
    ms.Close ();  
    return data;  
}
```

B. public byte [] DecryptData (byte [] cipherText, TripleDESCryptoServiceProvider secretKey)

```
{  
    MemoryStream ms = new MemoryStream (cipherText);  
    CryptoStream cs = new CryptoStream (ms, secretKey.CreateDecryptor (),  
    CryptoStreamMode.Read);  
    byte [] data = new byte [ms.Length - 1];  
    cs.Read (data, 0, data.Length);  
    cs.Close ();  
    ms.Close ();  
    return data;  
}
```

C. public byte [] DecryptData (byte [] cipherText, TripleDESCryptoServiceProvider secretKey)

```
{  
    MemoryStream ms = new MemoryStream (secret.Key);  
    CryptoStreamMode.Read);  
    byte [] data = ms.Decrypt (cipherText);  
    cs.Read (data, 0, data.Length);  
    ms.Close ();  
    return data;  
}
```

```
}  
D. public byte [] DecryptData (byte [] cipherText, TripleDESCryptoServiceProvider  
secretKey)  
{  
CryptoStream cs = new CryptoStream (secretKey);  
byte [] data = ms.Decrypt (cipherText);  
cs.Read (data, 0, data.Length);  
ms.Close ();  
return data;  
}
```

Answer: B

Explanation: This code instantiates a CryptoStream object, specifies the ICryptoTransform object to encrypt data, decrypts the CipherText byte array, and returns the encrypted byte array. The TripleDESCryptoServiceProvider class represents a managed cryptographic provider of the Data Encryption Standard (DES) symmetric algorithm. The DES symmetric algorithm is commonly used for data confidentiality, and it supports 64-bit keys. When you instantiate a TripleDESCryptoServiceProvider object, a secret key for encryption and an initialization vector (IV) are created. Because the same key and IV are needed for encryption and decryption, the CreateEncryptor and CreateDecryptor methods generate the appropriate ICryptoTransform object to alter the data.

Incorrect Answers:

A: You should not use the code that does not invoke the CreateDecryptor method because this is required when instantiating a CryptoStream object.

C, D: You should not use the code fragments that invoke the Decrypt method because no such method exists in the CryptoStream class.

QUESTION 204

You work as an application developer at Certkiller .com. Certkiller .com has given you the task of creating an application that will allow Certkiller .com's customers to order products online.

To guarantee the availability funds, the application will forward billing information to a third-party payment verification system to guarantee the availability funds.

You need to ensure that the data has not been tampered with between the application and the third-party payment verification system. To do this, you have to hash the billing information.

What code should you use to achieve this?

A. Use the following code:

```
public byte [] Hash (byte [] BillingData)  
{  
DESCryptoServiceProvider hashProvider = new DESCryptoServiceProvider ();  
return hashProvider.Hash (BillingData);  
}
```

B. Use the following code:

```
public byte [] Hash (byte [] BillingData)
{
    MD5CryptoServiceProvider hashProvider = new MD5CryptoServiceProvider ();
    return hashProvider.Hash (BillingData);
}
```

C. Use the following code:

```
public byte [] Hash (byte [] BillingData)
{
    MD5CryptoServiceProvider hashProvider = new MD5CryptoServiceProvider ();
    return hashProvider.ComputeHash (BillingData);
}
```

D. Use the following code:

```
public byte [] Hash (byte [] BillingData)
{
    DESCryptoServiceProvider hashProvider = new DESCryptoServiceProvider ();
    return hashProvider.ComputeHash (BillingData);
}
```

Answer: C

Explanation:

This code instantiates an MD5CryptoServiceProvider object, invokes the ComputeHash method, and returns the hashed byte array. The MD5CryptoServiceProvider class represents a managed cryptographic provider of the MD5 hash algorithm. The MD5 hash algorithm is commonly used for data integrity, and it supports a 128-bit hash size. The MD5 hash algorithm is known as a message detection code (MDC) hash function. The ComputeHash method accepts a byte array and returns a hashed byte array for data integrity.

Incorrect Answers:

A, D: The DESCryptoServiceProvider class is used for data confidentiality, not integrity.

B: The Hash method does not exist in the MD5CryptoServiceProvider class.

QUESTION 205

You work as an application developer at Certkiller .com. Certkiller .com has a file server named Certkiller -SR07 that hosts company data.

You are currently in the process of creating an application that will be used by Certkiller .com users to manage the data on Certkiller -SR07. to ensure that Certkiller .com users have the appropriate file permissions on the working directory, you define the DemanDirectorySecurity method as shown below.

```
public void DemanDirectorySecurity (string path)
{
    FileIOPermission filePerm = new FileIOPermission (PermissionState.None);
    filePerm.AddPathList (FileIOPermissionAccess.AllAccess, path);
    filePerm.Assert ();
}
```

Subsequent to installing the new application, you find that some users do not have full access to their working directories. You are informed that these Certkiller .com users only require read only access.

You are required to override the permission assertion in the DemandDirectorySecurity method for these users only.
What should you do?

A. Use the following code:

```
FileIOPermission.Revert ();  
FileIOPermission fileOVPerm = new FileIOPermission (PermissionState.None);  
fileOVPerm.AddPathList (FileIOPermissionAccess.Read, path);  
fileOVPerm.Assert ();
```

B. Use the following code:

```
FileIOPermission fileOVPerm = new FileIOPermission (PermissionState.None);  
fileOVPerm.AddPathList (FileIOPermissionAccess.Read, path);  
fileOVPerm.Permit ();
```

C. Use the following code:

```
FileIOPermission.Revoke ();  
FileIOPermission fileOVPerm = new FileIOPermission (PermissionState.None);  
fileOVPerm.AddPathList (FileIOPermissionAccess.Read, path);  
fileOVPerm.Assert ();
```

D. Use the following code:

```
FileIOPermission fileOVPerm = new FileIOPermission (PermissionState.None);  
fileOVPerm.AddPathList (FileIOPermissionAccess.Read, path);  
fileOVPerm.OverrideAll ();
```

Answer: A

Explanation: This code invokes the RevertAssert method on the FileIOPermission class, instantiates a FileIOPermission object representing read-only access to the working directory, and invokes the assert method on the FileIOPermission object.

Incorrect Answers:

B, C, D: The Permit, OverrideAll, and Revoke methods do not exist in the FileIOPermission class.

QUESTION 206

You work as an application developer at Certkiller .com. You are currently creating a manifest-activated application on the Certkiller .com's intranet using ClickOnce deployment.

The network administrator informs you that each application has to identify its name, version, culture, and requested permissions. You need to ensure that the application you are creating uses the command line to display the required information.

What should you do?

A. Use the following code:

```
ApplicationSecurityInfo appInfo = new ApplicationSecurityInfo  
(appDomain.CurrentDomain);
```

```
Console.WriteLine (appInfo.ApplicationID.Name);
```

```
Console.WriteLine (appInfo.ApplicationID.Version);
```

```
Console.WriteLine (appInfo.ApplicationID.Culture);
```

```
Console.WriteLine (appInfo.DefaultRequestSet.ToXml ());
```

B. Use the following code:

```
ApplicationSecurityInfo appInfo = ActivationContext .GetCurrentContext ();
```

```
Console.WriteLine (appInfo.ApplicationID.Name);
```

```
Console.WriteLine (appInfo.ApplicationID.Version);
```

```
Console.WriteLine (appInfo.ApplicationID.Culture);
```

```
Console.WriteLine (appInfo.DefaultRequestSet.ToXml ());
```

C. Use the following code:

```
ApplicationSecurityInfo appInfo = new ApplicationSecurityInfo (  
appDomain.CurrentDomain.ActivationContext);
```

```
Console.WriteLine (appInfo.ApplicationID.Name);
```

```
Console.WriteLine (appInfo.ApplicationID.Version);
```

```
Console.WriteLine (appInfo.ApplicationID.Culture);
```

```
Console.WriteLine (appInfo.DefaultRequestSet.ToXml ());
```

D. Use the following code:

```
ApplicationSecurityInfo appInfo = ActivationID .GetCurrentApplication ();
```

```
Console.WriteLine (appInfo.ApplicationID.Name);
```

```
Console.WriteLine (appInfo.ApplicationID.Version);
```

```
Console.WriteLine (appInfo.ApplicationID.Culture);
```

```
Console.WriteLine (appInfo.DefaultRequestSet.ToXml ());
```

Answer: C

Explanation: The ApplicationSecurityInfo class represents the security evidence for a manifest-activated application. The constructor requires an ActivationContext object that represents the manifest activation context of the application. The AppDomain.CurrentDomain.ActivationContext property retrieves the activation context of the current manifest-activated application. The DefaultRequestSet property represents the permission set the application is requesting of the local system.

Incorrect Answers:

A, B, D: You should not use the code fragments because they attempt to retrieve the ApplicationSecurityInfo object through non-existent methods.

QUESTION 207

You work as an application developer at Certkiller .com. You are in the process of creating an application that will be used to forward confidential information to Certkiller .com's business partners.

In a bid to improve the security of your production environment, you install digital certificates for publishing all assemblies in the application.

You need to confirm that every assembly belongs to the same publisher, based on

that publisher's digital certificate.

You are asked to confirm that the current assembly belongs to a certain publisher.
What should you do?

A. Use the following code:

```
public bool CheckPolicy (X509Certificate cert)
{
    PublisherMembershipCondition policy = new PublisherMembershipCondition (cert);
    return policy.Check (Assembly.GetCallAssembly ().Evidence);
}
```

B. Use the following code:

```
public bool CheckPolicy (X509Certificate cert)
{
    Publisher pub = new Publisher (cert);
    return pub.Verify (AppDomain.CurrentDomain.Evidence);
}
```

C. Use the following code:

```
public bool CheckPolicy (X509Certificate cert)
{
    Publisher pub = new Publisher (cert);
    return pub.Check (AppDomain.CurrentDomain.Evidence);
}
```

D. Use the following code:

```
public bool CheckPolicy (X509Certificate cert)
{
    PublisherMembershipCondition policy = new PublisherMembershipCondition (cert);
    return policy.Verify (Assembly.GetCallAssembly ().Evidence);
}
```

Answer: A

Explanation:

Incorrect Answers:

B, C: You should not use the code fragments that specify the `AppDomain.CurrentDomain.Evidence` property as an argument because this property retrieves only the evidence available to the current application domain.

D: You should not use this code fragment that specifies the `Verify` method because this method does not exist in the `PublisherMembershipCondition` class

QUESTION 208

You work as an application developer at Certkiller .com. You are in the process of creating an application on Certkiller .com's Web sever named Certkiller -SR11.

This application will be used to manage confidential data from Certkiller .com's business partners. The application relies on several assemblies located in Certkiller .com's intranet to fulfill its duties.

As a result, you have to verify that every assembly originates from the same intranet

Web site.

How would you accomplish this?

A. Use the following code:

```
public bool CheckSite ()  
{  
    SiteMembershipCondition site = new SiteMembershipCondition  
(http://intranet. Certkiller .com);  
    return site.Check (AppDomain.CurrentDomain.Evidence);  
}
```

B. Use the following code:

```
public bool CheckSite ()  
{  
    Site site = new Site (http://intranet. Certkiller .com);  
    return site.Check (Assembly.GetCallingAssembly ().Evidence);  
}
```

C. Use the following code:

```
public bool CheckSite ()  
{  
    Site site = new Site (http://intranet. Certkiller .com);  
    return site.Check (AppDomain.CurrentDomain.Evidence);  
}
```

D. Use the following code:

```
public bool CheckSite ()  
{  
    SiteMembershipCondition site = new SiteMembershipCondition  
(http://intranet. Certkiller .com);  
    return site.Check (Assembly.GetCallingAssembly ().Evidence);  
}
```

Answer: D

Explanation: This code instantiates a SiteMembershipCondition object using the site's URL as a string, retrieves the evidence information from the current assembly, and verifies the evidence indicating the assembly originates from the company intranet. The SiteMembershipCondition class' sole purpose is to verify whether an assembly belongs to a site's code group based upon the originating Web site of the application or assembly. The SiteMembershipCondition class has a constructor that takes a URL as a string argument. The Check method determines whether an assembly belongs to the site's code group based upon the evidence provided as an argument. The GetExecutingAssembly method of the Assembly class returns an

Assembly object representing the assembly that invoked the CheckPolicy method. The Evidence property of the Assembly class returns the identity information used by the .NET Framework code access security mechanism to determine code group membership.

Incorrect Answers:

A, C: You should not use the code fragments that specify the `AppDomain.CurrentDomain.Evidence` property because this retrieves the evidence available to the current application domain only.

B: You should not use the code fragments that specify the `Site` class because this class does not provide a method to verify the originating Web site of an assembly or application.

QUESTION 209

You work as an application developer at Certkiller .com. You are currently creating an application that requires role-based security. You are planning to utilize a database to store the user accounts and group membership data.

You need to ensure that users are able to log on and off. You also need to ensure that the application you have created tracks the user accounts of these users, and restrict or allow access to code based on their group membership. You need to achieve this objective with as little developer effort as possible.

What should you do to implement role-based security?

- A. Inherit from the `GenericIdentity` and `GenericPrincipal` classes.
- B. Make use of `GenericIdentity` and `GenericPrincipal` objects.
- C. Implement the `IIdentity` and `IPrincipal` interfaces.
- D. Make use of `WindowsIdentity` and `WindowsPrincipal` objects.

Answer: B

Explanation: in this scenario, the `GenericIdentity` and `GenericPrincipal` objects could be implemented as follows:

```
GenericIdentity curIdentity = new GenericIdentity ("CurrentUser");  
string [] roles = { "Users", "Administrators" };  
thread.CurrentPrincipal = GenericPrincipal (curIdentity, roles);
```

This code instantiates a `GenericIdentity` object based upon a user name as a string object, instantiates a string array representing the roles to which that user belongs, instantiates a `GenericPrincipal` object specifying the `GenericIdentity` object and string array of roles as arguments, and assigns the new `GenericPrincipal` object to the `CurrentPrincipal` property of the current thread. By assigning the new principal to the `CurrentPrincipal` property of the current thread, role membership checks can be performed using the `IsInRole` method

Incorrect Answers:

A, C: These options require more developer effort than necessary.

D: The `WindowsIdentity` and `WindowsPrincipal` classes are intended for use with windows domain stored accounts and groups only.

QUESTION 210

You work as an application developer at Certkiller .com. You are in the process of creating an application that will display confidential employee information.

When your manager informs you that only managers and administrators should be able to view the information, you utilize windows authentication and .NET

role-based security to guarantee this.

The network administrator in your department informs you that he has noticed that there are certain users that are not managers or administrators are able to view the employee information. You immediately analyze your code, and discover an issue with domain group memberships.

The network administrator asks you to trace the user account and security identifier (SID) of each user in the application so that he can use this information to detect users across the enterprise and verify that their group memberships are correct.

How would you do this?

A. Use the following code:

```
WindowsIdentity curID = WindowsIdentity.GetCurrent ();  
NTAccount account = new NTAccount (curID.Name);  
SecurityIdentifier sid = (SecurityIdentifier);  
account.Translate (typeof (SecurityIdentifier));  
Trace.Write ("User's SID is" + sid.Value, "User" + account.Value);
```

B. Use the following code:

```
WindowsIdentity curID = WindowsIdentity.GetCurrent ();  
NTAccount account = new NTAccount (curID.Name);  
Trace.Write ("User's SID is" + sid.Value, "User" + account.Value);
```

C. Use the following code:

```
WindowsIdentity curID = WindowsIdentity.GetCurrent ();  
Trace.Write ("User's SID is" + curID.Value, "User" + sid.Name);
```

D. Use the following code:

```
WindowsIdentity curID = WindowsIdentity.GetCurrent ();  
SecurityIdentifier sid = new SecurityIdentifier (curID.Name);  
Trace.Write ("User's SID is" + curID.Value, "User" + sid.Name);
```

Answer: A

Explanation: This code retrieves the current `WindowsIdentity` object associated with the user, instantiates an `NTAccount` object using the `Name` property, invokes the `Translate` method to retrieve the current `SecurityIdentifier` object, and invokes the `Write` method on the `Trace` class to record the `Value` property of both the `SecurityIdentifier` and `NTAccount` objects. The `GetCurrent` method of the `WindowsIdentity` object represents the identity of the application user. The `NTAccount` class represents a Windows user group account in the local Security Accounts Manager (SAM) or in the Active Directory domain. The constructor of the `NTAccount` class accepts either a single string representing the account name or two strings, one representing the domain name and the other representing the account on that domain. To facilitate SID lookups, the `Translate` method takes a `Type` argument and returns an `IdentityReference` object. You must convert or cast the `IdentityReference` object to a `SecurityIdentifier` object to retrieve the `Sid` for the specified account. The `Value` property of the `SecurityIdentifier` and `NTAccount` class returns a SID and fully-qualified user name string, respectively. The `Write`

method of the Trace class outputs the specified message into the specified category.

Incorrect Answers:

B: You should not use the code that does not specify the SecurityIdentifier class because the NTAccount class does not have a SID property.

C: You should not use the code that does not specify the NTAccount and SecurityIdentifier classes because there is no SID property in the WindowsIdentity class.

D: You should not use the code that does not specify the NTAccount class because a SecurityIdentifier object cannot be instantiated using an account name as an argument, and it does not contain a Name property.

QUESTION 211

You work as an application developer at Certkiller .com. You are currently creating a sales report application that requires Windows authentication on Certkiller .com's domain.

To achieve this, you are required to implement role-based security within the sales report application.

You establish that the method shown below should only be invoked by members of the Managers group:

```
public void UpdateEmpSalesBonus (int empID, double amount)
{
//Update employee's salary
}
```

You need to ensure that invocation of the UpdateEmpSalesBonus method is restricted to only managers.

What should you do? (Choose two)

A. Apply the following attribute to the UpdateEmpSalesBonus method:

[WindowsPrincipalPermission (SecurityAction.Demand, Role = "Managers")]

B. Apply the following code to the UpdateEmpSalesBonus method:

```
WindowsIdentity user = WindowsIdentity.GetCurrent ();
if (user.IsInRole ("Managers"))
{
//Update employee's salary
}
```

C. Apply the following attribute to the UpdateEmpSalesBonus method:

[PrincipalPermission (SecurityAction.Demand, Role = "Managers")]

D. Apply the following code to the UpdateEmpSalesBonus method:

```
if (Thread.CurrentPrincipal.IsInRole ("Managers"))
{
//Update employee's salary
}
```

Answer: C, D

Explanation: Imperative role-based security can use the PrincipalPermission class or the IPPrincipal object directly. The PrincipalPermission class takes a user name and

role as string arguments representing the required membership. The Demand method indicates that all callers must belong to the user or group membership specified in the constructor to access the resource. The IPrincipal object can be retrieved using the Thread.CurrentPrincipal property. The IsInRole method takes a role argument as a string and returns a Boolean value indicating whether the current caller belongs to that group or not.

Incorrect Answers:

A: You should not use the attribute that applies the WindowsPrincipalPermission attribute because no such attribute exists in the .NET Framework 2.0 class library.

B: You should not use the code that invokes the IsInRole method on the WindowsIdentity class because no such method exists.

QUESTION 212

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application on a workstation used as collateral and you are trying to port an old Certkiller .com management application that was written in unmanaged Windows code with no COM interfaces. The application you are developing makes calls to the old Certkiller .com management unmanaged library named BillPerformance.dll. You are required to make a call to the GetPerformanceScore method of the unmanaged Performance.dll library.

What should you do?

- A. The Type Library Exporter tool (tlbexp.exe) should be used
- B. The Type Library Importer tool (tlbimp.exe) should be used
- C. The Assembly Registration tool (regasm.exe) should be used
- D. The Platform Invoke (DllImportAttribute) should be used

Answer: D

Explanation: The feature Platform Invoke is used to allow you to call methods that are in unmanaged libraries but you need to declare the unmanaged method in the managed code using the extern and static keywords with the DllImport attribute which is used to specify the unmanaged library.

Incorrect Answers:

A, B, C: The tool should not be considered for usage in the scenario because the unmanaged dll file is not in COM and it only processes COM type libraries.

QUESTION 213

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run

Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application on a workstation named Certkiller -WS01 used as collateral. The application will be used to list the available public types and methods in the Certkiller .com assembly. You named the assembly strongly and it is installed in the global assembly cache (GAL) and an assembly with the same identity is stored at c:\ Certkiller \assemb\ Certkiller .com.dll.

You are required to dynamically load the Certkiller .com assembly into your application whilst you ensure that the assembly is loaded from c:\ Certkiller \assemb\ Certkiller .com.dll rather than the global assembly cache (GAL). What should you do?

- A. Assembly assemb = Assembly.LoadFrom("c:\ Certkiller \assemb\ Certkiller .com.dll");
- B. Assembly assemb = Assembly.LoadFile("c:\ Certkiller \assemb\ Certkiller .com.dll");
- C. Assembly assemb = Assembly.ReflectionOnlyLoad(" Certkiller .com");
- D. Assembly assemb = Assembly.Load(" Certkiller .com");
- E. Assembly assemb = Assembly.ReflectionOnlyLoadFrom("c:\ Certkiller \assemb\ Certkiller .com.dll");

Answer: E

Explanation: To correctly load the Assembly class from the location c:\ Certkiller \assemb\ Certkiller .com.dll you should make use of the method used in the option of the scenario.

Incorrect Answers:

A, B, C, D: The other methods of the assembly class will request the common language runtime (CLR) to resolve the location of the assembly based on its identity therefore these options should not be used in the scenario even though you provide the full absolute path as a parameter.

QUESTION 214

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application on a workstation named Certkiller -WS11 used as collateral. The application's assembly is named Certkiller App and is stored in Certkiller App.exe. You are busy using .NET Framework's Strong Name tool to generate a pair for Certkiller App.exe shown below:

Sn.exe -k Certkiller AppKey

You are required to use the key pair to build the Certkiller App.exe as a strong named assembly.

What should you do?

- A. The AssemblyKeyFileAttribute class should be used
- B. The AssemblyDelaySignAttribute class should be used
- C. The AssemblyConfigurationAttribute class should be used
- D. The AssemblyKeyNameAttribute should be used

Answer: A:

Explanation: The Strong name tool is used to allow you to generate and manage keys for the strong name signing and by using the -k switch the tool generates a new key pair and stores it in the specified file. So using the AssemblyKeyFileAttribute is the correct way to go in the scenario.

Incorrect Answers:

- B: This class should not be considered for use as it is designed to specify whether or not delayed signing should be used.
- C: The class should not be used in the scenario because the class is used to specify a build configuration for an assembly.
- D: This class should not be used in the scenario because it is used to specify the name of a key container that should be used.

QUESTION 215

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application on a workstation used as collateral, the application will allow users to send e-mails. The users are required to be able to send e-mail containing information like budget documents and images. You decide to use the .NET Framework 2.0 Attachment class to create the e-mail attachments within your application.

You are required to specify the content in an attachment by using the attachment class constructors.

What should you do? (Choose two)

- A. The Stream object attachment class should be used in the scenario
- B. The String object attachment class should be used in the scenario
- C. The Image object attachment class should be used in the scenario
- D. The XmlDocument object attachment class should be used in the scenario
- E. The SqlDataReader object attachment class should be used in the scenario

Answer: A, B

Explanation: In the scenario the Attachment constructors allow you to create attachments from a filename, a String object, or a Stream object.

Incorrect Answers:

- C: This method is incorrect and should not be used in the scenario because the Image object Attachment class cannot directly use an Image object.
- D: This method is incorrect and should not be used in the scenario because the XmlDocument Attachment class cannot directly use an XmlDocument object.
- E: This method is incorrect and should not be used in the scenario because the SqlDataReader Attachment class cannot directly make use of a SqlDataReader object.

QUESTION 216

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 enterprise application on a workstation used as collateral. The application will be used to allow the users to send e-mail messages and should allow users to send HTML-based e-mails, but the users should not be able to use the HTML tag to embed images in the HTML document

The images are not externally hosted so instead the images must be sent as part of the e-mail message. You are required to select which class to use.

What should you do?

- A. The AlternateView class should be used in the scenario
- B. The Attachment class should be used in the scenario
- C. The MailAddress class should be used in the scenario
- D. The LinkedResource class should be used in the scenario

Answer: D

Explanation: In the scenario you should make use of the LinkedResource class as it is used to embed external resources in an e-mail attachment such as images in an HTML attachment.

Incorrect Answers:

- A: The class in question could be used in the scenario but the AlternateView class itself cannot be used to embed images in the HTML document.
- B: The Attachment class should not be used in the scenario as the class only allows you to send images as an attachment.
- C: The usage of this class is incorrect as it is used to store the address information for e-mail messages in the scenario.

QUESTION 217

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Windows Forms application using a workstation used as collateral. The Windows Forms application will be used by regional offices of Certkiller .com in various countries.

You are required to customize the application so that the language, calendar and cultural conventions are changed based on the user's operating system settings. You additionally are required to identify the .Net Framework class that should be used for this requirement.

What should you do?

- A. The cultureInfo class should be used
- B. The TextInfo class should be used
- C. The DateTimeFormatInfo should be used
- D. The CharUnicodeInfo should be used
- E. The RegionInfo should be used

Answer: A

Explanation: The CultureInfo class should be used in the scenario because it contains culture-specific information and provides the information required for performing culture-specific operations like changing casing, formatting dates and numbers and comparing strings.

Incorrect Answers:

B: This class should not be used in the scenario because this class only affects the behavior such as text casing.

C: This class should not be used in the scenario because this class only defines how the Date and Time values are formatted.

D: This class should not be used in the scenario because this class is used to only retrieve information about a Unicode character.

E: This class should not be used in the scenario because this class does not represent any preferences of the user and does not depend upon the culture.

QUESTION 218

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Windows Forms application that must provide support for multiple languages and regional differences on a workstation that is used as collateral. You are required to define a custom culture based on an existing culture and region. An administrative user will install the custom culture on the end user's computer prior to the applications deployment and you are required to select which class to use.

What should you do?

- A. The CultureAndRegionInfoBuilder class should be used

- B. The CustomAttributeBuilder class should be used
- C. The RegioInfo class should be used
- D. The CultureInfo class should be used

Answer: A

Explanation: The correct option in the scenario would be to make use of the CultureAndRegionInfoBuilder class as this class is used to define a custom culture that is new or based upon an existing region and culture.

Incorrect Answers:

B: This class should not be used in the scenario because this class is used to define custom attributes which are used to associate declarative information.

C: This class should not be used in the scenario because this class is used to access the region data for an already installed culture.

D: This class should not be used in the scenario because this class can only be used to make use of cultures that have already been installed.

QUESTION 219

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application on a workstation used as collateral and you require to provide locale-specific services to employees with the application. You must additionally ensure that you use a unique country identifier that can be used as a key to access a database record that contains specific information about a country whilst you use the minimum storage for storing the key.

What should you do?

- A. CultureInfo.Name should be used as an identifier for a country
- B. CultureInfo.GetHashCode should be used as an identifier for a country
- C. RegionInfo.GetHashCode should be used as an identifier for a country
- D. RegionInfo.Name should be used as an identifier for a country

Answer: D

Explanation: In the scenario you should make use of the RegionInfo.Name property as this property gets the name or ISO 3166 two-letter country/region code for the current RegionInfo object.

Incorrect Answers:

A: This method should not be used in the scenario as you will only receive the culture name instead of the country name and does not meet the objective.

B, C: The usage of the GetHashCode property in the scenario is incorrect as the hash

value generated can be used to tell whether the RegionInfo or CultureInfo objects are the same or not.

QUESTION 220

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 enterprise application on a workstation used as collateral and you create the following variable in your code:

```
DateTime dateValue;
```

You additionally write code to store time in the local time to the dateValue variable.

You are required to serialize the value of the dateValue variable, if you serialize the DateTime object in one time zone and deserialized in a different time zone, the local time represented as a result should be automatically adjusted to the second time zone. You are to decide which expression to use.

What should you do?

A.

The dateValue.ToString("yyyy-MM-ddTHH:mm:ss.ffffff",
CultureInfo.InvariantCulture)

B. The dateValue.ToBinary() expression should be used

C. The dateValue.Kind expression should be used

D. The dateValue.Ticks expression should be used

Answer: B

Explanation: To preserve the information that you are required to preserve in the scenario you should make use of the newToBinary and FromBinary method as these methods can be used to automatically adjust the local times.

Incorrect Answers:

A: The expression in question should not be used in the scenario because the expression will not preserve any of the required reserved information.

C: This expression will be used to check whether the value indicates whether time is represented by the instance is based on local time.

D: This expression is used to super fast serialize the required information but should not be considered when working with the local time.

QUESTION 221

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 enterprise application

on a workstation named CertK INMG-WS02 used as collateral and you write the code below in your application, line numbers are reference:

```
01: String num;  
02: Integer val;  
03: num = " (37)";  
04:
```

You are required to write additional code at line 04 that will be used to correctly parse the string value and assigns the result to the Integer variable named val. When you execute the code the variable is required to hold a value of -37 and you must decide which code to use.
What should you do?

- A. val=Int32.Parse(num, NumberStyles.AllowLeadingSign And NumberStyles.AllowLeadingWhite)
- B. val=Int32.Parse(num, NumberStyles.AllowParentheses And NumberStyles.AllowLeadingWhite)
- C. val=Int32.Parse(num, NumberStyles.AllowLeadingSign Or NumberStyles.AllowLeadingWhite)
- D. val=Int32.Parse(num, NumberStyles.AllowParentheses Or NumberStyles.AllowLeadingWhite)

Answer: D

Explanation: The NumberStyles.AllowParentheses value is used to indicate that the numeric string can have one pair of parentheses enclosing the number and the NumberStyles.AllowLeadingWhite value is used to indicate that a leading white-space character must be ignored during the parse.

Incorrect Answers:

- A, B: This code should not be used in the scenario because the code is used to indicate that the numeric string can have a leading sign.
- C: The code in question should not be used in the scenario because the attributes of NumberStyles are set by using the bitwise inclusive Or on the field flags.

QUESTION 222

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Windows Forms application that will be used by several Certkiller .com employees in several countries on a workstation used as collateral. The application is required to fully support customization of the user interface based on the user's preferences like the language currency and date and time formats.

You are required to write code that will compare the name of two employees which are stored in variables named employee1 and employee2. You are required to

ensure correct comparisons whilst taking care of the regional settings selected.
What should you do?

- A. The `String.Compare(Fileemployee1, Fileemployee2, true, CultureInfo.CurrentCulture)` segment should be used
- B. The `String.Compare(Fileemployee1, Fileemployee2, true, CultureInfo.InvariantCulture)` segment should be used
- C. The `String.Compare(Fileemployee1, Fileemployee2, true, CultureInfo.InstalledUICulture)` segment should be used
- D. The `String.Compare(Fileemployee1, Fileemployee2, true, CultureInfo.CurrentUICulture)` segment should be used

Answer: A

Explanation: The default behavior of the segment in question is to perform culture-sensitive comparisons and should definitely be considered for use in the scenario.

Incorrect Answers:

- B: This code segment is incorrect and should not be used in the scenario because it will lead to culture-insensitive operations.
- C: This code segment is incorrect and should not be used in the scenario because this will use the culture that is installed with the operating system.
- D: This code segment is incorrect and should not be used in the scenario because this settings only used for changing the user's interface culture used by a thread.

QUESTION 223

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a large .NET Framework 2.0 application that is required to provide support for culture-specific information using a workstation used as collateral. You are required to parse a date and time string generated for a custom culture and to help the success of the parse operation you designate parse patterns that are likely to succeed. You must additionally prevent the operation from failing whilst you select the method to use for parsing the string.

What should you do?

- A. The `ParseExact` method should be used
- B. The `Parse` method should be used
- C. The `TryParseExact` method should be used
- D. The `TryParse` method should be used

Answer: C

Explanation: The TryParseExact method should be used if you require parsing a date and time string generated from a custom culture.

Incorrect Answers:

A, B: The usage of these methods in the scenario would be incorrect because the methods do not provide error handling and the custom culture can be complicated and difficult to parse.

D: If you decide to use the TryParse method which attempt to parse a string using several implicit parse patterns that may all fail you will not achieve the scenario objective.

QUESTION 224

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application that will be used to manipulate graphics files in GIF, JPG and PNG formats using a workstation named Certkiller -WS32 which is used as collateral. You are required to choose an appropriate data type to store graphic files whilst your solution must use the least amount of code.

What should you do?

- A. The Icon class should be used
- B. The Metafile class should be used
- C. The Image class should be used
- D. The Bitmap class should be used

Answer: D

Explanation: Because the Bitmap class is an implementation of the Image abstract class that is capable of working with several types of image formats this class should be considered for usage in the scenario.

Incorrect Answers:

A: This class should not be used in the scenario because the Icon class only allows you to work with small bitmap images.

B: This class should not be used in the scenario because this class can not be used to manipulate images in different formats.

C: This class should not be used in the scenario because this class is an abstract class which requires functionality to be implemented which requires programming effort.

QUESTION 225

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 text-processing application on a workstation used as collateral and are busy defining the regular expression of currency values:

```
Regex tx = Test Regex("^-?\d+(\.\d{2})?$")
```

You are required to write code that will be used to find whether a string in the variable named Bill matches the regular expression or not and you are also required to use this code as the expression in a conditional statement and need to know which code segment to use.

What should you do?

- A. The tx.Matches(Bill)
- B. The tx.Equals(Bill)
- C. The tx.Match(Bill)
- D. The tx.IsMatch(Bill)

Answer: D

Explanation: In order for you to successfully indicate whether the regular expression finds a match in the input string you should make use of the IsMatch(Bill) segment in the scenario.

Incorrect Answers:

A: This segment should not be used in the scenario because the Matches method is used to search an input string for all occurrences of a regular expression and returns all the successful matches.

B: This segment should not be used in the scenario because this method is used to determine whether any two Object instances are equal.

C: This segment should not be used in the scenario because the Match method is used to search an input string for an occurrence of a regular expression and returns the precise results as a single successful match.

QUESTION 226

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application on a workstation used as collateral. The application will be used globally and must be able to represent characters in the following languages: English, Chinese Traditional, Hebrew and Tamil. Your application is required to provide error detection for invalid sequences of characters whilst your application must also optimize storage.

What should you do?

- A. Encode the characters in your application using the UTF8Encoding class
- B. Encode the characters in your application using the UTF7Encoding class

- C. Encode the characters in your application using the UTF32Encoding class
- D. Encode the characters in your application using the UTF16Encoding class

Answer: A

Explanation: To successfully enable error detection and make the class instance more secure you should make use of the UTF8Encoding class in the scenario.

Incorrect Answers:

B: The Encoding class used in this option UTF7Encoding does not provide any error detection and should not be used in the scenario.

C, D: The Encoding classes in these options should not be used in the scenario because the UTF16Encoding class represents each character as a sequence of one to two 16-bit integers and the UTF32Encoding represents each code point as a 32-bit integer.

QUESTION 227

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

You are in the process of developing a .NET Framework 2.0 application that uses the following code (line numbers are for reference only)

```
1: Dim testCount As Nullable(Of Integer) = -1
```

```
2: testCount = Nothing
```

You are required to insert a statement after line 2 to print the value of the variable testCount but if the value of the testCount is a null reference(nothing) the program should print -1.

What should you do?

A. If (testCount.HasValue) Then

```
Console.WriteLine("testCount = {0}", testCount.Value)
```

Else

```
Console.WriteLine("testcount = {0}", testCount.GetValueOrDefault())
```

End If

B. Console.WriteLine("testCount = {0}", testCount.Value)

C. Console.WriteLine("testcount = {0}", testCount.GetValueOrDefault())

D. If (testCount.HasValue) Then

```
Console.WriteLine("testCount = {0}", testCount.Value)
```

Else

```
Console.WriteLine("testCount = {0}", -1)
```

End If

Answer: D

Explanation: The Has.Value method should be used to determine if a nullable type contains a defined value and should be used in the scenario.

Incorrect Answers:

A, B, C: The other statements are incorrect as it will only run fine when a value is not set to Nothing in the scenario. The GetValueOrDefault method retrieves the value of the current nullable object if it is not Nothing.

QUESTION 228

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

You are in the process of storing numerical values up to 2,100,000,000 into a variable and may require storing negative values using a .NET Framework 2.0 application. You are required to optimize memory usage. What should you do?

- A. Int32
- B. UInt16
- C. UInt32
- D. Int16

Answer: A

Explanation: The Int32 type should be used in the scenario as it can be used to store positive and negative numerical values from -2,147,483,648 to +2,147,483,647.

Incorrect Answers:

B, C: The UInt32 and UInt16 type should not be used in the scenario because they are used to store only unsigned positive numbers.

D: The Int16 type should not be used as you will only be allowed to store values from -32768 to +32768.

QUESTION 229

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

You have recently finished development of a class named TestReward and package the class in a .NET 2.0 assembly named TestObj.dll. After you ship the assembly and it is used by client applications, you decide to move the TestReward class from TestObj.dll assembly to the TestRewardObj.dll Assembly. You are to ensure when you ship the updated TestObj.dll and TestRewardObj.dll assemblies that the client applications continue to work and do not require recompiling.

What should you do?

- A. The TypeForwardedTo attribute should be used
- B. The TypeConverter.ConvertTo method should be used
- C. The InternalsVisibleTo attribute should be used
- D. The Type Converter.ConvertFrom method should be used

Answer: A

Explanation: The statement used for you to add a type from one assembly into another assembly is the TypeForwardTo attribute which enables you not to have the application recompiled.

Incorrect Answers:

B, D: The TypeConverter class provides a unified way of converting different types of values to other types and can not be used to move a type.

C: The method in question here specifies all nonpublic types in an assembly are visible to other assemblies but can not be used to move types.

QUESTION 230

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

You are in the process of developing a .NET Framework 2.0 application used to store a type-safe list of names and e-mail addresses. The list will be populated all at ones from the sorted data which means you well not always need to perform insertion or deletion operations on the data. You are required to choose a data structure that optimizes memory use and has good performance.

What should you do?

- A. The System.Collections.Generic.SortedList class should be used
- B. The System.Collections.HashTable class should be used
- C. The System.Collections.Generic.SortedDictionary class should be used
- D. The System.Collections.SortedList class should be used

Answer: A

Explanation: The SortedList generic class should be used in the scenario class as it provides type safety compared against the System.Collections.SortedList class.

Incorrect Answers:

B: The System.Collections.HashTable class should not be used as this class provides no type safety.

C, D: Although this is very similar to the SortedList class the SortedList class should be used instead in the scenario.

QUESTION 231

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

You are in the process of developing a .NET Framework 2.0 application that uses the Stack class. You need to write the code which will enumerate through the stack

which may contain objects of the Stack class or objects of a class derived from the Stack class. The code you write must guarantee thread safety during the enumeration

What should you do?

- A. Dim TeStack As Stack = Test Stack()
syncLock (TeStack.SyncRoot)
For Each item As Object In TeStack
'additional code for processing.
Next
End SyncLock
- B. Dim TeStack As Stack = Test Stack()
Dim syncStack As Stack = Stack.Synchronized(Test Stack)
For Each item As Object In syncStack
'additional code for processing.
Next
- C. Dim TeStack As Stack = Test Stack()
Dim syncStack As Stack = TeStack.SyncRoot
For Each item As Object In syncStack
'additional code for processing.
Next
- D. Dim TeStack As Stack = Test Stack()
SyncLock (Stack.Synchronized(Test Stack))
For Each item As Object In TeStack
'additional code for processing.
Next
End SyncLock

Answer: A

Explanation: It is important to remember that when enumerating through a collection that a thread procedure is not safe as another thread can modify the collection, to ensure the safety the collection should be locked during enumeration.

Incorrect Answers:

B C: Any Stack classes derived from the Stack class may make use of the SyncRoot property to implement their own synchronized version of the Stack class.

D: The technique used here can also be used to maintain proper synchronization with other threads that might be modifying the Stack object simultaneously.

QUESTION 232

You work as an application developer at Certkiller .com. Certkiller .com has been contracted to develop an application for the local bank.

You have been given the responsibility of creating this application and need to store each transaction record, which is identified using a complex transaction identifier, in memory. The bank informs you that the total amount of transaction records could reach 200 per day.

To achieve this, you decide to utilize one of the existing collection classes in the .NET 2.0 class library.

You need to ensure that the collection class you select is the most efficient one for storing transaction records.

What should you do?

- A. Select the ListDictionary collection class.
- B. Select the HashTable collection class.
- C. Select the Queue collection class.
- D. Select the StringCollection collection class.

Answer: B

Explanation: You should select the HashTable class to store transaction records because each element is identified using a unique identifier and the size of the collection is large. Elements in the HashTable collection are stored with a key/value pair where each key is created using a hash code. The default capacity of a HashTable class is zero, and you can use the Add method to add a new element to the collection. The Count property provides the total number of elements in the HashTable collection. An element of the HashTable class can be accessed using the DictionaryEntry class. You can use the Key and Value properties of the DictionaryEntry class to access the key associated with the element and the value of the element, respectively.

Incorrect Answers:

- A: You should not select this collection class because this class is used if the total number of elements to be stored in a collection is less than 10 elements in length.
- C: You should not select this collection class because you need to access transaction records using a transaction identifier, not in sequential order.
- D: You should not select this collection class because this class is used to manage a collection of string values.

QUESTION 233

You work as an application developer at Certkiller .com. Certkiller .com has been hired by a small local private school to develop a class library that will be used in an application named ManageAttendance for the purpose of managing student records.

You are responsible for developing this class library. Certkiller .com has instructed you to create a collection in the application to store learners' results.

The school has informed you that they currently only have seven learners, but that this value will triple in the following year. Due to the limited resources, you need to ensure that the collection you create consumes a minimum amount of resources.

What should you use to create the collection?

- A. The HybridDictionary collection class.
- B. The HashTable collection class.
- C. The ListDictionary collection class.

D. The StringCollection collection class.

Answer: A

Explanation: You should use the HybridDictionary class to create the collection because this class is useful in scenarios where the number of elements is unknown or could grow in size. A collection of the HybridDictionary type manages the collection depending on the number of elements. The HybridDictionary type collection uses the ListDictionary class to manage the collection when there are only a few elements. When the number of elements exceeds ten, the HybridDictionary type collection automatically converts the elements into HashTable management.

Incorrect Answers:

B: You should not use this collection class because this class is used if the total number of elements to be stored in a collection is known and is greater than ten elements in length.

C: You should not use this collection class because this class is used if the total number of elements to be stored in a collection is known and is less than ten elements in length.

D: You should not use this collection class because this class is used to manage a collection of string values.

QUESTION 234

You work as an application developer at Certkiller .com. You are in the process of developing an application that makes use of a Queue class object named MyQueue. This Queue class object will be used to store messages sent by the user during application run time. The application that you are developing provides an interface for administrators and an interface for users to create message reports.

You want to ensure that all user messages stored in the MyQueue object are removed when an administrator selects the reset option.

What should you do?

A. Use the Enqueue method of the MyQueue object.

B. Use the Clear method of the MyQueue object.

C. Use the Dequeue method of the MyQueue object.

D. Use the TrimToSize method of the MyQueue object.

Answer: B

Explanation: The clear method sets the Count property of the Queue class object to 0 after removing all the elements from the queue. When you call the Clear method for a Queue object, the capacity of the Queue object is not changed.

Incorrect Answers:

A: You should not use this method because it is used to add a new element at the beginning of a Queue object.

C: You should not use this method because it is used to remove an element at the beginning of a Queue object.

D: You should not use this method because it is used to resize a Queue object.

QUESTION 235

You work as an application developer at Certkiller .com. You are in the process of developing an application that makes use of a Queue class object named MyQueue. This Queue class object will be used to store messages sent by the user during application run time.

You would like to access the message at the beginning of the queue, prior to processing the user messages, without removing it.

What should you do?

- A. Use the Enqueue method of the MyQueue object.
- B. Use the Contains method of the MyQueue object.
- C. Use the Dequeue method of the MyQueue object.
- D. Use the Peek method of the MyQueue object.

Answer: D

Explanation: The Peek method accesses the element at the beginning of the object of the Queue class without removing it from the queue. The Queue class is a data structure for handling elements based on the First In First Out (FIFO) concept. According to this concept, elements that are stored first are processed first.

Incorrect Answers:

A: You should not use this method of the Queue class because it is used to add a new element at the end of a Queue object.

B: You should not use this method of the Queue class because it is used to verify whether the specified element exists for the Queue object instance or not.

C: You should not use this method of the Queue class because it is used to remove the next element at the beginning of a Queue object.

QUESTION 236

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

You are in the process of developing a .NET Framework 2.0 application that uses a Dictionary generic class and you write the following code to create the dictionary.

```
Dim value As String = ""
```

```
Dim openWith As Dictionary(Of String, String) = _
```

```
New Dictionary(Of String, String)()
```

```
openWith.Add("txt", "notepad.exe")
```

```
openWith.Add("gif", "paint.exe")
```

```
openWith.Add("png", "paint.exe")
```

```
openWith.Add("rtf", "wordpad.exe")
```

```
openWith.Add("log", "notepad.exe")
```

You are required to write the code that displays the value corresponding to a key if

the key exists in the dictionary, but the code frequently tries keys that are not in the dictionary. The solution you propose must minimize the number of times you access the dictionary and offer the fastest performance.

What should you do?

A. If openWith.ContainsKey("tif") Then
Console.WriteLine("For key =" "tif" ", value = {0}. ", openWith("tif"))
Else
Console.WriteLine("Key =" "tif" "is not found.")
End If
B. Try
Console.WriteLine("For key =" "tif" ", value = {0}. ", openWith("tif"))
Catch knfe As KeyNotFoundException
Console.WriteLine("Key =" "tif" "is not found.")
End Try
C. Try
Console.WriteLine("For key =" "tif" ", value = {0}. ", openWith("tif"))
Catch ae As ArgumentException
Console.WriteLine("Key =" "tif" "is not found.")
End Try
D. If (openWith.TryGetValue("tif", value)) Then
Console.WriteLine("For key =" "tif" ", value = {0}. ", openWith("tif"))
Else
Console.WriteLine("Key =" "tif" "is not found.")
End If

Answer: D

Explanation: By making use of the TryGetValue method you efficiently retrieve values in a program that frequently tries keys that are not in the dictionary. By using this method the return will simply be a null reference(nothing).

Incorrect Answers:

A: The contains key is an effective way to check if a key exists but in this scenario it would require an additional operation to retrieve the value corresponding to the key.

B: Better performance can be attained by using the TryGetValue method in the scenario.

C: The method in question about catching the ArgumentException is not correct as nothing will be caught that is thrown when a key is not found.

QUESTION 237

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

You are in the process of developing a .NET Framework 2.0 application class library and create a class named Test:

Class Test

'Additional code goes here

End Class

In the code you wrote you created a SortedList collection with the Test objects as keys, the SortedList collection must be able to sort the items in a collection so that they are arranged in order from biggest to smallest. You must ensure that the class you wrote complies with the .NET Framework standard contracts.

What should you do?

- A. The Test class should be modified to implement the Icomparer interface
- B. The Test class should be modified to implement the IEquatable interface
- C. The Test class should be modified to implement the IConvertible interface
- D. The Test class should be modified to implement the IComparable interface

Answer: D

Explanation: The Test class must be modified to implement the IComparable interface as it determines the sort order of the two objects of the class.

Incorrect Answers:

A: This method is not recommended because the key type (Test) implements IComparable , the default comparer of the SortedList will use IComparable defined in the Test class to compare two objects.

B: This method should not be implemented as it only checks the two type instances for equality.

C: This interface is used to define methods that allow you to convert the value of the Test object to an equivalent value of any other type.

QUESTION 238

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

You are in the process of developing a .NET Framework 2.0 application that uses the queue data structure. You are required to create a solution that allows you to enumerate a queue's contents whilst providing type safety.

What should you do?

A. Dim t As Queue = Test Queue()
q.Enqueue("one")
q.Enqueue("two")
For Each s As String In t
Console.WriteLine(s)
Next

B. Dim t As Queue(Of String) = Test Queue(Of String)()
q.Enqueue("one")
q.Enqueue("two")
For Each s As String In t

```
Console.WriteLine(s)
Next
C. Dim t As Queue = Test Queue()
q.Enqueue("one")
q.Enqueue("two")
Dim safeT As Queue = Queue.Synchronized(t)
For Each s As String In t
Console.Writeline(s)
Next
D. Dim t As Queue = Test Queue()
q.Enqueue("one")
q.Enqueue("two")
For Each s As String in t
Console.WriteLine(s)
Next
```

Answer: B

Explanation: If you are to ensure type safety the generic version of the Queue class should be used, if you used the non-generic Queue class you would be able to add or insert objects of any type.

Incorrect Answers:

A, C, D: The usage of the SyncRoot property and the Synchronized method is useful for using the queue in a multithreaded scenario but does not provide any type safety.

QUESTION 239

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

You are in the process of developing a .NET Framework 2.0 application that will be used to store a list of names and e-mail addresses. The number of elements in the list are currently unknown and may vary at runtime. You are required to choose a data structure that provides the highest performance as you work with your data.

What should you do?

- A. A HybridDictionary should be used
- B. A HashTable should be used
- C. The ListDictionary should be used
- D. OrderedDictionary should be used

Answer: A

Explanation: Since the number of Elements in the dictionary is unknown the HybridDictionary class is recommended as it takes advantage of the improved performance of a ListDictionary with small collections.

Incorrect Answers:

B, C: The class used in the answer to the scenario takes advantage of all that is offered by these classes and these classes should not be used.

D: In the scenario at hand the use of a OrderedDictionary class does not provide any performance advantage.

QUESTION 240

You work as an application developer at Certkiller .com. You are in the process of developing a collection class named ClientCollection, which is to be used for storing the names of Certkiller .com's clients that are situated in various geographical areas. These client names are represented by the Client class. You are planning to create a method named SortClients in the ClientCollection class to arrange Client objects in ascending order.

You need to ensure that the appropriate interface is implemented by the Client class to allow sorting.

What interface should be used?

- A. IDictionary
- B. IComparable
- C. IComparer
- D. IEqualityComparer

Answer: B

Explanation: The IComparable interface provides only one method named CompareTo, which takes on generic object, compares it to the current instance, and returns an Integer value representing whether the current instance is equal to, greater than, or less than the object. The IComparable interface is typically used when you want to create a class whose objects can be sorted in either a list or collection.

Incorrect Answers:

A: This interface should not be implemented because it is used to create a collection that is managed by key/value pairs.

C: This interface should not be implemented because it should be implemented by collection or comparer classes, not comparable classes.

D: This interface should not be implemented because it provides methods to compare two objects for equality only.

QUESTION 241

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

You are in the process of developing a .NET Framework 2.0 application that handles the inventory and you develop the following class:

Public Class Inventory

```
Public Event Reorder As EventHandler
Private quantity As Integer
Protected Overridable Sub OnReorder _
    (ByVal e As EventArgs)
    RaiseEvent Reorder(Me, e)
End Sub
End Class
```

You need to have code added for a new method named TestOne. The new method will be used to decrease the quantity variable by one unit and raises the Reorder event when the quantity becomes 0. You must additionally avoid rewriting any functionality that is already available.

What should you do?

- A. Public Sub TestOne()
 quantity = quantity -1
 If quantity = 0 Then
 RaiseEvent Reorder(Me, EventArgs.Empty)
 End If
End Sub
- B. Public Sub TestOne()
 quantity = quantity -1
 If quantity = 0 Then
 AddHandler Reorder, _
 AddressOfInventory_Reorder
 End If
End Sub
Public Sub Inventory_Reorder(_
 ByVal sender As Object Object, ByVal e As EventArgs)
 OnReorder(e)
End Sub
- C. Public Sub TestOne()
 quantity = quantity -1
 If quantity = 0 Then
 RaiseEvent Reorder(Me, New EventArgs())
 End If
End Sub
- D. Public Sub TestOne()
 quantity = quantity -1
 If quantity =0 Then
 OnReorder(New EventArgs())
 End If
End Sub

Answer: D

Explanation: The method in the answer is the correct choice because when the

quantity reaches 0 it calls the OnReorder method which raises the Reorder event.

Incorrect Answers:

A: The method in this answer should not be used as an AddHandler statement is used to add an event handler to the Reorder event which in turn calls the OnReorder method raising the Reorder event in an infinite loop.

B, C: The following methods should not be used because you should call the already available OnReorder method to correctly raise the Reorder event without rewriting the functionality which already exists.

QUESTION 242

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

You are in the process of developing a .NET Framework 2.0 class library and write the following code:

```
Public Delegate Sub NumberDelegate(ByVal number As Integer)
```

```
Public Class NumberClass
```

```
Public Sub Method1(ByVal number As Integer)
```

```
Dim output As String = "Zero"
```

```
If (number > 0) Then output = "Positive"
```

```
If (number < 0) Then output = "Negative"
```

```
Console.WriteLine(output)
```

```
End Sub
```

```
Public Sub Method2(ByVal number As Integer)
```

```
Dim output As String = String.Empty
```

```
If (number > 0) Then output = "+"
```

```
If (number < 0) Then output = "-"
```

```
Console.WriteLine(output)
```

```
End Sub
```

```
End Class
```

The following piece of code you write to test the class:

```
Dim num As NumberClass = Test NumberClass()
```

```
Dim del1 As NumberDelegate = Test NumberDelegate(AddressOf num.Method1)
```

```
Dim del2 As NumberDelegate = Test NumberDelegate(AddressOf num.Method2)
```

```
[Delegate].combine(del2, del1)
```

```
del1(5)
```

You are required to select the output that you would receive.

What should you do?

A. Positive

B. Positive

+

C. +

positive

D. +

Answer: A

Explanation: It is possible to combine two delegates objects but it does not alter the existing delegates, therefore the received output would be Positive.

Incorrect Answers:

B, C, D: There will be only one line of output generated because only one delegate (del1) is invoked in the scenario.

QUESTION 243

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

You are in the process of developing an inventory application by using the .NET Framework 2.0 and you develop the following class:

```
Public Class Inventory
Public Event Reorder As EventHandler
Private quantity As Integer
Public Sub SellOne()
quantity = quantity - 1
If quantity = 0 Then
OnReorder(Me, New EventArgs())
End If
End Sub
End Class
```

You are required to define the OnReorder method to raise the Reorder event. What should you do?

- A. Protected Overridable Sub OnReorder _
(ByVal sender As Object, ByVal e As EventArgs)
RaiseEvent Reorder(Me, e)
End Sub
- B. Protected Overridable Sub OnReorder _
(ByVAL sender As Object, ByVal e As EventArgs)
AddHandler Reorder, AddressOf OnReorder
RaiseEvent Reorder(Nothing, e)
End Sub
- C. Protected Overridable Sub OnReorder _
(ByVal sender As Object, ByVAL e As EventArgs)
If e Is Nothing Then
RaiseEvent Reorder(Me, e)
End If
End Sub
- D. Protected Overridable Sub OnReorder _
(ByVal sender As Object, ByVal e As EventArgs)

AddHandler Reorder, AddressOf OnReorder
End Sub

Answer: A

Explanation: By using the code specified in the answer, the RaiseEvent statement raises the specified event by calling all the event handlers attached to the event.

Incorrect Answers:

B, D: This statement about AddHandler is incorrect as you have to raise the event not add event handlers.

C: This is also incorrect as there is no need for checking whether the event argument is nothing before invoking the event.

QUESTION 244

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

You are in the process of developing a .NET Framework 2.0 application Windows Forms. You are required to create a new class that raises a large number of events and keep memory usage of the class as low as possible. This task must be accomplished using the minimum amount of code possible.

What should you do?

- A. One instance of the EventHandlerList class should be used to store the delegate defined for each event in the class
- B. One instance of the EventInstance class should be used for each event in the class
- C. The EventBuilder class should be used to define the events for the class
- D. One member variable per event delegate should be created per event delegate instance in the class

Answer: A

Explanation: The best option in this scenario would be to make use of the EventHandlerList class since the number of events is large and this method provides a memory efficient mechanism for storing a list of delegates.

Incorrect Answers:

B: This method is used for representing information for an event log entry.

C: This method is used for defining events for a dynamically generated class and in the scenario the class is not dynamically generated.

D: This method should not be used as it is not a memory efficient solution which is what is required of you.

QUESTION 245

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the

Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Windows Service application named TestScannerSync that will be used to constantly monitor for a scanner to be connected to the computer. The TestScannerSync class inherits its functionality from the ServiceBase class. When you connect a scanner the service synchronizes its data with the data in a SQL Server database.

You decide to override the OnStop method in the TestScannerSync class and write code to close database connections. You are required to identify a place in the code where you can open the connection to the database.

What should you do?

- A. The database connection is opened in the constructor of TestScannerSync class
- B. The database connection is opened in the OnContinue method of TestScannerSync class
- C. The database connection is opened in the OnStart method of the TestScannerSync class
- D. The database connection is opened in the OnPowerEvent method of the TestScannerSync class

Answer: C

Explanation: The constructor for a service class derived from ServiceBase is called the first time you call Start on the service, the OnStart command-handling method is called immediately after the constructor executes.

Incorrect Answers:

- A: The constructor is the incorrect choice as this is only called upon once and not again.
- B: This method should not be used as this code will be executed when a Continue command is sent to a service in a paused state.
- D: This method should not be considered as this method will execute when the computer's power state has changed.

QUESTION 246

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application that will be used to connect and control the behavior of existing services installed on a network server named Certkiller -SR01.

What should you do? (Choose two)

- A. ServiceController.MachineName
- B. ServiceController.ServiceName

- C. ServiceController.Site
- D. ServiceInstaller.Site
- E. ServiceInstaller.ServiceName
- F. ServiceInstaller.DisplayName

Answer: A, B

Explanation: The proper way to connect and control the behavior of existing services is by using the ServiceController class after which you are required to set two properties on it to identify the service to interact with. The MachineName property is used to define the computer Certkiller -SR01.

Incorrect Answers:

C, D: The Site property of the ServiceController and ServiceInstaller class should not be used because they bind a component to a container and enables communication between them.

E, F: This property should not be used as it is meant to specify the name of the service at the time of installation. The DisplayName property is used to specify the friendly name of the service at the time of installation.

QUESTION 247

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Windows Service application that consists of two Services. The first service monitors a directory for new orders while the other service replicates a database table with up-to-date information. You are required to develop a project installer class to install these services.

What should you do? (Choose two)

- A. One ServiceProcessInstaller instance must be Instantiate and add it to the project installer class
- B. Two ServiceInstaller instances must be Instantiate and add them to the project installer class
- C. Two ServiceProcessInstaller instances must be Instantiate and add them to the project installer class
- D. One ComponentInstaller instance must be Instantiate and add them to the project installer class
- E. Two ComponentInstaller instances must be Instantiate and add them to the project installer class
- F. One ServiceInstaller instance must be Instantiate and add them to the project installer class

Answer: A, B

Explanation: The proper way to do what the scenario requires of you would be to create one ServiceProcessInstaller instance per service application and one ServiceInstaller instance for each service in the application which have to be Instantiate.

Incorrect Answers:

C, F: You must create one ServiceProcessInstaller instance per service application and one ServiceInstaller instance for each service in the application which have to be Instantiate.

D, E: The ComponentInstaller class should not be considered for use as this class is an abstract class that can not be Instantiate.

QUESTION 248

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Windows Service application and you need to change the security context in which the service runs. The service will be run in context of a non-privileged user on the local computer and present anonymous credentials to any remote server.

You are required to set the Account property of the ServiceProcessInstaller class to specify the service account.

What should you do?

- A. ServiceAccount.User
- B. ServiceAccount.LocalService
- C. ServiceAccount.LocalSystem
- D. ServiceAccount.NetworkService

Answer: B

Explanation: The proper way to complete the operation is to use the ServiceAccount.LocalService as the value of the Account property of the ServiceProcessInstaller class, setting this value will run the service in context of the non-privileged user on the local computer.

Incorrect Answers:

A: This method should not be used as you will be specifying the service to run in the security context of a specified user account.

C: This method should not be considered as you will run the service in the security context of a highly privileged user account.

D: The scenario requires the service to run in the security context of a non-privileged user on the local system not the network.

QUESTION 249

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Windows Service application which contains three different Windows services. You are required to only set one Windows service to start automatically when the system is restarted. What should you do?

- A. ServiceController
- B. ServiceBase
- C. ServiceProcessInstaller
- D. ServiceInstaller

Answer: D

Explanation: The proper and best way to achieve the scenario would be to use the ServiceInstaller class, the StartType property of the ServiceInstaller class allows you to specify how and when a service is started.

Incorrect Answers:

A: This method used here is incorrect as it can not be used to specify the start type of a Windows service.

B: This method is the base type for all Windows services but does not allow you to specify the start type for a Windows service.

C: This class should not be used because it has a method that affects all services in an executable.

QUESTION 250

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Windows Service application and are busy writing the following installation code for the Windows service:

```
<RunInstallerAttribute(True)> _  
Public Class TestServiceInstaller  
Implements Installer  
'Additional code to go here  
End Class
```

You are required to install the Windows service and write the values associated with the service in the Windows Registry.

What should you do?

- A. The Assembly Registration Tool (Regasm.exe) should be used
- B. The Global Assembly Cache Tool (Gacutil.exe) should be used
- C. The .NET Services Installation Tool (Regsvcs.exe) should be used
- D. The Installer Tool (InstallUtil.exe) should be used

Answer: D

Explanation: The InstallUtil.exe utility is the correct tool that should be used because it will install the classes in the specified assembly that derive from the installer class and have the RunInstallAttribute attribute set to True.

Incorrect Answers:

- A: This tool should not be used in the scenario as this tool registers .Net assemblies so that COM clients can access .NET classes.
- B: This tool should not be used as it is used to install and uninstall assemblies from the global assembly cache.
- C: This tool should not be considered for usage as the tool is used for installing classes for Enterprise Services.

QUESTION 251

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

You are in the process of developing a .NET Framework 2.0 Windows service application that is used to perform several short tasks that require background processing. You are not required to actively manage threads in your application but you are required to ensure that security checks are performed during the execution of the task.

What should you do?

- A. ThreadPool.QueueUserWorkItem
- B. ThreadPool.UnsafeQueueUserWorkItem
- C. Thread.Resume
- D. Thread.Start

Answer: A

Explanation: The scenario requires several short tasks to be run which requires background processing. Using the ThreadPool class is ideal in this situation as the system manages the thread pool meaning you have less overhead involved.

Incorrect Answers:

- B: This method should not be considered for use as the security check the scenario requires will not be performed.
- C, D: This method should not be considered because the Thread class is useful for creating threads that run in the foreground that are actively managed.

QUESTION 252

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

You are in the process of developing a .NET Framework 2.0 Windows application and need to create a foreground thread to draw lines in your application. When the thread is started you must provide a data value that specifies the number of lines drawn.

What should you do? (Choose two)

- A. A WaitCallback delegate should be created
- B. A ThreadStart delegate should be created
- C. A ParameterizedThreadStart delegate should be created
- D. The ThreadStart method should be called
- E. The ThreadPool.QueueUserWorkItem method should be called

Answer: C, D

Explanation: The first order of operations would be to create a ParameterizedThreadStart delegate then use the ThreadStart method to start the thread. The ThreadStart method can be used to create actively managed foreground threads. The Parameterized ThreadStart delegate allows the passing of data when starting a thread.

Incorrect Answers:

- A: This method should not be used as this method is for executing in a background thread that is part of a thread pool.
- B: The ThreadStart delegate should not be used because you first need to pass parameters when starting a thread.
- E: The method in this option should not be used because this method is used to create system managed background threads.

QUESTION 253

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Windows Service application and you write the following code:

```
Dim teTimer As Timer = Test Timer(statusDelegate, Nothing, 1000, 250)
```

You already correctly defined the delegate statusDelegate and are required to modify the code to start so that the callback method is not invoked periodically. What should you do?

- A. Dim teTimer As Timer = _
Test Timer(statusDelegate, Nothing, Timeout.Infinite, 0)
B. Dim teTimer As Timer = _
Test Timer(statusDelegate, Nothing, 0, 32767)
C. Dim teTimer As Timer = _
Test Timer(statusDelegate, Nothing, Timeout.Infinite, 250)
D. Dim teTimer As Timer = _
Test Timer(statusDelegate, Nothing, 1000, Timeout.Infinite)

Answer: D

Explanation: This is the correct method if you do not want the callback method to be called periodically, the second last parameter is used to specify when the timer must fire for the first time whilst the last parameter indicates the interval for the callback method.

Incorrect Answers:

A, B, C: The methods in question in the options here should not be used as one option will try the callback method after 32767 milliseconds and the other option has a value of infinite meaning the callback is never invoked and the timer is disabled.

QUESTION 254

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 graphics application and write a Point class with two Integer fields shown below:

Class Point

Dim x, y As Integer

Public Sub New(ByVal x As Integer, ByVal y As Integer)

Me.x = x

Me.y = y

End Sub

End Class

You are required to write a method named GetPointPosition that will be used to provide read access to the two Integer fields in the class. You must additionally permit read access to multiple threads at the same time whilst your solution results in fast response time and high throughput.

What should you do?

A. Private rwlock As ReaderWriterLock

Public Sub GetPointPosition(ByRef x As Integer, ByRef y As Integer)

rwlock.AcquireReaderLock(Timeout.Infinite)

Try

x = Me.x

```
y = Me.y
Finally
rwlock.ReleaseReaderLock()
End Try
End Sub
B. Public Sub GetPointPosition(ByRef X As Integer, ByRef y As Integer)
SyncLock (Me)
x = Me.x
y = Me.y
End SyncLock
End Sub
C. Public Sub GetPointPosition(ByRef x As Integer, ByRef y As Integer)
Dim lockAcquired As Boolean
lockAcquired = Monitor.TryEnter(Me, 2000)
If (lockAcquired) Then
Try
x = Me.x
y = Me.y
Finally
Monitor.Exit(Me)
End Try
End If
End Sub
D. Public Sub GetPointPosition(ByRef x As Integer, ByRef y As Integer)
Monitor.Enter(Me)
Try
x = Me.x
y = Me.y
Finally
Monitor.Exit(Me)
End Try
End Sub
```

Answer: A

Explanation: The method chosen in the scenario allows you to design a synchronization scheme that employs shared locks together with exclusive locks making it possible to access multiple reader threads at the same time.

Incorrect Answers:

B, C, D: The other methods in questions should not be used as they all have an exclusive locking mechanism which does not take into consideration that not all threads are readers or writers.

QUESTION 255

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the

Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

You are in the process of developing a .NET Framework 2.0 application class library. You make use of a custom class named TestResource in the application, you create two instances of the TestResource class shown below:

```
Dim sr1, sr2 As TestResource
```

```
'Additional code goes here
```

You want object sr2 to be assigned to object sr1 if the values of the sr1 object is Nothing. The code may be shared by multiple threads and you are required to write code that is thread-safe and provides the best performance.

What should you do?

A. `System.Threading.Monitor.TryEnter(Me)`

```
If (sr1 Is Nothing) Then sr1 = sr2
```

```
System.Threading.Monitor.Exit(Me)
```

B. `System.Threading.Interlocked.Exchange(sr1, sr2)`

C. `If (sr1 Is Nothing) Then`

```
SyncLock (Me)
```

```
If sr1 Is Nothing) Then sr1 = sr2
```

```
End SyncLock
```

```
End If
```

D. `System.Threading.Interlocked.CompareExchange(sr1, sr2, Nothing)`

Answer: D

Explanation: The statement used in the answer should be used because the statement performs two operations comparison and exchange. The value of the first operand with the third operand if there is a match the first operand replaces the second operand.

Incorrect Answers:

A, C: This method should not be used in the scenario because it makes use of two atomic operations comparison and exchange where as the CompareExchange method uses just one.

B: This statement should not be considered for usage as the first operand will always replace the second operand.

QUESTION 256

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Windows Service application that will be used on a multiprocessor system. You are writing code for a class that contains globally accessible Integer variable named Testcounter. The value of the Testcounter will be incremented or decremented from other classes

running in separate threads.

You are required to provide atomic and non-blocking updates for the Testcounter whilst your solution provides the best performance.

What should you do?

- A. The Interlocked class should be used
- B. The Overlapped class should be used
- C. The SynchronizationContext class should be used
- D. The SyncLock statement should be used

Answer: A

Explanation: For this particular scenario the Interlocked class is ideal because you are required to provide atomic and non-blocking updates for a data item.

Incorrect Answers:

B: This option should not be used in the scenario because it is used to transfer information to Win32 API functions.

C: This operation should not be used as you will not be providing atomic and non-blocking updates.

D: This option should not be used as it does not offer atomic operations and offers inferior performance compared to the Interlocked class.

QUESTION 257

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Windows Service application. You are required to synchronize execution of some resources across multiple processes.

What should you do?

- A. Mutex
- B. Interlocked
- C. Monitor
- D. ReaderWriterLock

Answer: A

Explanation: The Mutex class can be used for the synchronization of thread execution across multiple processes.

Incorrect Answers:

B, C, D: The classes in question in these options can not be used in the scenario because they can only be used within a single process.

QUESTION 258

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 graphics application and are busy writing a Point class with two Integer fields shown below:

Class Point

Dim x, y As Integer

Public Sub New(ByVal x As Integer, ByVal y As Integer)

Me.x = x

Me.y = y

End Sub

'Additional code

End Class

You are required to write a method named GetPointPosition that will be used to provide read access to the two Integer fields in the class and prevent inconsistent reads where another reader thread would be able to see a Point object at an invalid position. The Point class makes use of additional code that other applications may use over which you have no control. You must ensure you protect your code against deadlocks.

What should you do?

A. Public Sub GetPointPosition(ByRef x As Integer, ByRef y As Integer)

Dim lockAcquired As Boolean

lockAcquired = Monitor.TryEnter(Me, 2000)

If (lockAcquired) Then

Try

x = Me.x

y = Me.y

Finally

Monitor.Exit(Me)

End Try

End If

End Sub

B. Public Sub GetPointPosition(ByRef x As Integer, ByRef y As Integer)

Monitor.Enter(Me)

Try

x = Me.x

y = Me.y

Catch

Monitor.Exit(Me)

End Try

End Sub

C. Public Sub GetPointPosition(ByRef x As Integer, ByRef y As Integer)


```
Synclock (Me)
x = Me.x
y = Me.y
End SyncLock
End Sub
D. Public Sub GetPointPosition(ByRef x As Integer, ByVal y As Integer)
Monitor.Enter(Me)
Try
x = Me.x
y = Me.y
Finally
Monitor.Exit(Me)
End Try
End Sub
```

Answer: A

Explanation: To have your code protected from being deadlocked you should avoid using the SyncLock statement and replace calls to Monitor.Enter with calls to Monitor.TryEnter.

Incorrect Answers

B, C, D: If a class instance is access publicly the code is beyond your control and may lock an instance in your class which could create deadlocks.

QUESTION 259

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application that uses the CreateDomain method of the AppDomain class to create an application domain.

You are required to set the following properties for the new application domain:

- * Root directory
- * Location of the configuration file
- * Search path that the Common Language Runtime uses to load the assemblies into the domain

You must ensure that these properties values are passed to the CreateDomain method.

What should you do?

- A. An AppDomainFactory
- B. An AppDomainIsolatedTask object
- C. An AppDomainHelper object
- D. An AppDomainSetup object

Answer: D

Explanation: The correct method for achieving your scenario objective is to pass an AppDomainSetup object as parameter to the CreateDomain method. The AppDomainSetup object is used to allow you to specify the root directory and required.

Incorrect Answers:

A: This method is used to create a new AppDomain instance for the Web applications and can not be used to specify setup information for an application domain.

B: The method in question here can be used to create build tasks that can be instantiated in their own application domain but can not be used to specify setup information.

C: This method should not be used in the scenario as it switches into the given application domain and does a callback on the given function and can not be used to specify setup information.

QUESTION 260

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application that will be used for geographical mapping. Whenever you load a plug-in you create a separate application domain and you want to specify a list of directories that are searched for private assemblies. You are required to add the application's base directory as part of your search and need to configure an application domain to meet the requirements.

What should you do?

A. The AppDomainSetup.PrivateBinPathProbe property should be used

B. The AppDomain.BaseDirectory property should be used

C. The AppDomain.DynamicDirectory property should be used

D. The AppDomainSetup.PrivateBinPath property should be used

Answer: D

Explanation: The method used in the answer is used to specify a list of directories under the application's base directory that are probed for private assemblies. This property must be set to specify the locations that should be searched.

Incorrect Answers:

A: This property is set to a non-empty value and excludes the ApplicationBase from the searches and should not be used.

B: This method only specifies the base directory for the application domain and does not specify all the different locations to be searched for private assemblies.

C: This property is used to get the directory that the assembly resolver uses to probe for dynamically created assemblies and is a read-only assembly.

QUESTION 261

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application class library and decide to use the AppDomainSetup class to create an application domain. You are required to create an instance of a type named BillSpace.BillType. You are additionally required to configure the new application domain so that it probes for the assembly containing the type in a specified directory.

What should you do?

- A. The ApplicationBase property of the AppDomainSetup class should be used
- B. The ActivationArguments property of the AppDomainSetup class should be used
- C. The CachePath property of the AppDomainSetup class should be used
- D. The AppDomainInitializerArguments property of the AppDomainSetup class should be used

Answer: A

Explanation:

It is possible to provide the common language runtime with configuration information for a new application domain using the AppDomainSetup class. The most important property is the ApplicationBase when creating your own application domains which is used to define the root directory of the application.

Incorrect Answers:

B: This method is incorrect and should not be used because it sets or gets data about activation of an application domain.

C: This method is incorrect and should not be used because it sets or gets the name of an area specific to the application where files are shadow copied.

D: This method is incorrect and should not be used because it sets or gets AppDomainInitializer delegate which represents a callback method.

QUESTION 262

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

You are in the process of developing a .NET Framework 2.0 system utility application and are required to write some code that allows you to examine assemblies compiled for other platforms of the .NET Framework. You create a new application domain and load assemblies into it. You are required to ensure that code loaded into this context can be examined but not executed. You know the path name

of the file containing the assembly but you do not know the name of the assembly.
What should you do?

- A. The Assembly.ReflectionOnlyLoadFrom method should be used
- B. The Assembly.LoadFrom method should be used
- C. The Assembly.ReflectionOnlyLoad method should be used
- D. The Assembly.Load method should have been used

Answer: A

Explanation: The correct method for what is required would be to use the reflection-only load context because this allows you to only examine the assembly and not execute it.

Incorrect Answers:

B, D: These methods should not be considered for usage because the methods allow you to execute code and create objects.

C: The method in question should not be considered for usage when you only know the path name to where the assembly resides.

QUESTION 263

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Web application and you need to access the configuration data for the application. You do not need read-only access to the configuration data whilst your solution provides the maximum performance.

What should you do?

- A. The GetSection Configuration class should be used
- B. The GetSection ConfigurationManager class should be used
- C. The GetSectionGroup method of the Configuration class should be used
- D. The GetSection method of the WebConfigurationManager class should be used

Answer: D

Explanation: The configuration class in question is designed to programmatically access configuration information for Web applications. The GetSection static method retrieves the cached configuration information.

Incorrect Answers:

A: The method in question does allow programmatic access to all configuration files but it does not cache configuration values for the current application.

B: This should be avoided at all costs as it is best suited for retrieving information for Windows client applications.

C: This method is used to only retrieve specific section groups from the configuration object similar to the GetSection method.

QUESTION 264

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Web application and are busy creating a Configuration object in your application that inherits settings from the applications' web.config file and machine.config file. You modify several of the Configuration objects settings and want to save the Configuration object to a file named testconf.config. You require only the values that differ from the inherited values to be written to the configuration file.

What should you do? (Choose two)

- A. The Save method on the Configuration object should be called
- B. The ConfigurationSaveMode.Full value must be passed as a parameter
- C. The ConfigurationSaveMode.Modified value must be passed as a parameter
- D. The SaveAs method on the configuration object should be called
- E. The ConfigurationSaveMode.Minimal value should be passed as a parameter

Answer: C, D

Explanation: When you are required to write configuration settings to a different file the SaveAs method should be called. If you wish to write only values which differ from inherited values the ConfigurationSaveMode.Minimal value should be passed as a parameter.

Incorrect Answers:

A: This method is used to have the SaveAs method to save all the values to the configuration file that you specified in the scenario.

B: This method is used to have the SaveAs method to only the modified values to the configuration file that you specified in the scenario.

QUESTION 265

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Web application and you are required to extend the standard configuration setting by adding a custom configuration section using the following class:

```
Public Class ConfigHandler  
Public Sub New()
```

End Sub

End Class

You are required to ensure that the class ConfigHandler allows reading and writing to the custom configuration section whilst providing strongly typed access to the custom configuration elements.

What should you do?

- A. The ConfigHandler class must be inherited from the ConfigurationSection class
- B. The ISettingsProviderService interface must be implemented in the ConfigHandler
- C. The IConfigurationSectionHandler interface must be implemented in the ConfigHandler class
- D. The IApplicationSettingsProvider interface must be implemented in the ConfigHandler class

Answer: A

Explanation: The ConfigurationSection is a new class in .NET Framework 2.0 which should be used as it allows you to read and write custom configuration sections. The method in the answer also provides strongly typed access to the custom configuration sections.

Incorrect Answers:

B: This method is used to provide support for specific application settings that are required by the design-time tools and will not help in the scenario.

C: This is an old method of working with custom configuration sections and does not provide the required strongly typed access.

D: This method is only use full when it comes to Windows client applications and you are busy with a Web application.

QUESTION 266

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of maintaining a .NET Framework 1.0 Windows application and need to configure the application to run using the .NET Framework 1.1. The network computers of Certkiller .com all have three versions of .NET Framework (version 1.0, 1.1, and 2.0 installed side-by-side. You are required to modify the application configuration file to target the .NET Framework 1.1 runtime.

What should you do?

A. <configuration>

<startup>

<supportedRuntime version="v2.0.50727"/>

<supportedRuntime version="V1.1.4322"/>

<supportedRuntime version="v1.0.3705"/>

```
</startup>
</configuration>
B. <configuration>
<startup>
<supportedRuntime version="V1.1.4322"/>
<supportedRuntime version="v1.0.3705"/>
</startup>
</configuration>
C. <configuration>
<startup>
<requiredRuntime version="v1.1.4322"/>
</startup>
</configuration>
D. <configuration>
<startup>
<supportedRuntime version="v1.1.4322"/>
</startup>
</configuration>
```

Answer: D

Explanation: To have your applications run under the required runtime in the scenario you should use the configuration section provided in the answer, this is the only correct method.

Incorrect Answers:

A: The method you are trying to use here is incorrect as you would be executing against .NET Framework v2.0.

B: The method you are trying to use here is incorrect as you would be executing against .NET Framework v1.1.

C: This method is used to indicate that the application only supports .Net Framework v1.0 and should not be used in the scenario.

QUESTION 267

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Windows application that will make use of an assembly named BillAssembly. The assembly file BillAssembly.dll is deployed in a folder named Test20 under the application root directory. The BillAssembly assembly was not strongly named

You are required to configure the Windows application to specify the location of the BillAssembly assembly whilst any settings that you change not affect other applications installed on the system.

What should you do?

A. The application configuration file must be modified to add the following setting to the <assemblyBinding> section:

<probing privatePath="Test20\BillAssembly.dll"/>

B. The machine configuration file should be modified to add the following setting to the <assemblyBinding> section:

<codeBase href="Test20"/>

C. The machine configuration file must be modified to add the following setting to the <assemblyBinding> section for the BillAssembly assembly:

<codeBase href="Test20/BillAssembly.dll"/>

D. The application configuration file should be modified to add the following section to the <assemblyBinding> section:

<probing privatePath="Test20"/>

Answer: D

Explanation: Since the BillAssembly assembly is not strongly named the configuration will have to be made at the local level by making use of the application configuration files as is the case in the scenario.

Incorrect Answers:

A, B: The modification of the machine configuration file is incorrect as the assembly in question does not have a unique identity and should not be used.

C: The path here is incorrect since you only need point to the Test20 path in the scenario.

QUESTION 268

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application and are busy developing the shared assembly called BillSharedObjects which resides in a file named BillSharedObjects.dll, upon compiling you store the assembly in the C:\BillSharedObjects\Debug directory. You do not want the assembly to be repeatedly installed in the global assembly cache while you develop and debug. You want the application to load the assembly from its current location by .Net Framework when testing whilst any changes made to the system not affect any other applications that are deployed or will be deployed.

What should you do? (Choose two)

A. C:\SharedObjects\Debug must be put in the PATHEXT environment variable

B. C:\SharedObjects\Debug must be put in the PATH environment variable

C. C:\SharedObjects\Debug must be put in the DEVPATH environment variable

D. The following code should be added to the application configuration file:

<configuration>

<runtime>

```
<assemblyBinding xmlns="urn:schemas-microsoft-com:asm.v1">  
<probing privatePath="c:\SharedObjects\Debug"/>  
</assemblyBinding>  
</runtime>  
</configuration>
```

E. The following code should be added to the machine configuration file:

```
<configuration>  
<runtime>  
<assemblyBinding xmlns="urn:schemas-microsoft-com:asm.v1">  
<dependantAssembly>  
<assemblyIdentity name="BillSharedObjects"  
publicKeyToken="12ac3ab67e0a34b5"  
culture="en-us"/>  
<codeBase version="2.0.0.0"  
href="BillSharedObjects\Debug"/>  
</dependantAssembly>  
</assemblyBinding>  
</runtime>  
</configuration>
```

F. The following code should be added to the machine configuration file:

```
<configuration>  
<runtime>  
<developmentMode developerInstallation="true"/>  
</runtime>  
</configuration>
```

Answer: C F

Explanation: In order for you to achieve the scenario objective you must use the <developmentMode> element and set the developerInstallation attribute to "true" this will let .NET Framework search for assemblies in the DEVPATH environment variable.

Incorrect Answers:

A, B: This method is incorrect as these environment variables are used by Windows and are not used by .NET Framework.

D, E: The usage of the <codeBase> and <probing> elements are incorrect as the one is useful for specifying the search path for private assemblies and the other will affect settings of applications that are already deployed.

QUESTION 269

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Windows service

application that has three distinct Windows services. You create a custom installation class named BillAppInstaller which derives from the Installer class. Within the class you decide to customize installation for each Windows service by using the ServiceInstaller objects and add them to the installer collection below:

Installers.Add(serviceInstaller1)

Installers.Add(serviceInstaller2)

Installers.Add(serviceInstaller3)

You later compile the class and store in a file named BillAppInstaller.dll and you are required to programmatically access and install the Windows services in the BillAppInstaller.dll file.

What should you do?

- A. ManagedInstallerClass
- B. ComponentInstaller
- C. InstallContext
- D. AssemblyInstaller

Answer: D

Explanation: The AssemblyInstaller class should be used in the scenario because the AssemblyInstaller class is capable of loading available installers in an assembly and install them.

Incorrect Answers:

A: This class should not be used in the scenario as this is not for the .NET Framework internal use.

B: This method is used to install components such as event logs and performance counters and should not be used in the scenario.

C: This class should not be used because by itself the class can not help install the installers in an assembly.

QUESTION 270

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Remoting application with the name of your class BillType and the name of the assembly TestAssembly which will be accessed using the Transmission Control Protocol (TCP) at port 1234. You are required to expose BillType as a server-activated object for remote access whilst you must use a configuration file to register the remote object.

What should you do?

- A. <configuration>
- <system.runtime.remoting>
- <application>

```
<service>
<activated type = "BillType, TestAssembly"/>
</service>
</application>
</system.runtime.remoting>
</configuration>
B. <configuration>
<system.runtime.remoting>
<application>
<client url="tcp://localhost:1234/BillType.rem">
<activated type = "BillType, TestAssembly"/>
</client>
</application>
</system.runtime.remoting>
</configuration>
C. <configuration>
<system.runtime.remoting>
<application>
<service>
<wellknown mode = "Singleton"
type = "BillType, TestAssembly"
objectUri = "BillType.rem"
/>
</service>
</application>
</system.runtime.remoting>
</configuration>
D. <configuration>
<system.runtime.remoting>
<application>
<client>
<wellknown type = "BillType, TestAssembly"
url = "tcp://localhost:1234/BillType.rem"
/>
</client>
</application>
</system.runtime.remoting>
</configuration>
```

Answer: C

Explanation: In order to successfully set up an object for remote access the configuration used in the answer is the proper method if you want the object to be activated as a server object.

Incorrect Answers:

A, B, D:

The usage of the <client> element is incorrect as this will be used to configure a program that will consume the remote object and in the scenario you must expose an object for remote access.

QUESTION 271

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application. You complete the application but as soon as users attempt to log on to the application the application fails and you need to have an entry written to the Windows event log. When you look at the event log viewer you want the source of the events to be listed as TestApp. You are required to create an event source that can be used to write entries to the event log.

What should you do?

- A. If Not EventLog.SourceExists("TestApp") Then
EventLog.CreateEventSource("TestApp", "Application")
End If
- B. EventLog.LogNameFromSourceName("TestApp", "Application")
- C. EventLog.LogNameFromSourceName("TestApp", "Security")
- D. If Not EventLog.SourceExists("TestApp") Then
EventLog.CreateEventSource("TestApp", "Security")
End If

Answer: A

Explanation: The code that is used in the answer is the proper code that should be used to create entries into the Application event log.

Incorrect Answers:

B, C, D: The other methods that are used are not correct because the security log is read-only and furthermore the LogNameSourceName method returns the name of an event log for the given event and does not help in creating an event source.

QUESTION 272

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application that will be used to capture application errors like failure to send e-mail messages are logged in the Windows event log. You are required to write only non-localized string messages to the event log. You already previously wrote the event source and need to write

code to create an entry in the error log.
What should you do?

- A. Dim failedEvent As EventInstance = _
Test EventInstance(1001, 0, EventLogEntryType.Error)
Dim messageStrings As Strings() = {"Process1", "Value1"}
myEventLog.WriteEvent(failedEvent, messageStrings)
- B. Dim messageStrings As String() = {"Process1", "Value1"}
myEventLog.WriteEntry(String.Join(", ", messageStrings), _
EventLogEntryType.FailureAudit)
- C. Dim failedEvent As EventInstance = _
Test EventInstance(1001, 0, EventLogEntryType.FailureAudit)
Dim messageStrings As String() = {"Process1", "Value1"}
myEventLog.WriteEvent(failedEvent, messageStrings)
- D. Dim messageStrings As String() = {"Process1", "Value1"}
meEventLog.WriteEntry(String.Join(", ", messageStrings), _
EventLogEntryType.Error)

Answer: D

Explanation: The WriteEntry method of the EventLog class should be used in the scenario as this method is used to write the localized messages to the event log. The usage of the EventLogEntryType.Error value as a parameter is the proper way to use the WriteEntry method.

Incorrect Answers:

A, B, C: The other methods in question are not correct as you would be auditing and you are required to write to the error log of the Windows event log and should not be considered to use.

QUESTION 273

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Windows application named TestAnalyzer.exe that will be used to monitor the Application event log of the local computer to find if any new events are generated by another application named BillNotify.exe which runs on the local computer named Certkiller -WS11. Whenever a new event log entry is recorded the application must invoke the applicationLog_EntryWritten method in response.

You write the code below for the notification of new event log entries:

```
Dim applicationLog As EventLog = Bill EventLog("Application", ".")  
AddHandler applicationLog.EntryWritten, AddressOf  
applicationLog_EntryWritten
```

When you test the application you discover that there are no notifications

generated. You are required to ensure that you are notified of a new event log entries.

What should you do?

- A. The applicationLog.EnableRaisingEvents property must be set to True
- B. The applicationLog.Log property must be set to BillNotify.exe
- C. The applicationLog.MachineName property must be set to Certkiller -WS11
- D. The applicationLog.EnableRaisingEvents property must be set to False

Answer: A

Explanation: The EnableRaisingEvents property of the applicationLog object must be set to true if you want to be notified whenever new entries have been written to the specified event log.

Incorrect Answers:

B: This method is incorrect as the Log property should be used to specify the name of the event log.

C: This is incorrect as this is a redundant operation and the EventLog object is already pointing to Certkiller -WS11.

D: This step is almost what you require but the property of the EnableRaisingEvents should be set to True.

QUESTION 274

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application that will be used for publishing its own custom performance counter. You additionally require the value of a performance counter to increase by 5 and must minimize the amount of code needed to write.

What should you do?

- A. NextValue
- B. Decrement
- C. Increment
- D. IncrementBy

Answer: D

Explanation: To have the value of a counter decreased by the desired amount the best choice of method requiring the least amount of code would be the IncrementBy method.

Incorrect Answers:

A: This is the code used to return the value of the counter and should not be used in the

scenario.

B: The method is used if you want to have the value decreased and in the scenario an increase is needed.

C: This method is used to only increase the value of the counter by one and should not be used.

QUESTION 275

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 time management application that requires opening a file named BillTimeManagement.xls programmatically. All the client computers are equipped with Microsoft Office and file associations have not been modified after installation of the software. You are required to create a ProcessStartInfo object to provide file details to open the file. What should you do?

- A. Dim psi As ProcessStartInfo = Test ProcessStartInfo("BillTimeManagement.xls", "Excel")
- B. Dim psi As ProcessStartInfo = Test ProcessStartInfo("Excel BillTimeManagement.xls")
- C. Dim psi As ProcessStartInfo = Test ProcessStartInfo("Excel", "BillTimeManagement.xls")
- D. Dim psi As ProcessStartInfo = Test ProcessStartInfo("BillTimeManagement.xls")

Answer: D

Explanation: To successfully complete your objective you should use the ProcessStartInfo class that is used to specify an application file name with which the process should start.

Incorrect Answers:

- A: This option should not be used because BillTimeManagement the file to be opened would be used as a command line argument.
- B: This method should not be used as the file name Excel BillTime Management.xls will be treated as the file name in the scenario.
- C: This option should not be considered for use as Excel would be the file name and BillTimeManagement would be a command line argument

QUESTION 276

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Windows application that provides a user interface similar to Microsoft Excel and allows users to manage their expenses. You recently wrote a wrapper around the expense management application which performs security checks. If the users has the sufficient rights the wrapper application launches the expense management application, if no sufficient rights the application should be forced to close. You must decide which method of the Process class to use.

What should you do?

- A. Kill
- B. Close
- C. Dispose
- D. CloseMainWindows

Answer: A

Explanation: To successfully have an application forcefully close or shutdown the Kill method should be used as it forces an immediate termination of the process.

Incorrect Answers:

B: This method should not be used as the Close method is used to free resources associated with the application process.

C: This method should not be used in the scenario as it is generally used to implement cleaning of unmanaged resources.

D: This method should not be used as this method requests that the application be closed and we require closing the application forcefully.

QUESTION 277

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Windows application that has the following configuration settings.

```
<system.diagnostics>
<switches>
<add name="BooleanSwitch" value="1"/>
<add name="TraceLevelSwitch" value="1"/>
</Switches>
</system.diagnostics>
```

You started coding your Windows application further by creating switch objects using the following statements:

```
Dim ts As Boolean Switch = Test BooleanSwitch("BooleanSwitch", "Boolean
Switch")
```

```
Dim ks As TraceSwitch = Bill TraceSwitch("TraceLevelSwitch", "Trace
Switch")
```

You are required to select what the outcome would be of executing the command s in the scenario.

What should you do? (Choose two)

- A. The TraceLevelSwitch switch objects trace level is set to TraceLevel.Info
- B. The BooleanSwitch switch object is disabled
- C. The TraceLevelSwitch switch objects trace level is set to TraceLevel.Warning
- D. The BooleanSwitch switch object is enabled
- E. The TraceLevelSwitch switch objects trace level is set to TraceLevel.Error

Answer: D, E

Explanation: The Boolean objects can be considered to be either On or Off. The value 0 corresponds to being off whereas a non-zero value indicates the objects are On.

Incorrect Answers:

A, C: The usage of the TraceSwitch class is used to provide different levels of tracing switches which are defined by the enumeration as Off -0, Error -1, Warning -2, Info -3 and Verbose -4.

B: The value 1 will have the BooleanSwitch object enabled and a value of 1 will set the TraceLevelSwitch objects to have a trace level to TraceLevel.Error.

QUESTION 278

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application and write the following code in you Bill program:

```
Dim logFile As Stream = File.Create("C:\BillLogFile.tct")
Dim twtl As TextWriterTraceListner = Test
TextWriterTraceListner(logFile)
Trace.Listners.Add(twtl)
Trace.WriteLine("Bill Message 1")
Debug.WriteLine("Bill Message 2")
Trace.Flush()
```

You need to know what output will be generated in the C:\BillLogFile.txt file when you run the Bill program in debug mode.

What should you do?

- A. Bill Message 1
- B. Bill Message 2
- C. The C:\BillLogFile.txt file is empty
- D. Bill Message 1
Bill Message 2

Answer: D

Explanation: The program if run in debug mode both the Trace and Debug statements will be executed as their object is sent to the listener object.

Incorrect Answers:

A, B, C: The other mentioned methods are all incorrect because if you run the application in debug mode both the Tracer and Debug statements will be executed.

QUESTION 279

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 console application that will be used to enumerate all disk drives on the local computer and list their drive letter and available free space. You are required to make use of the functionality in the System.Management namespace to accomplish the task.

What should you do?

A. Dim tq As SelectQuery = Test SelectQuery _
("Win32_LogicalDisk")
Dim tos As ManagementObjectSearcher = _
Test ManagementObjectSearcher(tq)
For Each to As ManagementObject In Tos.Get()
Console.WriteLine("Drive {0}, Free Space {1}". _
to("DeviceID"), to("NumberOfBlocks"))
Next

B. Dim tq As SelectQuery = Test SelectQuery _
("Select *from Win32_LogicalDisk")
Dim tos As ManagementObjectSearcher = _
Test ManagementObject Searcher(tq)
For Each To As ManagementObject In tos.Get()
Console.WriteLine("Drive {0}, to("FreeSpace"))
Next

C. Dim tq As SelectQuery = TestSelectQuery _
("Win32_LogicalDisk")
Dim tos As ManagementObjectSearcher = _
Test ManagementObjectSearcher(tq)
For Each to As ManagementObject In tos.Get()
Console.WriteLine("Drive {0}, FreeSpace {1}", _
to("DeviceID"), to("NumberOfBlocks"))
Next

D. Dimts As SelectQuery = Test SelectQuery _
("Win32_LogicalDisk")

```
Dim tos As ManagementObjectSearcher = _  
Test ManagementObjectSearcher(tq)  
For Each to As ManagementObject In tos.Get()  
Console.WriteLine("Drive {0}, Free Space {1}", _  
to("Name"), to("FreeSpace"))  
Next
```

Answer: D

Explanation: The correct way to have your code display what is required in the scenario would be to write the code specified in the answer this will list the drive letters and available free space.

Incorrect Answers:

A, B, C: The usage of the Win32_LogicalDisk management object is incorrect as this will not return the drive letter and furthermore the usage of the NumberOfBlocks property should not be used because it will return the block size of each disk rather than the free space.

QUESTION 280

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Windows application. You require finding the current IP address of the local computer and need to create a SelectQuery object in your application that enables the retrieval of the current IP address.

What should you do?

- A. Dim tq As SelectQuery = Test SelectQuery ("SELECT IPAddress FROM _Win32_NetworkAdapterConfiguration")
- B. Dim tq As SelectQuery = Test SelectQuery ("SELECT IPXAddress FROM _Win32_NetworkAdapterConfiguration")
- C. Dim tq As SelectQuery = Test SelectQuery ("SELECT NetworkAddress FROM _Win32_NetworkAdapter")
- D. Dim tq As SelectQuery = Test SelectQuery ("SELECT MacAddress FROM Win32_NetworkAdapter")

Answer: A

Explanation: The proper way to go in the scenario would be to query the Win32_NetworkAdapterConfiguration object as this property is associated with the network adapter configuration.

Incorrect Answers:

B: This method should not be used as there is no statement about an IPXAddress in the

scenario.

C: This should not be used as it is an unimplemented method which returns nothing by default.

D: This method is used to return the machine address for a network adapter which is a unique 48-bit id assigned to the network card by the manufacturer.

QUESTION 281

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Windows application.

You are required to asynchronously monitor the creation of new Windows processes and write the following code:

```
Dim query As WqlEventQuery = Test
WqlEventQuery("_InstanceCreationEvent",_
Bill TimeSpan(0, 0, 5), "TargetInstance is a ""Win32_Process""")
Dim watcher As ManagementEventWatcher = Test ManagementEventWatcher()
watcher.Query = query
```

You are in the process of adding additional code for the asynchronous monitor to work and need to know which code segment to use.

What should you do? (Choose two)

- A. watcher.Stop()
- B. Dim e As ManagementBaseObject = watcher.WaitForNextEvent()
- C. AddHandler watcher.EventArrived,AddressOf Process_Created
- D. watcher.Start

Answer: C, D

Explanation: The correct method would be for you to start with using the Start method of the ManagementEventWatcher class to asynchronously monitor the creation of processes. In order for you to receive notifications an event handler should be added.

Incorrect Answers:

A: This is the correct method used to have the monitor stop monitoring events.

B: The usage of the method is used for waiting for when the events occur and leads to synchronous processing.

QUESTION 282

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 class library and you create the classes below:

```
Public Class Book
```

```
Public Name As String
```

```
End Class
```

```
Public Class Encyclopedia
```

```
Inherits Book
```

```
Public Volume As Integer
```

```
End Class
```

You are required to serialize the objects in the encyclopedia class to a disk file.

What should you do?

- A. The <Serializable> attribute should be added to the Book class and the <Serializable> attribute should be added to the Encyclopedia class
- B. The <Serializable> attribute should be added to the Book class only
- C. The <Serializable> attribute should be added to the Encyclopedia class only
- D. The <Serializable> attribute should be added to the Encyclopedia class and the <NonSerialized> attribute should be added to the Name field

Answer: A

Explanation: As the Serializable attribute is not inherited by the derived classes you should add the attribute to both classes in the scenario.

Incorrect Answers:

B, C: If you only marked one of the classes with the Serializable attribute you would not be capable of completing your scenario objective.

D: If you configured the application this way the program would return a runtime error, meaning this should not be used.

QUESTION 283

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application and create the following class in the application:

```
Public Class Model
```

```
Public Name As String
```

```
End Class
```

You are required to deserialize the data in testmodel.xml in an object of the Model type. The contents of testmodel.xml are shown below, if you encounter unknown elements the method named Model_Unknown should be executed:

```
<?xml version="1.0" encoding="utf-8"?>
```

```
<Model xmlns:xsi=http://www. Certkiller .com/XMLSchema-instance  
xmlns:xsd=http://www. Certkiller .com/XMLSchema>
```



```
<Number>123</Number>
<Name>Model1</Name>
<Style>Business</Style>
<Size>Large</Large>
</Model>
```

What should you do?

A. Private Sub DeserializeModel(ByVal filename As String)
Dim xs As XmlSerializer = Test XmlSerializer(GetType(Model))
AddHandler xs.UnknownElement, AddressOf Model_Unknown
Using fs As FileStream = _
 Bill FileStream(filename, FileMode.Open)
Dim testModel As Model = CType(xs.Deserialize(fs), Model)
End Using
End Sub

B. Private Sub DeserializeModel(ByVal filename As String)
Dim xs As XmlSerializer = Test XmlSerializer(GetType(Model))
Using fs As FileStream = _
 Bill FileStream(filename, FileMode.Open)
Dim testMofel As Model = CType(xs.Deserialize(fs), Model)
End Using
End Sub

C. Private Sub DeserializeModel(ByVal filename As String)
Dm xs As XmlSerializer = Test XmlSerializer(GetType(Model))
AddHandler xs.UnknownAttribute, AddressOf Model_Unknown
Using fs As FileStream = _
 Bill FileStream(filename, FileMode.Open)
Dim testModel As Model = CType(xs.Deserialize(fs), Model)
End Using
End Sub

D. Private Sub DeserializeModel(ByVal filename As String)
Dim xs As XmlSerializer = Test XmlSerializer(GetType(Model))
Using fs As FileStream = _
 Bill FileStream(filename, FileMode.Open)
Dim testModel As Model = CType(xs.Deserialize(fs), Model)
End Using
End Sub

Answer: A

Explanation: The proper way to achieve the scenario objective is shown in the answer, the UnknownElement event will be raised when the XmlSerializer encounters an XML element such as number, style and size.

Incorrect Answers:

B, C, D: The other events should not be considered for use in the scenario because the UnknownAttribute event is raised when such an event is encountered. Further more the

unreferencedObject should not be used as this event is raised when types are encountered that are not being used.

QUESTION 284

You work as an application developer at Certkiller .com. You have just completed the creation of an application that receives order data from Certkiller .com's partner company in XML format.

The XML has to be utilized to create an Order object that is consumed by the new application.

The following exhibit displays an example of Certkiller .com's partner company's XML data:

```
<?xml version="1.0" encoding="utf-8"?>
<Order id="101">
  <Shipping>
    <Instructions>
      Come to front door and ring door bell.
      No other options.
    </Instructions>
    <Address>
      <Street> 786 Certkiller .com Lane</Street>
      <City>Atlanta</City>
      <State>GA</State>
      <Zip>30350</Zip>
    </Address>
  </Shipping>
  <Date>2007-07-12T00:00:00-04:00</Date>
  <Details>
    <SalesProduct InStock="true" Taxable="true">
      <Name>Lounge Suite</Name>
      <Quantity>1</Quantity>
      <Price>2000.00</Price>
    </SalesProduct>
    <Product InStock="false">
      <Name>Plasma Television</Name>
      <Quantity>2</Quantity>
      <Price>26.999.00</Price>
    </Product>
  </Details>
</Order>
```

You plan to use the XmlSerializer class to deserialize the XML data into an Order object. When you learn that Certkiller .com's partner company's XML also contains Shipping object data, you decide to deserialize the shipping object after the Shipping element is detected during deserialization.

To achieve this, you need to use a certain event of the XmlSerializer class. What event should you use?

- A. UnknownElement
- B. UnknownNode
- C. UnreferencedObject
- D. UnknownAttribute

Answer: B

Explanation: The UnknownNodeevent is fired when an unexpected element or node is detected that does not map to the XmlSerializer object's expected type. The UnknownNode event included the XmlNodeEventArgs, which allows access to the entire node of the XML data. This would allow easy deserialization for the Shipping object.

Incorrect Answers:

A, C, D: These options would not allow easy deserialization for the Shipping object.

QUESTION 285

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application and write the code below as your own code:

```
Public Class Book
Public Name As String
End Class
Public Class Library
<XmlArray("ID1")
<AmlArrayItem("ID2")
Public Book As Book()
End Class
```

You are required to create an object of the Library type and serialize it to disk in a file named Certkiller books.xml and write the following code:

```
Dim books As Book() = Test Book()
{Test Book(), Test Book(), Test Book()}
books(0).Name = "Book Name 1"
books(1).Name = "Book Name 2"
books(2).Name = "Book Name 3"
Dim library As Library = Bill Library()
library.Books = books
Dim testSerializer As XmlSerializer = _
New XmlSerializer(GetType(Library))
Using BillWriter As StreamWriter = _
New StreamWriter(" Certkiller books.xml")
testSerializer.Serialize(BillWriter, library)
End Using
```

You are required to choose from the following selection which output will be generated by the program.
What should you do?

A. <Library>

```
<ID1>
<Book>
<ID2>Book Name 1</ID2>
</Book>
<Book>
<ID2>Book Name 2</ID2>
</Book>
<Book>
<ID2>Book Name 3</ID2>
</Book>
</ID1>
</Library>
```

B. <Library>

```
<Books>
<ID1>
<ID2>Book Name 1</ID2>
</ID1>
<ID1>
<ID2>Book Name 2</ID2>
</ID1>
<ID1>
<ID2>Book Name 3</ID2>
</ID1>
</Books>
</Library>
```

C. <Library>

```
<ID2>
<ID1>
<Name>Book Name 1</Name>
</ID1>
<ID1>
<Name>Book Name 2</Name>
</ID1>
<ID1>
<Name>Book Name 3</Name>
</ID1>
</ID2>
</Library>
```

D. <Library>

```
<ID1>
<ID2>
```

```
<Name>Book Name 1</Name>
</ID2>
<ID2>
<Name>Book Name 2</Name>
</ID2>
<ID2>
<Name>Book Name 3</Name>
</ID2>
</ID1>
</Library>
```

Answer: D

Explanation: The proper and best way for you to achieve your scenario objective would be to use the code specified in the answer this will serialize the required data into the Certkiller books.xml file.

Incorrect Answers:

A, B, C: The other mentioned methods should not be considered for use as they will most likely change the name of the array element to which it is applied.

QUESTION 286

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 remoting application. Your computer system relies on run-time type validation. You are required to deserialize a remote stream by using the BinaryFormatter class in your application whilst you configure the BinaryFormatter object to protect against any deserialization attacks by deserializing only certain types associated with only the most basic remoting functionality.

What should you do?

- A. The TypeFormat property should be set to FormatterTypeStyle.TypesAlways
- B. The TypeFormat property should be set to FormatterTypeStyle.TypesWhenNeeded
- C. The FilterLevel property should be set to TypeFilterLevel.Full
- D. The FilterLevel property must be set to TypeFilterLevel.Low

Answer: D

Explanation: The best choice for you in the scenario would be to use the FilterLevel property of the BinaryFormatter object set to TypeFilter.Low which deserializes only the most basic remoting functionality helping to protect against deserialization attacks.

Incorrect Answers:

A, B: The setting can not be used to set the deserialization of types because it just configures how the types are laid out in the deserialization stream.
C: This setting should not be used as you will be deserializing all types and this offers no protection against deserialization attacks in the scenario.

QUESTION 287

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 geographical information system for the company and create a class named Certkiller GeogCode.

You are required to serialize all public and non-public data of the Certkiller GeogCode class whilst you ensure that you produce the smallest byte stream so that the smallest load is placed upon network resources.

What should you do?

- A. The XmlSerializationWriter class should be used
- B. The XmlSerializer class should be used
- C. The BinaryFormatter class should be used
- D. The SoapFormatter class should be used

Answer: C

Explanation: To successfully serialize all the public and non-public data you should make use of the BinaryFormatter class because in addition the BinaryFormatter class produces the most compact byte stream compared to other serialization classes.

Incorrect Answers:

A, B: The XmlSerializer class should not be used as this class only serializes public properties and fields and the XmlSerializationWriter class is used to control serialization by using the XmlSerializer class and fails to meet requirements.

D: The SoapFormatter class could be used as it will allow you to serialize public and non-public data but the result of the stream will be a verbose one and will consume more network resources.

QUESTION 288

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 resource management utility and you write the code below as part of your program:

```
Dim dirInfo As DirectoryInfo = Bill.DirectoryInfo("c:\Test1")
```

```
dirInfo.MoveTo("c:\Bill2")
```

Both of the required folders exist when you run the application and the code has the required permissions to work with c:\Test1 and c:\Bill2. You are required to select the outcome when you execute your application.

What should you do?

- A. The c:\Test1 directory will be moved within the c:\Bill2 to become c:\Bill2\Test1
- B. The c:\Test1 directory will be renamed to c:\Bill2
- C. An ArgumentException will be thrown by the code
- D. An IOException will be thrown by the code

Answer: D

Explanation: In the scenario the target directory already exists therefore the method in question will throw an IOException as it wants to create the folder.

Incorrect Answers:

A: This will not be the outcome of the situation you should have specified c:\Bill2\Test1 as the target directory then this would be correct.

B: The Directory will only be renamed if the target does not exist in the scenario the target exists.

C: This will only be thrown if in the event the target directory is an empty string.

QUESTION 289

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 financial application and are busy developing a module that backs up the critical data on a separate hard drive. You are required to decide which properties of the DriveInfo class to use and find the type of file system like FAT or NTFS and the drive free space and the user disk quota should be ignored by the application.

What should you do? (Choose two)

- A. DriveFormat
- B. TotalFreeSpace
- C. AvailableFreeSpace
- D. DriveType
- E. VolumeLabel
- F. TotalSize

Answer: A, B

Explanation: The only choice that would work with your requirement is the DriveFormat and TotalFreeSpace properties of the DriveInfo class, this will display

what you need.

Incorrect Answers:

C: The property should not be used as the user disk quota would be taken into account.

D: This property should not be used as it only specifies whether the drive is a DVD ROM or fixed drive etc.

E: This property should not be used in the scenario as it is used to give a name to the fixed disk.

F: This property should not be used as it will specify the entire disk space not just free space.

QUESTION 290

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 resource management utility that will be used to monitor for the creation of a file with the .res extension in c:\Test1. When such a file is created you will execute code to read and process its contents. You are required to write the code that enables you to monitor the creation of the .res file.

What should you do? (Choose two)

A. Dim watcher As FileSystemWatcher = Test FileSystemWatcher()

watcher.path = "c:\Test1"

watcher.Filter = "*.res"

B. Watcher.WaitForChanged(WatcherChangeTypes.Created)

C. watcher.NotifyFilter = NotifyFilters.CreationTime

D. watcher.EnableRaisingEvents = True

E. Dim watcher As FileSystemWatcher = Test FileSystemWatcher()

watcher.Filter = c:\Test1*.res"

Answer: A, B

Explanation: The first step will be to create the FileSystemWatcher object and set its path and filter properties and finally the WaitForChanged method should be invoked in the scenario this will let you achieve your objective.

Incorrect Answers:

C: This method should not be used in the scenario as it is used to specify which of the notification events are invoked in the scenario when a file is changed.

D: This property should only be created when you have coded event handlers in the scenario that is the only time this method would be use full.

E: This method should not ever be considered for use in the scenario because the filter property is used to specify the file pattern only the path should not be included there.

QUESTION 291

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 data analysis application. You have no information about the inherent structure of a file when it is supplied to the program for reading data. You are required to read the contents of the file byte-by-byte and make use of a custom algorithm to find its format whilst selecting a class that allows you to read the files contents byte-by-byte.

What should you do?

- A. FileStream
- B. BinaryReader
- C. StreamReader
- D. StringReader

Answer: A

Explanation: The purpose and function of the FileStream class is to allow the user to be able to view the required files byte-by-byte.

Incorrect Answers:

B: The BinaryReader class is use full if you know the binary format for the data to read but should not be considered for use in the scenario.

C: This method is use full if you want to read character data in a particular encoding, but is not useful for reading any other data.

D: This class is used for reading text from a string and is not use full for reading any other data.

QUESTION 292

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 text-processing application and you have access to an array of bytes named BillArray that contains your data. You are busy writing code that will be used to write the contents of the array to a disk file. If you are done with the write operation you also display the contents of the stream on the console to make sure that the write operation completes successfully. The code segment to read and write from the stream is shown below and the line numbers are reference only:

01: Using fs As FileStream = Test FileStream("TestFile.txt",
 FileMode.Create)

02: For I As Integer =) To BillArray.Length

```
03: fs.WriteByte(BillArray(i))
04: Next i
05: 'Code to be added here
06: For I As Integer = 0 To fs.Length
07 Console.WriteLine(fs.ReadByte())
08: Next i
09: End Using
```

You are required to insert the required code at line 05 to correctly print the contents of the stream.

What should you do?

- A. Fs.Seek(0, SeekOrigin.End)
- B. Fs.Position = fs.Length
- C. Fs.Seek(0, SeekOrigin.Current)
- D. Fs.Seek(0, SeekOrigin.Begin)

Answer: D

Explanation: Because after every write operation is completed you need to reposition the stream so that you can read the contents from the beginning which is done with the statement in the answer, the first parameter will specify the offset, the second the reference point for the seek operation and the value SeekOrigin.Begin indicates that the reader should be positioned at the beginning of the stream.

Incorrect Answers:

A, C: The method in the statement is incorrect because you are referencing the end or the current part of the stream which you are trying to manipulate.

B: This statement should not be used because it sets the current position of the stream to its length effectively referencing the end of the stream.

QUESTION 293

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 banking Windows Forms application and are busy working on a function that retrieves the images of cancelled checks and displays them on the form. You currently have access to a method that reads the images from Microsoft SQL server as a series of bytes. You are required to select a class that allows you to transfer the image from SQL Server to the Windows Forms application whilst your solution reduces the need of a temporary buffers and files

What should you do?

- A. MemoryStream
- B. NetworkStream

- C. FileStream
- D. BufferedStream

Answer: A

Explanation: With the given scenario objective you should use the MemoryStream class which allows you to read the image data in memory and stream it to a Windows Forms application without creating any temporary buffers or files.

Incorrect Answers:

B: There is no connection established directly to the SQL Server database so using this option is out of the question.

C, D: The streaming class in question in this option is incorrect because both require the creation of temporary files or buffers.

QUESTION 294

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 text manipulation application and you make use of the code below in your application:

```
Dim tb As StringBuilder = Test StringBuilder(":string:")
Dim b() As Char = {"a"c,"b"c, "c"c, "d"c, "e"c, "f"c, "g"c}
Dim tw As StringWriter = New StringWriter(tb)
tw.Write(b, 0, 3)
Console.WriteLine(tb)
tw.Close()
```

You are required to select from the following what the output will be when you execute the application.

What should you do?

- A. :stabcddefg
- B. abc:string:
- C. abcring:
- D. :string:abc

Answer: D

Explanation: Since the specific overload of the Write method takes character array and reads three characters starting from the index 0 and appends them to the underlying StringBuilder object this is the proper choice in the scenario.

Incorrect Answers:

A, C: Both of the streams are incorrect and should not be used because the StringWriter is sequential and will not go back and overwrite the characters that already exist in the underlying StringBuilder object.

B: This is the incorrect response because the characters will append to the end of the underlying StringBuilder object in the scenario.

QUESTION 295

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 graphical analysis application. You are about to save a graphical object from the application which is a collection of x and y points, each represented by using a single precision floating point number. You are required to keep the disk space usage to a minimum by the saved object.

What should you do?

- A. TextWriter
- B. StreamWriter
- C. StringWriter
- D. BinaryWriter

Answer: D

Explanation: The BinaryWriter class is used to store data in a binary format, which is used to provide the most compact format for storing data among the given classes.

Incorrect Answers:

A, B, C: The classes in question all save or store data in the text format, which will require more space than the binary format and therefore should not be used in the scenario.

QUESTION 296

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Windows application that uses a shared assembly personalizing the user interface of the application. The assembly in question is used by several other applications on the user's computer and any changes made to the user preferences in one application should be carried over to other applications. You are required to access the user's preferences for displaying the user interface.

What should you do?

- A. The IsolatedStorageFile.GetUserStoreForDomain method should be used
- B. The IsolatedStorageFile.GetMachineStoreForDomain method should be used

- C. The `IsolatedStorageFile.GetMachineStoreForAssembly` method should be used
- D. The `IsolatedStorageFile.GetUserStoreForAssembly` method should be used

Answer: D

Explanation: To successfully read the user's preferences you should make use of the `IsolatedStorageFile.GetUserStoreForAssembly` method should be used. The method retrieves assembly-specific and user-specific data from the isolated storage.

Incorrect Answers:

A: This method should not be used in the scenario as it is designed too retrieve isolated storage that is application domain and assembly specific.

B, C: The settings in question should not be used because the methods are machine-scoped rather than user scoped.

QUESTION 297

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application on a workstation used as collateral and you write the following code in the application line numbers are for reference only:

```
01: Public Function Proc Count() As Integer
02: Dim envPerm As EnvironmentPermission = _
03: New EnvironmentPermission(_
04: EnvironmentPermissionAccess.Read,_
05: "NUMBER_OF_PROCESSORS")
06:
07: Return Environment.ProcessorCount
08: End Function
```

The `ProcCount` method in the code will be used to return the number of processors on the computer running the code and the implementation of the method is completely transparent to the callers of the methods. You ensured that the `ProcCount` method has been granted permission to access environment variables and the callers to the code may not have permission to access the variables.

The classes in the other assemblies are required to be able to successfully call the `ProcCount` method. You must additionally write code at line 06 to override the security check whilst you ensure that any code you write does not affect the permissions that your code already has.

What should you do?

- A. `envPerm.PermitOnly()`
- B. `envPerm.Demand()`
- C. `encPerm.Deny()`
- D. `envPerm.Assert()`

Answer: D

Explanation: The envPerm.Assert() method should be used in the scenario because the method allows your code and any code that you call to perform actions that your code has permissions to perform however the callers may not have permissions to perform.

Incorrect Answers:

A: The PermitOnly method should not be used in the scenario because it will result to the same action as calling Deny on all permissions other than the permission P and this will affect other permissions.

B: This method should not be considered for use in the scenario because the Demand method requires all the callers to have permissions to perform the specific action.

C: The Deny method should not be considered for usage in the scenario because the method will explicitly cause the Permission P to be denied and you are required to ensure permissions are applied to the code.

QUESTION 298

You work as an application developer at Certkiller .com. A fellow developer named Amy Walsh recently created an assembly that implements a custom permission set. Certkiller .com has asked you to test this assembly. You start by copying the assembly to a test server named Certkiller -SR15 that has the Microsoft .NET 2.0 Framework installed. You then log on to the Certkiller -SR15 as a member of the local Administrators Windows group.

You run the assembly, and receive a security exception. You perform a brief analysis of the security issues involved, and find that the assembly has not been assigned the appropriate permissions to run.

You need to ensure that this assembly runs.

What should you do?

- A. Use the permview.exe tool to modify the assembly's granted permissions.
- B. Use the sn.exe tool to modify the assembly's granted permissions.
- C. Use the caspol.exe tool to modify the assembly's granted permissions.
- D. Use the gacutil.exe tool to modify the assembly's granted permissions.

Answer: C

Explanation: The caspol.exe command-line tool allows users to modify security permissions, permission sets, and code groups for an assembly at the machine, user, and enterprise policy levels.

Incorrect Answers:

A: The permview.exe tool only allows users to view declarative security of an assembly.

B: The sn.exe tool allows developers to create a strong-named asymmetric key pair for strong-named assemblies.

D: The gacutil.exe tool allows users to manage the contents of the global assembly and download cache.

QUESTION 299

You work as an application developer at Certkiller .com. Certkiller .com has a test server named Certkiller -SR09 that is frequently used by other Certkiller .com developers to test assemblies and applied security policies.

You have just completed creating an assembly and want to test it on Certkiller -SR09. you need to ensure that all security policies on Certkiller -SR09 are reset to their default settings.

What should you do?

- A. Execute the caspol all -rollback command.
- B. Execute the caspol all -reset command.
- C. Execute the machine all -rollback command.
- D. Execute the machine all -reset command.

Answer: B

Explanation: The caspol.exe command-line tool allows users to modify security permissions, permission sets, and code groups for an assembly at the machine, user, and enterprise policy levels. The reset switch will set the specified security policy or policies back to their default state. The all switch refers to machine, user, and enterprise policy levels.

Incorrect Answers:

A, C: The rollback switch does not exist for the caspol.exe tool.

D: This option will not set all security policies back to their default state.

QUESTION 300

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application and are about to examine the code groups in machine, user, and enterprise policies. The user security policy file is located in c:\test\Bill\config\ Certkiller Security.config and belongs to a user other than the currently logged on user.

You are required to use code access security policy tool to inspect the security policy and need the required command.

What should you do?

- A. caspol -customall -resolvegroup "c:\test\Bill\config\ Certkiller Security.config"
- B. caspol -customer "c:\test\Bill\config\ Certkiller Security.config" -listgroups
- C. caspol -customer -resolvegroup "c:\test\Bill\config\ Certkiller Security.config"
- D. caspol -customall "c:\test\Bill\config\ Certkiller Security.config" -listgroups

Answer: D

Explanation: Since the -customall option is used to specify that the command applies to the enterprise, machine and custom user policy stored in the "c:\test\Bill\config\ Certkiller Security.config file making this the correct option to use in the scenario. The -listgroup option is used to specify the code groups in the specified policies that need to be listed.

Incorrect Answers:

A, C: The usage of the -resolvegroup option in the scenario is incorrect because the -resolvegroup option is used to show the code groups that the specified user belongs to.
B: The option in question in this answer should not be used in the scenario because the option is used to specify only the code groups of the specified user policy.

QUESTION 301

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application on a workstation used as collateral and you create an assembly that implements a custom security object. The assembly resides in the CusPerm.exe file, CusPerm.exe references the classes in the BasePerm.exe assembly. You are required to write a script that will be used to add the assembly to the full trust assembly list of the currently logged on user whilst the user will never have write access to the machine policy file.

What should you do? (Choose two)

- A. caspol -addfulltrust CusPerm.exe
- B. caspol -addfulltrust BasePerm.exe
- C. caspol -enterprise -addfulltrust BasePerm.exe
- D. caspol -enterprise - addfulltrust CusPerm.exe
- E. caspol -machine - addfulltrust BasePerm.exe
- F. caspol -machine - addfulltrust CusPerm.exe

Answer: A, B

Explanation: The caspol.exe tool is used to allow you to modify the code access security policy at the user level, machine level as well as the enterprise level and using the -addfulltrust option adds an assembly that implements a custom security object to a list of fully trusted assemblies.

Incorrect Answers:

C, D, E, F: In the event that there is no policy level specified the caspol.exe tool checks if the user has write permission to the machine policy file if so the machine level security policy will be used otherwise the user-level policy will be used.

QUESTION 302

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application on a workstation used as collateral and you must add a new code group which adds FullTrust permissions to the code originating from www. Certkiller .com. You are required to use the code access security policy tool (Caspol.exe to add the code group whilst you ensure that you only affect the user level policy for the user running Caspol.exe

What should you do?

- A. Caspol -user -addgroup -site www. Certkiller .com FullTrust
- B. Caspol -user -addgroup -zone Internet
- C. Caspol -user -addgroup -url www. Certkiller .com FullTrust
- D. Caspol -user -addgroup -pub - cert test.cer FullTrust

Answer: A

Explanation: The correct thing to do in the scenario would be to make use of the segment that used -user to specify only the user level policy, the -addgroup argument to add a new code group to the code hierarchy and the -site argument that targets code that originated only from www. Certkiller .com.

Incorrect Answers:

B: This method should not be used in the scenario because it is used to simply add a new code group that is a member of the Internet Zone.

C: This command should not be used in the scenario because it should be used to specify a complete url including the protocol like http"// etc.

D: The command should not be used in the scenario as the method does not specify a Web site and the -pub argument is used to identify the software publisher.

QUESTION 303

You work as an application developer at Certkiller .com. Certkiller .com has been contracted by a local doctor's clinic to develop a client application using Microsoft .NET 2.0 that sends patient visit information to a remote server at the clinic's main office.

This data must be transmitted via a secure network stream because it contains patient protected health information (PHI). The data will be sent from a windows application client on the doctor's notebook computer to a windows service hosted on a remote server. Both of these applications employ a certificate store for network identification.

You need to create a secure data stream by adding certain classes to the client application.

What classes should you add? (Choose three)

- A. The MD5CryptoServiceProvider class.
- B. The X509Certificate class.
- C. The NetworkStream class.
- D. The SslStream class.
- E. The TcpListener class.
- F. The TcpClient class.

Answer: B, D, F

Explanation: You should use the X509Certificate class to store the server certificate and encrypt data, the SslStream class to create a secure channel, and the TcpClient class to establish the connection with the server application.

Incorrect Answers:

- A: Using this option would only hash the data using the MD5 algorithm.
- C: Using this option would not necessarily create a secure channel.
- E: This class is used by the server application.

QUESTION 304

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application that will be used for transmitting contents over the Internet and you need to encrypt a data file before transmitting the file. The encryption is required to prevent any spoofing of the identity of the publisher of the data file. You decide to sign the data using the publisher's private key and you encrypt the data with the publisher's public key as well.

The receiver of the file will use a private key that only he knows to decrypt the data and the receiver has access to the publisher's public key also. The intended receiver of the file should be able to decrypt the encrypted file after it was received through the Internet transmission whilst the receiver should additionally be able to detect if the contents of the data file were tampered with.

What should you do?

- A. The RSACryptoServiceProvider class should be used in the scenario
- B. The RijndaeManaged class should be used in the scenario
- C. The SHA1CryptoServiceProvider class should be used in the scenario
- D. The SHA1Managed class should be used in the scenario

Answer: A

Explanation: Since the RSACryptoServiceProvider class implements an asymmetric cryptography algorithm that makes use of a set of related keys to encrypt and

decrypt data this class is the correct choice in the scenario.

Incorrect Answers:

B: This class should not be used in the scenario because the RijndaeManaged class implements a symmetric cryptography algorithm that uses a single shared secret key for encrypting and decrypting data.

C, D: The classes in these two options should not be used in the scenario because the classes both implement a hash algorithm that can be used to detect tampering but they can not be used to establish the identity of the data file's publisher.

QUESTION 305

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application and are busy creating a default instance of the Rijndael symmetric algorithm class and configure it with a key that is generated from a password. The following code you wrote, line numbers are for reference only:

01: Dim val1 As Double = 0

02: Dim salt(16) As Byte

03: Dim passDerBytes As PasswordDeriveBytes = Test
PasswordDeriveBytes(password, salt)

04: Dim key As Byte() = passDerBytes.GetBytes(16)

05: Dim cryptoRij As = Rijndael.Create()

06: cryptorij.Key = key

The variable that is named salt acts as a seed to the key derivation algorithm and you are required to insert additional code before line 03 that stores a random number in the salt variable.

What should you do?

A. Dim rNum As RandomNumberGenerator = RandomNumberGenerator.Create()
rNum.GetBytes(salt)

B. Dim guid as Guid = Test Guid()
salt = guid.ToByteArray()

C. Dim enc as Encoding = New ASCIIEncoding()
salt = enc.GetBytes(DateTime.Now.ToString())

D. Dim rNum as Random = Test Random()
rNum.NextBytes(salt)

Answer: A

Explanation: The correct thing to do in the scenario at hand would be for you to use the code segment RandomNumberGenerator class as it represents a cryptographically secure random number.

Incorrect Answers:

B: The Guid method should not be considered for use in the scenario as this is only use full for creating a unique number that will be use full for computer, network and component identification.

C: The Date and time should not ever be considered as an instance because that would be a very predictable number.

D: The class should never be considered for use because the Random class generates pseudo random numbers that may be repeatable or predictable.

QUESTION 306

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Windows application on a workstation named Certkiller -WS12 which is used as collateral and you write the following code in the application:

```
Dim testplain As Byte()
```

The byte array testplain contains the data that needs to be protected and the length of the data stored in the byte array is always a multiple of 16. You want only the threads running under the current user context to be able to unprotect the data whilst the protected data will be stored in a different byte array. The original contents from the testplain byte array must remain unmodified. You are required to select which code segment to use if the application will be executed on computers running Windows XP Professional.

What should you do?

- A. Use ProtectedMemory.Protect(testplain, MemoryProtectionScope.SameLogon
- B. Use ProtectedMemory.Protect(testplain, Nothing, DataProtectionScope.LocalMachine
- C. Use ProtectedMemory.Protect(testplain, MemoryProtectionScope.SameProcess)
- D. Use ProtectedData.Protect(testplain, Nothing, DataProtectionScope.CurrentUser)

Answer: D

Explanation: The ProtectedData.Protect method is used to return a protected copy of the data in the testplain byte array whilst the content of the byte array remains unaffected making this the correct option to use in the scenario.

Incorrect Answers:

A, C: The methods in the option should not be used in the scenario because this method is used to store the protected data in the original copy of the byte array and the original array should remain unaffected.

B: The usage of this method is incorrect as you will allow any process running on the local computer to be able to unprotect the data.

QUESTION 307

You work as the application developer at Certkiller .com. The Certkiller .com network

consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application on a workstation used as collateral, the application will be used to send data over the internet. You are required to ensure that the sent data is not modified or tampered with during transmission, the secrecy of the data transmission is not considered important.

You recently decided to implement a hash value for the data by using a secret key and transmit the data along with the hash value. The receiver of the data should be able to detect whether the data or the hash value has been modified whilst the receiver should have access to the secret key that was used for computing the hash value. You must additionally ensure that a key sequence of 160 bits should be acceptable.

What should you do?

- A. The DESCryptoServiceProvider class should be used to encode the data prior to transmission
- B. The HMACMD5 class should be used to encode the data prior to transmission
- C. The MACTripleDES class should be used to encode the data prior to transmission
- D. The HMACSHA1 class should be used to encode the data prior to transmission

Answer: D

Explanation: The SHA1 has function is used by the HMACSHA1 class to compute a Has-based Message Authentication Code (HMAC) and additionally HMAC can be used to check if a message has been modified during the transmission.

Incorrect Answers:

A: The class should not be considered for use in the scenario because the class is used to encode the data to protect and maintain its secrecy.

B: The class should not be used because the scenario requires a hash sequence of 160 bits and the class only provides a hash sequence of 128 bits.

C: The class should never be considered for use in the scenario because the class uses a secret key of length 16 or 24 bytes whilst producing a hash sequence of 8 bytes.

QUESTION 308

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Windows application that will be used to allow users to download video files to the local hard drive. The application will require permissions for file input and output operations in order to execute, if no permissions are available for input or output operations the program

should not execute whilst you ensure the application is secure.
What should you do?

- A. The following attribute should be applied at the assembly level:
<Assembly: FileIOPermission(SecurityAction.RequestOptional, Unrestricted:=True)>
- B. The following attribute should be applied at the class level:
<FileIOPermission(SecurityAction.Assert, Unrestricted:=True)>
- C. The following attribute should be applied at the class level:
<FileIOPermission(SecurityAction.Demand, Unrestricted:=True)>
- D. The following attribute should be applied at the assembly level:
<Assembly: FileIOPermission(SecurityAction.RequestRefuse, Unrestricted:=True)>
- E. The following attribute should be applied at the assembly level:
<Assembly: FileIOPermission(SecurityAction.RequestMinimum, Unrestricted:=True)>

Answer: E

Explanation: The best choice seems to be requesting the minimum permissions that the application requires to perform the operations it was intended to perform in the scenario which is to download video files to the local hard drive.

Incorrect Answers:

- A: The option in question specifies that the permissions required by the application are optional and should not be used in the scenario.
- B C: The security in the scenario is required at the application level and this attributes should not be applied at the class level in the scenario.
- D: This option should not be used as this will specify that the application be refused the required permissions to perform the required operations.

QUESTION 309

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application on a workstation used as collateral and you create a class named Certkiller DataAccess and you must configure the Certkiller DataAccess class to disallow access to the c:\test\Bill\cfg.dat file and you also want to restrict the access to c:\test\Bill\cfg.dat through a Universal Naming Convention (UNC) path or a mapped drive letter path. You are required additionally to be able to access all other files on the c: drive of the computer running the program

What should you do? (Choose two)

- A. <FileIOPermissionAttribute(SecurityAction.RequestOptional, All:="C:\test\Bill\cfg.dat")>
- B. <FileIOPermissionAttribute(SecurityAction.RequestRefuse, All:="C:\test\Bill\cfg.dat")>
- C. <FileIOPermissionAttribute(SecurityAction.Demand, All:="C:\")>

- D. <FileIOPermissionAttribute(SecurityAction.RequestMinimum,All:"C:\")>
- E. <FileIOPermissionAttribute(SecurityAction.Deny,All:="C:\test\Bill\cfg.dat")>
- F. <FileIOPermissionAttribute (SecurityAction.PermitOnly,All:="C:\")>

Answer: E F

Explanation: The correct option in the scenario applies permissions only to the specified pathname so if the file is access using a different path such as \\Worstation1\C\$\test\Bill\cfg.dat or by mapping a drive the permissions do not apply.

Incorrect Answers:

A, B, C, D: It is possible to use a combination of PermitOnly and deny to deny access to specific resources as in the above segment the first line uses SecurityAction.PermitOnly to specify access permissions are only available for path names starting c:\.

QUESTION 310

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 assembly using the code shown below:

```
Public NotInheritable Class UtilProc
Public Sub DoWork()
'Additional code to go here
End Sub
End Class
```

The code is capable of being called by a Web application or Web service. You are required to restrict the assemblies that are capable of calling the DoWork method so only assemblies signed with a specific public key should be able to call the DoWork method.

What should you do?

- A. SecurityAction.LinkDemand should be passed as a parameter to the attribute
- B. The StrongNameIdentityPermission attribute should be applied to the DoWork method
- C. SecurityAction.InheritanceDemand should be passed as a parameter to the attribute
- D. The SecurityAction.Demand should be passed as a parameter to the attribute
- E. The GacIdentityPermission should be applied to the DoWork method
- F. The KeyContainerPermission should be applied to the DoWork method

Answer: A, B

Explanation: By using the StrongNameIdentityPermission attribute you effectively ensure that only the assemblies that have been signed by a specific public key are capable of calling the DoWork method in the scenario, the

SecurityAction.LinkDemand value further ensures that only the immediate caller is authorized.

Incorrect Answers:

C: This method should be used if you want to limit the scope of the attribute to only inheriting classes and the class is declared NotInheritable.

D: This should not be used because you would be forcing everything in the call stack to be signed using the same public key and you can not sign dynamically created assemblies.

E: This option should not be considered for usage as you will ensure that calling code should originate from the global assembly cache (GAC).

F: This method should not be used in the scenario because this method is used to control access to specific key containers.

QUESTION 311

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application on a workstation used as collateral and you write the class named TestScrapData and you are required to configure the TestScrapData class and limit its access to only the code originating from a specific Web site, www. Certkiller .com and it's subdomains.

The Web sites will be required to be access using HTTP, HTTPS and the FTP protocols. You are required to additionally configure code access permissions for the TestScrapData class

What should you do?

- A. The SiteIdentityPermission class should be used in the scenario
- B. The PublisherIdentityPermission class should be used in the scenario
- C. The ZoneIdentityPermission class should be used in the scenario
- D. The UrlIdentityPermission class should be used in the scenario

Answer: A

Explanation: To successfully achieve your scenario objective you must use the SiteIdentityPermission class to configure code access permissions for the callers from a specific Web site.

Incorrect Answers:

B: This class should not be used as it is designed for usage to configure permissions based on the identity of the software publisher.

C: This class should not be used because it is used to configure code access permissions for the zone where the code originates and the Internet zone may contain to many Web-sites.

D: This class should not be considered for use as it is used to configure access permissions for a Uniform Resource Locator (URL).

QUESTION 312

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application that will be deployed throughout the network on all workstations which are all networked as part of a Microsoft Windows domain. The application you wrote requires certain permissions in order to run. As the domain administrator you configure the enterprise policy to grant the required permissions to the application which may be part of one or more code group.

You must ensure that your application receives the sufficient permissions to run at all times whilst you override any policy changes made by the end users that lower the permissions required by the application to run.

What should you do?

- A. The LevelFinal attribute should be applied to the application's code group on the enterprise policy level
- B. The Exclusive attribute should be applied to the application's code group on the user policy level
- C. The LevelFinal attribute should be applied to the application's code group on the user policy level
- D. The Exclusive attribute should be applied to the application's code group on the enterprise policy level

Answer: A

Explanation: The FinalLevel attribute should be applied in the scenario to the application's code group on the enterprise level as this is the highest level of policy.

Incorrect Answers:

B, D: The Exclusive attribute should not be considered in the scenario for usage as the runtime will never grant permissions associated with the code group marked with the Exclusive attribute.

C: This should not be done as you would enable the end users the capability of changing or altering security settings that will restrict the applications execution.

QUESTION 313

You work as an application developer at Certkiller .com. You are currently creating an application that requires role-based security. You are planning to utilize a database to store the user accounts and group membership data.

You need to ensure that users are able to log on and off. You also need to ensure that the application you have created tracks the user accounts of these users, and restrict or allow access to code based on their group membership. You need to achieve this objective with as little developer effort as possible.

What should you do to implement role-based security?

- A. Inherit from the GenericIdentity and GenericPrincipal classes.
- B. Make use of GenericIdentity and GenericPrincipal objects.
- C. Implement the IIdentity and IPrincipal interfaces.
- D. Make use of WindowsIdentity and WindowsPrincipal objects.

Answer: B

Explanation: in this scenario, the GenericIdentity and GenericPrincipal objects could be implemented as follows:

```
GenericIdentity curIdentity = new GenericIdentity ("CurrentUser");  
string [] roles = { "Users", "Administrators" };  
thread.CurrentPrincipal = GenericPrincipal (curIdentity, roles);
```

This code instantiates a GenericIdentity object based upon a user name as a string object, instantiates a string array representing the roles to which that user belongs, instantiates a GenericPrincipal object specifying the GenericIdentity object and string array of roles as arguments, and assigns the new GenericPrincipal object to the CurrentPrincipal property of the current thread. By assigning the new principal to the CurrentPrincipal property of the current thread, role membership checks can be performed using the IsInRole method

Incorrect Answers:

A, C: These options require more developer effort than necessary.

D: The WindowsIdentity and WindowsPrincipal classes are intended for use with windows domain stored accounts and groups only.

QUESTION 314

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application on a workstation used as collateral and you write the following code in the application, line numbers are for reference:

```
01: Dim ts As FileSecurity =  
File.GetAccessControl("c:\Bill\root\config.crn")  
02: Dim ownerName As String = String.Empty  
03: Console.WriteLine("Owner name: {0}", ownerName)
```

You are required to write additional code before line 03 that will be used to allow you to print a user-friendly owner name of the c:\Bill\root\config.crn.

What should you do?

- A. Dim sid As SecurityIdentifier = ts.GetGroup(GetTyp(SecurityIdentifier))
ownerName = sid.Value
- B. Dim sid As SecurityIdentifier = ts.GetOwner(GetType(SecurityIdentifier))
ownerName = sid.Value

C. Dim acc As NTAccount = ts.GetGroup(GetType(NTAccount))
ownerName = acc.Value
D. Dimm acc As NTAccount = ts.GetOwner(GetType(NTAccount))
ownerName = acc.Value

Answer: D

Explanation: Since the GetOwner method of the FileSecurity class gets the owner associated with the given file and the Value property of the NTAccount class represents a user-friendly owner name this particular code segment should be used.

Incorrect Answers:

A, B: In the scenario you are required to get the file owner instead of the primary group to which the owner belong and there for you should not use the two GetGroup method code segments.

C: The Value of the security identifier class provides a long string containing the security identifier corresponding to the windows account.

QUESTION 315

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application on a workstation that is used as collateral and you write the code shown below:

```
Public Class Shape
Private shapeName As String
Public Sub Shape(ByVal shapeName As String)
Test.shapeName = shapeName
End Sub
Public Overridable Function GetName() As String
Return shapeName
End Function
Private Sub DrawShape()
'Add additional code
End Sub
End Class
```

You later decide to have the application compiled and registered for COM interoperability. The other developers on your team complain that they are unable to create an instance of the Shape class in their COM applications. You are required to ensure that COM applications are able to create an instance of the Shape class. What should you do?

A. The following code should be added to the Shape class:

```
Public Sub New()
End Sub
```

B. The following ComVisible attribute to the Shape class:

<ComVisible(True)>

C. The definition of the GetName method should be modified as below:

Public Function GetName() As String

Return shapeName

End Function

D. The following ComVisible attribute should be added to each method of the Shape class:

<ComVisible(True)>

Answer: A

Explanation: Remember that only the classes that have a public default constructor can be instantiated from a COM application and the parameterized constructor which is not used by the COM and therefore you should add the code used in the answer.

Incorrect Answers:

B, D: The lines of code that are used in the scenario will not make any difference to the situation at hand currently in the scenario and should not be used.

C: The class and public members are already visible to COM applications so your only problem lays with instantiating the class.

QUESTION 316

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application on a workstation used as collateral. You write a new class named Certkiller Process as shown below:

```
Public Class Certkiller Process
```

```
Public Sub New()
```

```
End Sub
```

```
Public Sub GetState()
```

```
'Additional code to go here
```

```
End Sub
```

```
Public Function ChangeCase(ByVal s As String) As String
```

```
Return s.ToUpper()
```

```
End Function
```

```
End Class
```

You compile the class to a file named Certkiller Process.dll, the Component Object Model (COM) applications are required to be able to create instances of this class and invoke methods. The Com applications may need to bind type information at compile time and you are required to select which command line tool to use.

What should you do?

- A. The Type Library Exporter tool (Tlbexp.exe) should be used
- B. The Type Library Importer tool (Tlbimp.exe) should be used
- C. The Assembly Registration tool (Regasm.exe) should be used
- D. The Native Image Generator tool (Ngen.exe) should be used

Answer: C

Explanation: Because the Com applications expect to find runtime information about types in the Windows registry the usage of the Assembly Registration tool (Regasm.exe) reads an assembly creates entries required by the Com applications.

Incorrect Answers:

- A: This tool is used to generate a Com library from an assembly and should not be considered for usage in the scenario.
- B: This tool does exactly the opposite of the exporter tool and should also not be considered for usage in the scenario.
- D: The tool is used to generate a native image for managed code and reduces load times for the application but does not convert assemblies for use in COM applications.

QUESTION 317

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application on a workstation used as collateral and you are trying to port an old Certkiller .com management application that was written in unmanaged Windows code with no COM interfaces. The application you are developing makes calls to the old Certkiller .com management unmanaged library named BillPerformance.dll. You are required to make a call to the GetPerformanceScore method of the unmanaged Performance.dll library.

What should you do?

- A. The Type Library Exporter tool (tlbexp.exe) should be used
- B. The Type Library Importer tool (tlbimp.exe) should be used
- C. The Assembly Registration tool (regasm.exe) should be used
- D. The Platform Invoke (DllImportAttribute) should be used

Answer: D

Explanation: The feature Platform Invoke is used to allow you to call methods that are in unmanaged libraries but you need to declare the unmanaged method in the managed code using the extern and static keywords with the DllImport attribute which is used to specify the unmanaged library.

Incorrect Answers:

A, B, C: The tool should not be considered for usage in the scenario because the unmanaged dll file is not in COM and it only processes COM type libraries.

QUESTION 318

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Windows application on a workstation used as collateral. Your application needs to call the GetComputerName method in the library named kernel32.dll to display the computer name and write the code below:

```
<DllImport("kernel32.dll")>_  
Public Shared Function GetComputerName(  
ByVal IpBuffer As StringBuilder, ByRef IpSize As Integer) As Boolean  
End Function
```

You are required to call the method as ComputerName based on your coding standards whilst you ensure that your code can be cancelled on any Windows operating system. You need to know how to modify the DllImport attribute to call the GetComputerName method.

What should you do?

- A. The EntryPoint property must be set to "ComputerName"
- B. The CharSet property must be set to CharSet.Unicode
- C. The CharSet property must be set to CharSet.Ansi
- D. The EntryPoint property must be set to "GetComputerName"
- E. The CharSet property must be set to CharSet.Auto

Answer: D, E

Explanation: The correct method to use in the scenario is to modify the DllImport attribute and set the EntryPoint property to "GetComputerName" which is the name of the method invoked in kernel32.dll but the .NET method should be declared as ComputerName.

Incorrect Answers:

A, B, C: The methods used in the options could be used but require that the code be changed significantly and you should not consider using the options in the scenario as they are bound to fail.

QUESTION 319

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the

applications.

You are in the process of developing a .NET Framework 2.0 Windows application that will be used to copy the text of a specified window's title bar on a workstation used as collateral. You decided to make use of the GetWindowText method of the user32.dll unmanaged DLL in your application and the method is declared below:

```
Int GetWindowText(HWND hWnd,LPTSTR IpString, int nMaxCount);
```

The hWnd parameter is used to act as a handle to the windows containing the text, Ipstring is the pointer to the buffer that will receive the text, and the nMaxCount is the maximum number of characters to copy to the buffer. You are required to declare the GetWindowText method in your managed application whilst your solution requires minimal changes when ported from a 32-bit to 64-bit computer.

What should you do?

```
A. <DllImport("user32.dll", SetLastError:=True, CharSet:=CharSet.Auto)>_
Public Shared Function GetWindowText(ByVal hWnd As Integer,_
ByVal IpString As String, ByVal nMaxCount As Integer) As Integer
End Function
```

```
B. <DllImport("user32.dll", SetLastError:=True, CharSet:=CharSet.Auto)>_
Public Shared Function GetWindowText(ByVal hWnd As Integer,_
ByVal IpString As StringBuilder, ByVal nMaxCount As Integer) As Integer
End Function
```

```
C. <DllImport("user32.dll", SetLastError:=True, CharSet:=CharSet.Auto)>_
Public Shared Function GetWindowText(ByVal hWnd As IntPtr,_
ByVal IpString As String, ByVal nMaxCount As Integer) As Integer
End Function
```

```
D. <DllImport("user32.dll", SetLastError:=True, CharSet:=CharSet.Auto)>_
Public Shared Function GetWindowText(ByVal hWnd As Integer,_
ByVal IpString As String, ByVal nMaxCount As Integer) As Integer
End Function
```

Answer: A

Explanation: In order for you to modify the actual string you are required to make use of the StringBuilder object instead of a String object because string objects in the .NET Framework are considered to be immutable.

Incorrect Answers:

B, C, D: If you decided to make use of the String object to represent the Ipstring parameter you will receive an empty string because the modifications made will not be preserved and further more the window handles require to be defined in such a way that they are 32 bits in size on a 32-bit computer and 64 bits in size on a 64-bit computer.

QUESTION 320

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the

applications.

You are in the process of developing a .NET Framework 2.0 application on a workstation named Certkiller -WS01 used as collateral. The application will be used to list the available public types and methods in the Certkiller .com assembly.

You named the assembly strongly and it is installed in the global assembly cache (GAL) and an assembly with the same identity is stored at c:\ Certkiller \assemb\ Certkiller .com.dll.

You are required to dynamically load the Certkiller .com assembly into your application whilst you ensure that the assembly is loaded from

c:\ Certkiller \assemb\ Certkiller .com.dll rather than the global assembly cache (GAL). What should you do?

- A. Dim assemb As Assembly =
Assembly.LoadFrom("c:\ Certkiller \assemb\ Certkiller .com.dll")
- B. Dim assemb As Assembly =
Assembly.LoadFile("c:\ Certkiller \assemb\ Certkiller .com.dll")
- C. Dim assemb As Assembly = Assembly.ReflectionOnlyLoad(" Certkiller .com")
- D. Dim assemb As Assembly = Assembly.Load(" Certkiller .com")
- E. Dim assemb As Assembly = _
Assembly.ReflectionOnlyLoadFrom("c:\ Certkiller \assemb\ Certkiller .com.dll")

Answer: E

Explanation: To correctly load the Assembly class from the location c:\ Certkiller \assemb\ Certkiller .com.dll you should make use of the method used in the option of the scenario.

Incorrect Answers:

A, B, C, D: The other methods of the assembly class will request the common language runtime (CLR) to resolve the location of the assembly based on its identity therefore these options should not be used in the scenario even though you provide the full absolute path as a parameter.

QUESTION 321

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application on a workstation named Certkiller -WS11 used as collateral. The application's assembly is named Certkiller App and is stored in Certkiller App.exe. You are busy using .NET Framework's Strong Name tool to generate a pair for Certkiller App.exe shown below:

Sn.exe -k Certkiller AppKey

You are required to use the key pair to build the Certkiller App.exe as a strong named assembly.

What should you do?

- A. The AssemblyKeyFileAttribute class should be used
- B. The AssemblyDelaySignAttribute class should be used
- C. The AssemblyConfigurationAttribute class should be used
- D. The AssemblyKeyNameAttribute should be used

Answer: A:

Explanation: The Strong name tool is used to allow you to generate and manage keys for the strong name signing and by using the -k switch the tool generates a new key pair and stores it in the specified file. So using the AssemblyKeyFileAttribute is the correct way to go in the scenario.

Incorrect Answers:

- B: This class should not be considered for use as it is designed to specify whether or not delayed signing should be used.
- C: The class should not be used in the scenario because the class is used to specify a build configuration for an assembly.
- D: This class should not be used in the scenario because it is used to specify the name of a key container that should be used.

QUESTION 322

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application on a workstation used as collateral, the application will allow users to send e-mails. The users are required to be able to send e-mail containing information like budget documents and images. You decide to use the .NET Framework 2.0 Attachment class to create the e-mail attachments within your application.

You are required to specify the content in an attachment by using the attachment class constructors.

What should you do? (Choose two)

- A. The Stream object attachment class should be used in the scenario
- B. The String object attachment class should be used in the scenario
- C. The Image object attachment class should be used in the scenario
- D. The XmlDocument object attachment class should be used in the scenario
- E. The SqlDataReader object attachment class should be used in the scenario

Answer: A, B

Explanation: In the scenario the Attachment constructors allow you to create attachments from a filename, a String object, or a Stream object.

Incorrect Answers:

- C: This method is incorrect and should not be used in the scenario because the Image object Attachment class cannot directly use an Image object.
- D: This method is incorrect and should not be used in the scenario because the XmlDocument Attachment class cannot directly use an XmlDocument object.
- E: This method is incorrect and should not be used in the scenario because the SqlDataReader Attachment class cannot directly make use of a SqlDataReader object.

QUESTION 323

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application that will be used to send e-mail on a workstation used as collateral and you develop the code below, line numbers for reference:

```
01: Public Sub SendMessage(ByVal message As MailMessage, ByVal host As  
String)  
02: Dim client As SmtpClient = Test SmtpClient(host)  
03: Try  
04: client.Send(message)  
05: Catch ex As SmtpFailedRecipientsException  
06:  
07: For I As Integer =1 To ex.InnerExceptions.Length  
08:  
09: Next  
10: End Try  
11: End Sub
```

The parameter MailMessage will be used to represent an e-mail message and the parameter host contains the address of a SMTP server. During the day the code will encounter SMTP error 450 (mailbox busy) errors, when this occurs an attempt should be made to resend the mail message after five seconds. In the event that you encounter another error it should be recorded in the event log.

You are required to add additional code at line 08 for handling the errors and need to write an expression that allows you to find the specific SMTP error returned by the SMTP server.

What should you do?

- A. The ex.InnerExceptions(i).Data expression should be used
- B. The ex.InnerExceprions(i).Message expression should be used
- C. The ex.InnerExceptions(i).FailedRecipient expression should be used
- D. The ex.InnerExceptions(i).StatusCode expression should be used

Answer: D

Explanation: In the scenario you should make use of the StatusCode expression because the expression can be used to return an enumeration of type SmtpStatusCode and gets the error code returned by the SMTP server in the scenario.

Incorrect Answers:

A: This expression should not be used in the scenario because this expression will be used to return a set of user-defined values corresponding to the exception.

B: This expression should not be used in the scenario because it returns a descriptive message about the error and does not provide you specific information of the error returned by the SMTP server

C: This expression should not be used in the scenario because it is used to have the e-mail address that had the problems returned and gives no information about the SMTP error.

QUESTION 324

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 enterprise application on a workstation used as collateral. The application will be used to allow the users to send e-mail messages and should allow users to send HTML-based e-mails, but the users should not be able to use the HTML tag to embed images in the HTML document

The images are not externally hosted so instead the images must be sent as part of the e-mail message. You are required to select which class to use.

What should you do?

- A. The AlternateView class should be used in the scenario
- B. The Attachment class should be used in the scenario
- C. The MailAddress class should be used in the scenario
- D. The LinkedResource class should be used in the scenario

Answer: D

Explanation: In the scenario you should make use of the LinkedResource class as it is used to embed external resources in an e-mail attachment such as images in an HTML attachment.

Incorrect Answers:

A: The class in question could be used in the scenario but the AlternateView class itself cannot be used to embed images in the HTML document.

B: The Attachment class should not be used in the scenario as the class only allows you to send images as an attachment.

C: The usage of this class is incorrect as it is used to store the address information for e-mail messages in the scenario.

QUESTION 325

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Windows Forms application using a workstation used as collateral. The Windows Forms application will be used by regional offices of Certkiller .com in various countries.

You are required to customize the application so that the language, callender and cultural conventions are changed based on the user's operating system settings. You additionally are required to identify the .Net Framework class that should be used for this requirement.

What should you do?

- A. The cultureInfo class should be used
- B. The TextInfo class should be used
- C. The DateTimeFormtaInfo should be used
- D. The CharUnicodeInfo should be used
- E. The RegionInfo should be used

Answer: A

Explanation: The CultureInfo class should be used in the scenario because it contains culture-specific information and provides the information required for performing culture-specific operations like changing casing, formatting dates and numbers and comparing strings.

Incorrect Answers:

B: This class should not be used in the scenario because this class only affects the behavior such as text casing.

C: This class should not be used in the scenario because this class only defines how the Date and Time values are formatted.

D: This class should not be used in the scenario because this class is used to only retrieve information about a Unicode character.

E: This class should not be used in the scenario because this class does not represent any preferences of the user and does not depend upon the culture.

QUESTION 326

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Windows Forms application that must provide support for multiple languages and regional

differences on a workstation that is used as collateral. You are required to define a custom culture based on an existing culture and region. An administrative user will install the custom culture on the end user's computer prior to the applications deployment and you are required to select which class to use.

What should you do?

- A. The CultureAndRegionInfoBuilder class should be used
- B. The CustomAttributeBuilder class should be used
- C. The RegioInfo class should be used
- D. The CultureInfo class should be used

Answer: A

Explanation: The correct option in the scenario would be to make use of the CultureAndRegionInfoBuilder class as this class is used to define a custom culture that is new or based upon an existing region and culture.

Incorrect Answers:

B: This class should not be used in the scenario because this class is used to define custom attributes which are used to associate declarative information.

C: This class should not be used in the scenario because this class is used to access the region data for an already installed culture.

D: This class should not be used in the scenario because this class can only be used to make use of cultures that have already been installed.

QUESTION 327

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application on a workstation used as collateral and you require to provide locale-specific services to employees with the application. You must additionally ensure that you use a unique country identifier that can be used as a key to access a database record that contains specific information about a country whilst you use the minimum storage for storing the key.

What should you do?

- A. CultureInfo.Name should be used as an identifier for a country
- B. CultureInfo.GetHashCode should be used as an identifier for a country
- C. RegionInfo.GetHashCode should be used as an identifier for a country
- D. RegionInfo.Name should be used as an identifier for a country

Answer: D

Explanation: In the scenario you should make use of the RegionInfo.Name property

as this property gets the name or ISO 3166 two-letter country/region code for the current RegionInfo object.

Incorrect Answers:

A: This method should not be used in the scenario as you will only receive the culture name instead of the country name and does not meet the objective.

B, C: The usage of the GetHashCode property in the scenario is incorrect as the hash value generated can be used to tell whether the RegionInfo or CultureInfo objects are the same or not.

QUESTION 328

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 enterprise application on a workstation used as collateral and you create the following variable in your code:

```
Dim dateValue As DateTime
```

You additionally write code to store time in the local time to the dateValue variable.

You are required to serialize the value of the dateValue variable, if you serialize the DateTime object in one time zone and deserialized in a different time zone, the local time represented as a result should be automatically adjusted to the second time zone. You are to decide which expression to use.

What should you do?

- A. The dateValue.ToString("yyyy-MM-ddTHH:mm:ss.ffffff", CultureInfo.InvariantCulture)
- B. The dateValue.ToBinary() expression should be used
- C. The dateValue.Kind expression should be used
- D. The dateValue.Ticks expression should be used

Answer: B

Explanation: To preserve the information that you are required to preserve in the scenario you should make use of the newToBinary and FromBinary method as these methods can be used to automatically adjust the local times.

Incorrect Answers:

A: The expression in question should not be used in the scenario because the expression will not preserve any of the required reserved information.

C: This expression will be used to check whether the value indicates whether time is represented by the instance is based on local time.

D: This expression is used to super fast serialize the required information but should not be considered when working with the local time.

QUESTION 329

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 enterprise application on a workstation named CertK INMG-WS02 used as collateral and you write the code below in your application, line numbers are reference:

01: Dim num As String

02: Dim val As Integer

03: num = " (37)"

04:

You are required to write additional code at line 04 that will be used to correctly parse the string value and assigns the result to the Integer variable named val. When you execute the code the variable is required to hold a value of -37 and you must decide which code to use.

What should you do?

- A. val=Int32.Parse(num, NumberStyles.AllowLeadingSign And NumberStyles.AllowLeadingWhite)
- B. val=Int32.Parse(num, NumberStyles.AllowParentheses And NumberStyles.AllowLeadingWhite)
- C. val=Int32.Parse(num, NumberStyles.AllowLeadingSign Or NumberStyles.AllowLeadingWhite)
- D. val=Int32.Parse(num, NumberStyles.AllowParentheses Or NumberStyles.AllowLeadingWhite)

Answer: D

Explanation: The NumberStyles.AllowParentheses value is used to indicate that the numeric string can have one pair of parentheses enclosing the number and the NumberStyles.AllowLeadingWhite value is used to indicate that a leading white-space character must be ignored during the parse.

Incorrect Answers:

A, B: This code should not be used in the scenario because the code is used to indicate that the numeric string can have a leading sign.

C: The code in question should not be used in the scenario because the attributes of NumberStyles are set by using the bitwise inclusive Or on the field flags.

QUESTION 330

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 Windows Forms application that will be used by several Certkiller .com employees in several countries on a workstation used as collateral. The application is required to fully support customization of the user interface based on the user's preferences like the language currency and date and time formats.

You are required to write code that will compare the name of two employees which are stored in variables named employee1 and employee2. You are required to ensure correct comparisons whilst taking care of the regional settings selected. What should you do?

- A. The String.Compare(Fileemployee1, Fileemployee2, true, CultureInfo.CurrentCulture) segment should be used
- B. The String.Compare(Fileemployee1, Fileemployee2, true, CultureInfo.InvariantCulture) segment should be used
- C. The String.Compare(Fileemployee1, Fileemployee2, true, CultureInfo.InstalledUICulture) segment should be used
- D. The String.Compare(Fileemployee1, Fileemployee2, true, CultureInfo.CurrentUICulture) segment should be used

Answer: A

Explanation: The default behavior of the segment in question is to perform culture-sensitive comparisons and should definitely be considered for use in the scenario.

Incorrect Answers:

- B: This code segment is incorrect and should not be used in the scenario because it will lead to culture-insensitive operations.
- C: This code segment is incorrect and should not be used in the scenario because this will used the culture that is installed with the operating system.
- D: This code segment is incorrect and should not be used in the scenario because this settings only used for changing the user's interface culture used by a thread.

QUESTION 331

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a large .NET Framework 2.0 application that is required to provide support for culture-specific information using a workstation used as collateral. You are required to parse a date and time string generated for a custom culture and to help the success of the parse operation you designate parse patterns that are likely to succeed. You must additionally prevent the operation from failing whilst you select the method to use for parsing the string.

What should you do?

- A. The ParseExact method should be used
- B. The Parse method should be used
- C. The TryParseExact method should be used
- D. The TryParse method should be used

Answer: C

Explanation: The TryParseExact method should be used if you require parsing a date and time string generated from a custom culture.

Incorrect Answers:

A, B: The usage of these methods in the scenario would be incorrect because the methods do not provide error handling and the custom culture can be complicated and difficult to parse.

D: If you decide to use the TryParse method which attempt to parse a string using several implicit parse patterns that may all fail you will not achieve the scenario objective.

QUESTION 332

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application that will be used to manipulate graphics files in GIF, JPG and PNG formats using a workstation named Certkiller -WS32 which is used as collateral. You are required to choose an appropriate data type to store graphic files whilst your solution must use the least amount of code.

What should you do?

- A. The Icon class should be used
- B. The Metafile class should be used
- C. The Image class should be used
- D. The Bitmap class should be used

Answer: D

Explanation: Because the Bitmap class is an implementation of the Image abstract class that is capable of working with several types of image formats this class should be considered for usage in the scenario.

Incorrect Answers:

A: This class should not be used in the scenario because the Icon class only allows you to work with small bitmap images.

B: This class should not be used in the scenario because this class can not be used to manipulate images in different formats.

C: This class should not be used in the scenario because this class is an abstract class which requires functionality to be implemented which requires programming effort.

QUESTION 333

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 text-processing application on a workstation used as collateral and are busy defining the regular expression of currency values:

```
Dim tx As Regex = Test Regex("^-?\d+(\.\d{2})?$")
```

You are required to write code that will be used to find whether a string in the variable named Bill matches the regular expression or not and you are also required to use this code as the expression in a conditional statement and need to know which code segment to use.

What should you do?

- A. The tx.Matches(Bill)
- B. The tx.Equals(Bill)
- C. The tx.Match(Bill)
- D. The tx.IsMatch(Bill)

Answer: D

Explanation: In order for you to successfully indicate whether the regular expression finds a match in the input string you should make use of the IsMatch(Bill) segment in the scenario.

Incorrect Answers:

A: This segment should not be used in the scenario because the Matches method is used to search an input string for all occurrences of a regular expression and returns all the successful matches.

B: This segment should not be used in the scenario because this method is used to determine whether any two Object instances are equal.

C: This segment should not be used in the scenario because the Matches method is used to search an input string for an occurrence of a regular expression and returns the precise results as a single successful match.

QUESTION 334

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You make use of Visual Studio 2005 for creating the applications.

You are in the process of developing a .NET Framework 2.0 application on a workstation used as collateral. The application will be used globally and must be able to represent characters in the following languages: English, Chinese

Traditional, Hebrew and Tamil. Your application is required to provide error detection for invalid sequences of characters whilst your application must also optimize storage.

What should you do?

- A. Encode the characters in your application using the UTF8Encoding class
- B. Encode the characters in your application using the UTF7Encoding class
- C. Encode the characters in your application using the UTF32Encoding class
- D. Encode the characters in your application using the UTF16Encoding class

Answer: A

Explanation: To successfully enable error detection and make the class instance more secure you should make use of the UTF8Encoding class in the scenario.

Incorrect Answers:

B: The Encoding class used in this option UTF7Encoding does not provide any error detection and should not be used in the scenario.

C, D: The Encoding classes in these options should not be used in the scenario because the UTF16Encoding class represents each character as a sequence of one to two 16-bit integers and the UTF32Encoding represents each code point as a 32-bit integer.

QUESTION 335

You work as the application developer at Certkiller .com. To get information on a specific method named myMethod, you use Reflection. You need to find out if myMethod can be accessed from a derived class.

Which of the following properties should you call from the myMethod class?

- A. Call the IsAssembly property.
- B. Call the IsVirtual property.
- C. Call the IsStatic property.
- D. Call the IsFamily property.

Answer: D

Explanation: The IsFamily property determines whether the method is accessible onlsey to the class and descendant classes.

IsAssembly determines accessibility from within the assembly.

IsVirtual indicates whether the method is virtual.

IsStatic indicates whether the method is static.

QUESTION 336

You work as the application developer at Certkiller .com. You create a new class that uses unmanaged resources, but which still has references to managed resources on other objects.

You want users of the new class to be able to explicitly release resources when the class instance is no longer required.

What should you do next?

Choose the three actions which you should perform. Each correct answer presents only part of the complete solution.

- A. Define the existing class so that it inherits from the WeakReference class.
- B. Define the existing class so that it applies the IDisposable interface.
- C. Create a new class destructor which calls methods on other objects to release the managed resources.
- D. Create a new class destructor that releases the unmanaged resources.
- E. Create a new Dispose method that calls System.GC.Collect to force garbage collection.
- F. Create a new Dispose method that releases unmanaged resources and which also calls methods on other objects to release the managed resources.

Answer: B,D,F

Explanation:

It is necessary to implement the IDisposable interface if you need to release unmanaged resources or want explicit control of the life of managed resources. A class destructor should be created to release the unmanaged resources and this should be called from within the Dispose method. The dispose method should also release the managed resources.

Inheriting from WeakReference would result in the garbage collector releasing resources even though there may be valid references.

The managed resources should be released in the Dispose method.

System.GC.Collect could be used, however it is more efficient to manually release the managed resources. The GC incurs overhead and may have only recently been called anyway. The question states resources should be released explicitly.

QUESTION 337

You work as the application developer at Certkiller .com. You are developing a debug build of an existing application. You want to locate a specific line of code which resulted in the exception occurring.

Choose the property of the Exception class that you should use to accomplish the task.

- A. Data property
- B. Message property
- C. StackTrace property
- D. Source property

Answer: C

Explanation: The StackTrace property provides a listing of the current call stack.

Information such as the method calls and line numbers are shown.

Data will return additional user-defined information about the exception

Message describes the current exception but will not give details about the source code line number.

Source represents the name of the application or object that caused the error.

QUESTION 338

You work as the application developer at Certkiller .com. You need to modify the code of an application. The application uses two threads named thread A and thread B. You want thread B to complete executing before thread A starts executing.

How will you accomplish the task?

- A. Define thread A to run at a lower priority.
- B. Define thread B to run at a higher priority.
- C. Implement the WaitCallback delegate to synchronize the threads.
- D. Call the Sleep method of thread A.
- E. Call the SpinLock method of thread A.

Answer: C

Explanation:

Note: Some confusion why the answer is C. Using the ThreadPool and WaitCallback will not synchronise the threads, they will run in the background in parallel

QUESTION 339

DRAG DROP

You work as the application developer at Certkiller .com. You have been instructed to create an application that can provide information on the local computer only.

The application is configured with a form that provides information on all logical drives and associated drive properties of the local computer.

You must script a procedure that retrieves the properties of each logical drive of the local computer.

How will you accomplish the task? Answer by arranging the relevant actions in the proper order.

Actions, select from these	Actions, place here
Retrieve an instance of the FileSystemInfo class.	Place first, if any, here
Retrieve an instance of the DriveInfo class.	Place second, if any, here
Retrieve the drive capacity by using the Drdriveing Totalsize property	Place third, if any, here
Determine if the drive is avaiable by using the FileSystemInfo.Attributes property.	Place fourth, if any, here
Retrieve the drive names of all logical drives on a computer by using the DriveInfo.GetDrives method.	Place fifth, if any, here
Retrieve the drive capacity by using the Filesysteminfo.Attributes property.	Place sixth, if any, here

Answer:

Actions, select from these	Actions, place here
Retrieve an instance of the FileSystemInfo class.	Retrieve the drive names of all logical drives on a computer by using the DriveInfo.GetDrives method.
	Retrieve an instance of the DriveInfo class.
	Retrieve the drive capacity by using the DrdriveInfo.TotalSize property.
Determine if the drive is avaiable by using the FileSystemInfo.Attributes property.	Place fourth, if any, here
	Place fifth, if any, here
Retrieve the drive capacity by using the Filesysteminfo Attributes property.	Place sixth if any, here

Explanation:

To retrieve the properties of each logical drive on the system call DriveInfo.GetDrives. Iterate through the collection retrieving each instance and access the TotalSize property. FileSystemInfo is for file\directory manipulation.

QUESTION 340

You work as the application developer at Certkiller .com. The global cache contains an assembly named Certkiller Ass10. You are busy working on an assembly named Certkiller Ass09. Certkiller Ass9 includes a public method.

You want the public method to be called from only Certkiller Ass10.

Choose the permission class which you should use.

- A. Use the GacIdentityPermission
- B. Use the PublisherIdentityPermission
- C. Use the DataProtectionPermission
- D. Use the StrongNameIdentityPermission

Answer: D

Explanation: StrongNameIdentityPermission can be used to verify the identity of a calling assembly.

GACIdentityPermission can be used to test whether a file is in the global assembly cache or not.

PublisherIdentityPermission can be used to verify the identity of a publisher.

DataPublisherPermission is used to control the ability to access encrypted data and memory.

QUESTION 341

You work as the application developer at Certkiller .com. You are developing a new application named Certkiller App12.

Certkiller App12 must be configured to receive events asynchronously. You define two instances named Wq1EventQuery and ManagementEventWatcher respectively.

Wq1EventQuery will list those events and event conditions for which

Certkiller App12 should respond. ManagementEventWatcher will subscribe to all events matching the query.

Which two additional actions should you still perform to enable Certkiller App12 to receive events asynchronously?

Choose two correct answers. Each answer presents only part of the complete solution.

A. Call the Start method of the ManagementEventWatcher to start listening for events.

B. To configure a listener for events, use the EventArrived event of the ManagementEventWatcher.

C. To wait for the events, use the WaitFor NextEvent method of the ManagementEventWatcher.

D. Create an event handler class that contains a method which receives an ObjectReadyEventArgs parameter.

E. Use the Stopped event of the ManagementEventWatcher to configure a listener for events.

Answer: A,B

Explanation: The ManagementEventWatcher will not start to listen (hence the app cannot respond to Async messages) until the start method is called. Once the ManagementEventWatcher is listening it will trigger an EventArrived event every time an event occurs that matches the query. You should provide a listener for the EventArrived event to perform any custom handling.

WaitForNextEvent method is synchronous i.e the current thread will wait until a matching event occurs

ObjectReadyEventArgs holds data for the ObjectReadyEvent.

The Stopped event is triggered when the ManagementEventWatcher cancels it's subscription i.e is no longer interested in receiving notification of events.

QUESTION 342

You work as the application developer at Certkiller .com. You must specify a class which is optimized for key-based item retrieval from collections. Your class must cater for key-based item retrieval for small and large collections. Which of the following class types should you specify?

- A. Select the OrderedDictionary class.
- B. Select the HybridDictionary class.
- C. Select the ListDictionary class.
- D. Select the Hashtable class.

Answer: B

Explanation: A HybridDictionary is implemented as a ListDictionary for small collections and a Hashtable for large collections. Hence it provides very efficient storage for both small and large collections.

OrderedDictionary supports sorting based on the key. It has similar disadvantages for small collections to Hashtable on which it is based.

ListDictionary is ideal for small collections because it is implemented as a light-weight linked list. Performance will suffer for large collections.

HashTable is ideal for large collections, for small collections the overheads of such a sophisticated data structure do not compensate for the benefits.

QUESTION 343

You work as the application developer at Certkiller .com. You are working on an application and want to use platform invoke services to call an unmanaged function from managed code.

How will you accomplish the task?

- A. Create a class to store DLL functions. Create prototype methods by using the managed code.
- B. Use COM to register the assembly. Reference the managed code from COM.
- C. Export a type library for the managed code.
- D. Import a type library as an assembly. Create instances of COM object.

Answer: A

Explanation: It is good practice to wrap the messy P-Invoke code with a .net class.

The main benefit is to keep the client code tidy as the messy and cryptic code will be hidden away. Also better for maintenance e.g dll name or version changes.

The question explicitly says the unmanaged code should be called with platform invoke services. Importing/exporting a type library is relevant for interoperation with COM.

QUESTION 344

You work as the application developer at Certkiller .com. You must identify which

specific type meets this criteria: ?

Is always a number.?

Is not greater than 65,535.

Select the type you should use to meet the criteria.

- A. Choose System.UInt16
- B. Choose int
- C. Choose System.String
- D. Choose System.IntPtr

Answer: A

Explanation: System.UInt16 is the most efficient type for storing positive whole numbers up to 65,536.

An int type could be used but it is a lot wider than necessary.

System.String is intended for storing immutable strings.

System.IntPtr is a pointer to a memory address and its size is determined by the runtime platform. It is primarily used for interoperation.

QUESTION 345

You work as the application developer at Certkiller .com. You are working on an application named Certkiller App11. Certkiller App11 must be configured to execute a series of mathematical computations simultaneously.

What should you do next to configure Certkiller App11 to execute a series of mathematical computations simultaneously?

- A. Configure the IdealProcessor property of the ProcessThread object.
- B. Configure the ProcessorAffinity property of the ProcessThread object.
- C. Call the QueueUserWorkItem method of the ThreadPool class for each calculation which should be performed by Certkiller App11.
- D. Configure the Process.GetCurrentProcess().BasePriority property to be High.

Answer: C

Explanation: The ThreadPool class allows background tasks to run in parallel hence calculations can be queued to run as soon as a ThreadPool Worker thread becomes available. Because the ThreadPool can manage many worker threads, calculations will run in parallel.

ProcessThread.IdealProcessor requests a preferred processor for the thread to run on, it will not however spawn a new thread - which is what is required here to enable concurrency.

ProcessorAffinity gets or sets the processors that this thread can be scheduled to run on.

Process.BasePriority gets the base priority of the process.

QUESTION 346

You work as the application developer at Certkiller .com. An existing application

used by Certkiller .com is named Certkiller App15. Certkiller App15 runs on a shared computer, and was compiled using .NET Framework version 1.0. The .NET Framework version 1.0 and .NET Framework version 1.1 is installed on the shared computer.

You have been instructed to move Certkiller App15 to a new computer. This computer has .NET Framework version 1.1 and .NET Framework version 2.0 installed. You verify that Certkiller App15 is only compatible with the .NET Framework 1.1.

You must configure Certkiller App15 to use .NET Framework version 1.1 after it has been moved to the new computer.

What should you do next?

A. Add this XML element to the Certkiller App15 configuration file:

```
<configuration>
<startup>
<supportedRuntime version="1.1.4322" />
<startup>
</configuration>
```

B. Add this XML element to the Certkiller App15 configuration file:

```
<configuration>
<runtime>
<assemblyBinding
xmlns="urn:schemas-microsoft-com:asm.v1">
<dependentAssembly>
<assemblyIdentity name="Application1"
publicKeyToken="32ab4ba45e0a69a1"
culture="neutral" />
<bindingRedirect oldVersion="1.0.3075.0"
newVersion="1.1.4322.0"/>
</dependentAssembly>
</assemblyBinding>
</runtime>
</configuration>
```

C. Add this XML element to the computer configuration file:

```
<configuration>
<startup>
<requiredRuntime version="1.1.4322" />
<startup>
</configuration>
```

D. Add this XML element to the computer configuration file:

```
<configuration>
<runtime>
<assemblyBinding
xmlns="urn:schemas-microsoft-com:asm.v1">
<dependentAssembly>
<assemblyIdentity name="Application1"
```

```
publicKeyToken="32ab4ba45e0a69a1"  
culture="neutral" />  
<bindingRedirect oldVersion="1.0.3075.0"  
newVersion="1.1.4322.0"/>  
</dependentAssembly>  
</assemblyBinding>  
</runtime>  
</configuration>
```

Answer: A

QUESTION 347

You work as the application developer at Certkiller .com. You are developing a strong-named assembly named Certkiller Ass3. Certkiller Ass3 will be used by multiple applications. You plan to frequently rebuild Certkiller Ass3 during the development lifecycle. Whenever Certkiller Ass3 is rebuilt, you must ensure that it works as expected with all applications that will use it.

You must configure the computer that you are using to create Certkiller Ass3 so that all applications reference the latest build of Certkiller Ass3.

Choose the two actions which you should perform to achieve your goal. Each correct answer presents only part of the complete solution.

A. Create a DEVPATH environment variable which points to the build output directory for Certkiller Ass3.

B. Include this XML element in the computer configuration file:

```
<developmentMode developerInstallation="true"/>
```

C. Include this XML element in the computer configuration file:

```
<dependentAssembly>  
<assemblyIdentity name=" Certkiller Ass3"  
publicKeyToken="32ab4ba45e0a69a1"  
language="en-US" version="*.*.*.*" />  
<publisherPolicy apply="no" />  
</dependentAssembly>
```

D. Include this XML element in the configuration file of each application that must use Certkiller Ass3:

```
<supportedRuntime version="*.*.*.*" />
```

E. Include this XML element in the configuration file of each application that must use Certkiller Ass3:

```
<dependentAssembly>  
<assemblyIdentity name=" Certkiller Ass3"  
publicKeyToken="32ab4ba45e0a69a1"  
language="en-US" version="*.*.*.*" />  
<bindingRedirect newVersion="*.*.*.*" />  
</dependentAssembly>
```

Answer: A,B

Explanation: The developmentmode element in the machine configuration file tells the .net runtime to locate the assembly by using the DevPath environment variable. The SupportedRuntime element specifies which .net runtime versions the assembly supports.

The DependentAssembly element is used to encapsulate the binding policy and assembly location for each assembly.

QUESTION 348

You work as the application developer at Certkiller .com. You are developing a new class named Certkiller Class. Certkiller Class contains a method named Certkiller Method, and a number of child objects which are serializable. Certkiller Method will execute actions on all child objects.

You want make to certain that Certkiller Method is applied whenever Certkiller Class and its associated child objects are rebuilt.

Choose the two actions which you should perform next? Each correct answer presents only part of the complete answer.

- A. Apply the OnDeserializing attribute to the Certkiller Method method.
- B. Define Certkiller Class to implement the IDeserializationCallback interface.
- C. Define Certkiller Class to inherit from the ObjectManager class.
- D. Apply the OnSerialized attribute to Certkiller Method.
- E. Create a GetObjectData method that calls Certkiller Method.
- F. Create an OnDeserialization method that calls Certkiller Method.

Answer: B,F

Explanation: The iDeserializationCallback interface allows some custom code to be called after the complete object graph has been deserialized via the onDeserialization method. In this case the Certkiller Method should be called in the onDeserialization method.

Applying OnDeserializingAttribute to Certkiller Method will not work because there is not guarantee that the complete object graph will have been deserialized.

If Certkiller Class inherits from ObjectManager it will still have to implement iDeserializationCallback to perform actions after the complete object graph has been deserialized.

The OnSerialized attribute signifies that a method should be called immediately after serialization of the object.

QUESTION 349

You work as the application developer at Certkiller .com. You have created a new service application named Certkiller App33. Certkiller App33 must still be deployed into the Certkiller .com network. A Certkiller .com network administrator named Mia Hamm has already created a user account for Certkiller App33.

You must configure Certkiller App33 to run in the context of this new user account. What should you do next?

- A. Before deploying Certkiller App33, specify the StartType property of the ServiceInstaller class.
- B. Before deploying Certkiller App33, specify the Account, Username, and Password properties of the ServiceProcessInstaller class.
- C. Install the service by using the CONFIG option of the net.exe command-line tool.
- D. Install the service by using the installutil.exe command-line tool.

Answer: B

Explanation: The ServiceProcessInstaller class is automatically called during installation. It is the ideal place to specify the default service settings such as account credentials.

ServiceInstaller.StartType controls how the service will start up e.g automatically or manually. It has nothing to do with a specific account.

Net.exe with the config option is used to configure the server or workstation services.

Installutil.exe can be used to install the service but it is not possible to specify or override service account credentials. They have to be specified in the ServiceProcessInstaller class.

QUESTION 350

DRAG DROP

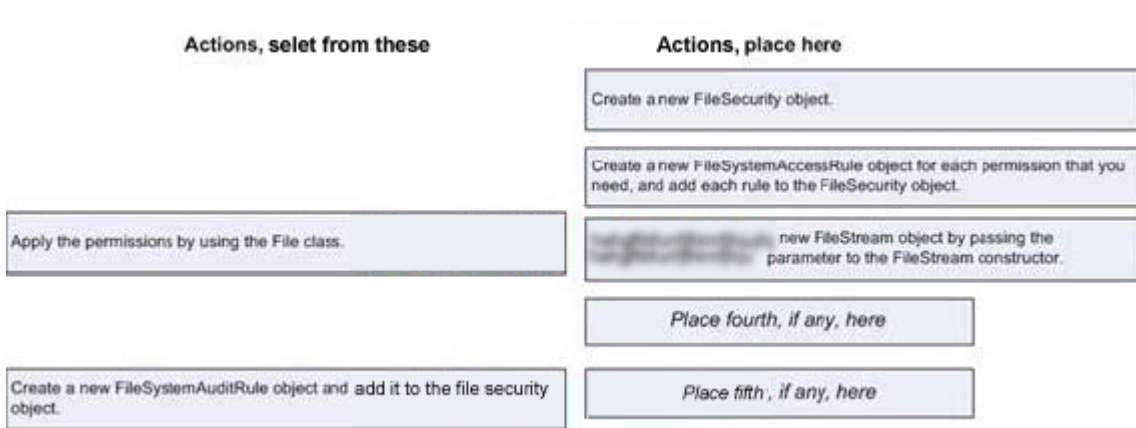
You work as the application developer at Certkiller .com. You are working on an application named Certkiller App05. Certkiller App05 is configured to create a new file on the local file system.

You must set specific security settings for the new file. You must ensure that file inheritance of any default security settings is denied.

What should you do next? Answer by arranging the relevant actions in the proper order.

Actions, select from these	Actions, place here
Create the file by using a new FileStream object by passing the FileSecurity object as a parameter to the FileStream constructor.	Place first, if any, here
Create a new FileSecurity object.	Place second, if any, here
Apply the permissions by using the File class.	Place third, if any, here
Create a new FileSystemAccessRule object for each permission that you need, and add each rule to the FileSecurity object.	Place fourth, if any, here
Create a new FileSystemAuditRule object and add it to the file security object.	Place fifth, if any, here

Answer:



Explanation:

The FileSecurity class should be used to apply the security settings to the file. Once an instance of FileSecurity is created, FileSystemAccessRule objects should can be added to achieve the correct security settings. Finally the FileStream class has a constructor that takes a FileSecurity object and will create the file with the specified security settings. The File class could have been used to apply the permissions (via SetAccessControl()). However this would demand an option to create the file independently of applying the security permissions that is not listed. FileSystemAuditRule class is used to specify the conditions when access to a file\directory is audited.

QUESTION 351

You work as the application developer at Certkiller .com.

You are working on method to call a COM component, and must use declarative security to explicitly request the runtime to perform a full stack walk. Before allowing any callers to execute the method, they must have the required level of trust for COM interop.

Choose the attribute that should be used on the method.

- A. Use this attribute: [SecurityPermission(SecurityAction::Demand, Flags=SecurityPermissionFlag::UnmanagedCode)]
- B. Use this attribute: [SecurityPermission(SecurityAction::LinkDemand, Flags=SecurityPermissionFlag::UnmanagedCode)]
- C. Use this attribute: [SecurityPermission(SecurityAction::Assert, Flags = SecurityPermissionFlag::UnmanagedCode)]
- D. Use this attribute: [SecurityPermission(SecurityAction::Deny, Flags = SecurityPermissionFlag::UnmanagedCode)]

Answer: A

Explanation: A Demand should be used on the SecurityPermission attribute with

the UnmanagedCode flag to force all callers in the call stack to have permission to call unmanaged components.

LinkDemand will only force the immediate caller to have the permission.

Assert will ignore the permissions of callers and allow them indiscriminately.

Deny will explicitly deny access if the caller has the specified permission. This is the reverse of what is required.

QUESTION 352

DRAG DROP

You work as the application developer at Certkiller .com. You are developing a new application named Certkiller App09. Certkiller App09 is configured to monitor free space on a hard disk drive.

You must perform the configuration that will result in Certkiller App09 monitoring free space at one minute intervals. You must also configure Certkiller App09 to run in the background.

What should you do next? Answer by arranging the relevant actions in the proper order.

Actions, select from these	Actions,, place here
Add code to the default constructor of the Service class to monitor the free space on the hard disk drive.	Place first, if any, here
Add code to the OnStart method of the Service class to monitor the free space on the hard disk drive.	Place second, if any, here
Add an instance of teh System.Windows.Forms.Timer class to the Service class and configure it to fire every minute.	place third, if any, here
Add an instance of teh System.Timers.Timer class to the Service class and configure it to fire every minute.	Place fourth, if any, here
Add code to the OnStart method of the Service class to start the timer.	Place fifth, if any, here
Add code to the Elapsed event handler of the timer to monitor and free space on the hard disk drive.	place sixth, if any, here
Add code to the Tick event handler of the timer to monitor the free space on the hard disk drive.	Place 7th, if any, here

Answer:

Actions, select from these	Actions, place here
Add code to the default constructor of the Service class to monitor the free space on the hard disk drive.	Add an instance of the System.Timers.Timer class to the Service class and configure it to fire every minute.
Add code to the OnStart method of the Service class to monitor the free space on the hard disk drive.	Add code to the OnStart method of the Service class to start the timer.
Add an instance of the System.Windows.Forms.Timer class to the Service class and configure it to fire every minute.	Add code to the Elapsed event handler of the timer to monitor the free space on the hard drive disk
	Place fourth, if any, here
	Place fifth, if any, here
	Place sixth, if any, here
Add code to the Tick event handler of the timer to monitor the free space on the hard disk drive.	Place 7th, if any, here

Explanation:

System.Timers.Timer should be added to the Service class and set with an Interval of 1 minute. The Timer should be started on the OnStart method of the service. The Elapsed event of the Timer will fire every minute an event handler can be coded to perform the monitoring of the free space on the hard disk.

Initialisation should not be performed in the constructor because if the service is stopped and restarted, constructor may not be called and the service will not re-start correctly.

The OnStart method is guaranteed to be called following a restart.

Adding code to the OnStart method of the Service class to monitor free space will work once when the service is started but there will be no continual periodic monitoring as the question requests.

The System.Windows.Forms.Timer class designed to be used on a windows forms application and not a service based application. It must be used within a window.

QUESTION 353

You work as the application developer at Certkiller .com. You are creating a new custom-collection class.

You must create the method that will be contained within the class. The method you need to create must return a type which is compatible with the Foreach statement.

Choose the criterion which your method must meet to match your requirement.

- A. Your method has to return a type of either IEnumerator or IEnumerable.
- B. Your method has to return a type of IComparable.
- C. Your method has to explicitly contain a collection.
- D. Your method has to be the only iterator in the class.

Answer: A

Explanation: Returning an IEnumerator will enable the ForEach statement. IEnumerable is a subtype of IEnumerator hence can also be up cast to IEnumerator.

Comparable is used to enable comparisons for a user type.
Explicitly containing a collection within the method will have no impact on the methods return type which is what the ForEach statement will operate on.

QUESTION 354

You work as the application developer at Certkiller .com. You are creating a new custom event handler that will be set up to automatically print all open documents. The custom event handler must also assist in identifying how many document copies must be printed.

You must determine which custom event arguments class to pass as a parameter to the custom event handler.

Choose the code segment which you should use to accomplish this task.

A. `public class PrintingArgs {
private int copies;
public PrintingArgs(int numberOfCopies) {
this.copies = numberOfCopies;
}
public int Copies {
get { return this.copies;
}
}}
B. public class PrintingArgs : EventArgs {
private int copies;
public PrintingArgs(int numberOfCopies) {
this.copies = numberOfCopies;
}
public int Copies {
get { return this.copies;
}
}}
C. public class PrintingArgs {
private EventArgs eventArgs;
public PrintingArgs(EventArgs ea) {
this.eventArgs = ea;
}public EventArgs Args {get { return eventArgs;
}}}
D. public class PrintingArgs : EventArgs {
private int copies;
}`

Answer: B

Explanation: The event handler will require a parameter of type EventArgs or a derived type. The derived type in this example will question states that the event handler helps specify the number of documents that require printing, this

information will have to come from the derived EventArgs class in the form of an instance variable.

A & C do not derive from EventArgs hence cannot fit into the event handling model.

D does not expose the copies instance variable.

QUESTION 355

You work as the application developer at Certkiller .com. You are working on a new method named PersistToDB. PersistToDB returns no value, and takes the EventLogEntry parameter type.

You must create the specific code segment which will enable you to test whether the new method works as expected. The code segment you use must be able to access entries from the application log of local computers, and must then pass only specific entries on to PersistToDB. The relevant entries to be passed to PersistToDB are Error events and Warning events from the source named mySource.

Choose the code segment which would achieve your goal in these circumstances.

A. EventLog myLog = new EventLog("Application", ".");
foreach (EventLogEntry entry in myLog.Entries)
{
if (entry.Source == "MySource")
{
PersistToDB(entry);
}}}

B. EventLog myLog = new EventLog("Application", ".");
myLog.Source = "MySource";
foreach (EventLogEntry entry in myLog.Entries)
{
if (entry.EntryType == (EventLogEntryType.Error &
EventLogEntryType.Warning))
{
PersistToDB(entry);
}}}

C. EventLog myLog = new EventLog("Application", ".");
foreach (EventLogEntry entry in myLog.Entries)
{
if (entry.Source == "MySource")
{
if (entry.EntryType == EventLogEntryType.Error ||
entry.EntryType == EventLogEntryType.Warning)
{
PersistToDB(entry);
}}}

D. EventLog myLog = new EventLog("Application", ".");
myLog.Source = "MySource";
foreach (EventLogEntry entry in myLog.Entries)
{

```
if (entry.EntryType == EventLogEntryType.Error ||
entry.EntryType == EventLogEntryType.Warning)
{
PersistToDB(entry);
}
```

Answer: C

Explanation: It is necessary to create a new Application EventLog, iterate over all the EventLogEntries and call the PersistToDB method if the entry is a warning or error and the source is MySource.

A will PersistToDB irrespective of the type of log entry. The question explicitly states only warnings and errors should be persisted.

B features an incorrect test for warnings and errors.

D&B do not ensure that only MySource entries are persisted. Instead they overwrite the source.

QUESTION 356

You work as the application developer at Certkiller .com. You have created a new application named Certkiller App05. Certkiller App05 is configured to forward an e-mail message. The SMTP server on the local subnet is named Certkiller -SR31. You want to test Certkiller App05. You decide to use a source address of mia@ Certkiller .com; and a target address of dest@ Certkiller .com. Choose the code segment which you should use to test whether Certkiller App05 sends e-mail messages.

A. MailAddress addrFrom =
new MailAddress("mia@ Certkiller .com", "Mia");
MailAddress addrTo =
new MailAddress("dest@ Certkiller .com", "Dest");
MailMessage message = new MailMessage(addrFrom, addrTo);
message.Subject = "Hello";
message.Body = "Test Message";
message.Dispose();

B. string strSmtpClient = " Certkiller -SR31";
string strFrom = " mia@ Certkiller .com";
string strTo = "dest@ Certkiller .com";
string strSubject = "Hello";
string strBody = "Test Message";
MailMessage msg =
new MailMessage(strFrom, strTo, strSubject, strSmtpClient);

C. MailAddress addrFrom = new MailAddress("mia@ Certkiller .com");
MailAddress addrTo = new MailAddress("dest@ Certkiller .com");
MailMessage message = new MailMessage(addrFrom, addrTo);
message.Subject = " Hello";
message.Body = "Test Message ";

```
Smtplib.SmtpClient client = new Smtplib.SmtpClient(" Certkiller -SR31");
client.Send(message);
D. MailAddress addrFrom =
new MailAddress("mia@ Certkiller .com", "Mia");
MailAddress addrTo =
new MailAddress("dest@ Certkiller .com", "Dest");
MailMessage message = new MailMessage(addrFrom, addrTo);
message.Subject = " Hello";
message.Body = " Test Message";
SocketInformation info = new SocketInformation();
Socket client = new Socket(info);
System.Text.ASCIIEncoding enc =
new System.Text.ASCIIEncoding();
byte[] msgBytes = enc.GetBytes(message.ToString());
client.Send(msgBytes);
```

Answer: C

Explanation: To Send a simple mail message construct a MailMessage object and a Smtplib.SmtpClient object. Call the Smtplib.SmtpClient.Send instance method supplying the MailMessage object as a parameter.

A creates a MailMessage but then destroys it.

B creates a MailMessage but then does not do anything with it.

D tries to do something with sockets, this is unnecessary because there is a SMTP server available. The question implies delivering the mail via SMTP.

QUESTION 357

You work as the application developer at Certkiller .com. You are working on a new application named Certkiller App20. Certkiller App20 is configured to perform a series of mathematical calculations. You create a class named Certkiller AppClass and create a procedure named Certkiller AppSP. Certkiller AppSP must execute on an instance of the class.

You must configure the application's user interface so that it continues to respond for the duration that calculations are performed. You must write the code segment for calling the Certkiller AppSP procedure which will accomplish your objective. Choose the code segment which you should use.

```
A. private void Certkiller AppSP() {...} private void DoWork(){
Certkiller AppClass myValues = new Certkiller AppClass();
Thread newThread = new Thread(
new ThreadStart( Certkiller AppSP));
newThread.Start(myValues);
}
```

```
B. private void Certkiller AppSP() {...} private void DoWork(){
Certkiller AppClass myValues = new Certkiller AppClass();
ThreadStart delStart = new
```

```
ThreadStart( Certkiller AppSP);
Thread newThread = new Thread(delStart);
if (newThread.IsAlive) {newThread.Start(myValues);
}}
C. private void Certkiller AppSP ( Certkiller AppClass values) {...} private void
DoWork(){
Certkiller AppClass myValues = new Certkiller AppClass();
Application.DoEvents();
Certkiller AppSP(myValues);
Application.DoEvents();
}
D. private void Certkiller AppSP(object values) {...} private void DoWork(){
Certkiller AppClass myValues = new Certkiller AppClass();
Thread newThread = new Thread(
new ParameterizedThreadStart( Certkiller AppSP));
newThread.Start(myValues);
}
```

Answer: D

Explanation: It is a requirement that the UI continues to respond, hence Certkiller AppSP should execute in a separate thread. Certkiller AppSP requires a parameter hence you should use the ParameterizedThreadStart delegate. A& B attempt to supply a parameter to the ThreadStart delegate. This is not possible. C Does not run in a new thread and hence may leave the UI unresponsive.

QUESTION 358

You work as the application developer at Certkiller .com. You create the following code segment:

```
public delegate void FaxDocs(object sender, FaxArgs args);
```

What should you do next to configure an event that will call FaxDocs?

Choose the code segment which you should use.

```
A. public static event FaxDocs Fax;
B. public static event Fax FaxDocs;
C. public class FaxArgs : EventArgs {
private string coverPageInfo;
public FaxArgs(string coverInfo) {
this.coverPageInfo = coverPageInfo;
}
public string CoverPageInformation {
get {return this.coverPageInfo;
}
}}
D. public class FaxArgs : EventArgs {
private string coverPageInfo;
```

```
public string CoverPageInformation {  
get {return this.coverPageInfo;  
}  
}}
```

Answer: A

Explanation: An event is declared by using the event keyword followed by a delegate type and then a name for the event.

B fax is not a delegate type.

C&D do not declare events.

QUESTION 359

You work as the application developer at Certkiller .com. You create a code segment that will call a function from the Win32 Application Programming Interface (API) via platform invoke. The precise code segment is:

```
string personName = "N?el";
```

```
string msg = "Thank you " + personName + " for coming "!";
```

```
bool rc = User32API.MessageBox(0, msg, personName, 0);
```

You must specify the prototype method that will efficiently assemble the string data.

Choose the code segment which will accomplish the task.

A. [DllImport("user32", CharSet = CharSet.Ansi)]public static extern bool
MessageBox(int hWnd, String text, String caption, uint type);
}

B. [DllImport("user32", EntryPoint = "MessageBoxA", CharSet = CharSet.Ansi)]public
static extern bool MessageBox(int hWnd,
[MarshalAs(UnmanagedType.LPWStr)]String text,
[MarshalAs(UnmanagedType.LPWStr)]String caption,
uint type);
}

C. [DllImport("user32", CharSet = CharSet.Unicode)]public static extern bool
MessageBox(int hWnd, String text, String caption, uint type);
}

D. [DllImport("user32", EntryPoint = "MessageBoxA", CharSet =
CharSet.Unicode)]public static extern bool MessageBox(int hWnd,
[MarshalAs(UnmanagedType.LPWStr)]String text,
[MarshalAs(UnmanagedType.LPWStr)]String caption,
uint type);
}

Answer: C

QUESTION 360

You work as the application developer at Certkiller .com. You create a method which will compress an array of bytes. A parameter named document is used to pass the

array to your method.

You want to compress the received array of bytes or data, and then want to return the result as an array of bytes.

Choose the code segment which will achieve your goal.

```
A. MemoryStream strm = new MemoryStream(document);
   DeflateStream deflate = new DeflateStream(strm,
   CompressionMode.Compress);
   byte[] result = new byte[document.Length];
   deflate.Write(result, 0, result.Length);
   return result;

B. MemoryStream strm = new MemoryStream(document);
   DeflateStream deflate = new DeflateStream(strm,
   CompressionMode.Compress);
   deflate.Write(document, 0, document.Length);
   deflate.Close();
   return strm.ToArray();

C. MemoryStream strm = new MemoryStream();
   DeflateStream deflate = new DeflateStream(strm,
   CompressionMode.Compress);
   deflate.Write(document, 0, document.Length);
   deflate.Close();
   return strm.ToArray();

D. MemoryStream inStream = new MemoryStream(document);
   DeflateStream deflate = new DeflateStream(inStream,
   CompressionMode.Compress);
   MemoryStream outStream = new MemoryStream();
   int b;
   while ((b = deflate.ReadByte()) != -1) {
       outStream.WriteByte((byte)b);
   } return outStream.ToArray();
```

Answer: C

Explanation: The document is compressed and written to a new MemoryStream using the Deflate class. Finally the compressed data can be returned as an array of bytes using the ToArray method of the MemoryStream.

A does not compress and write the document, instead it is compressing and writing an empty array

B & D are reading and writing to the same document.

QUESTION 361

You work as the application developer at Certkiller .com. You are developing an application named Certkiller App05. Certkiller App05 is configured to use SOAP to exchange data with other applications deployed on the Certkiller .com network. In your configuration, you specify that a class named Department inherits from

ArrayList to pass objects to the other application. The Department object is named department.

You must perform the configuration which will enable the application to serialize the Department object for transport via SOAP.

Choose the code segment which will accomplish this task.

- A. SoapFormatter formatter = new SoapFormatter();
byte[] buffer = new byte[Certkiller .Capacity];
MemoryStream stream = new MemoryStream(buffer);-
foreach (object o in department) {
formatter.Serialize(stream, o);
}
- B. SoapFormatter formatter = new SoapFormatter();
byte[] buffer = new byte[department.Capacity];
MemoryStream stream = new MemoryStream(buffer);
formatter.Serialize(stream, department);
- C. SoapFormatter formatter = new SoapFormatter();
MemoryStream stream = new MemoryStream();
foreach (object o in department) {
formatter.Serialize(stream, o);
}
- D. SoapFormatter formatter = new SoapFormatter();
MemoryStream stream = new MemoryStream();
formatter.Serialize(stream, department);

Answer: D

Explanation: Simply serialize the entire object to a stream using a SoapFormatter.

A&C attempt to serialize components of the object rather the object itself.

B attempts to serialize to an array, however the array will not be big enough to store the serialized object because it is not sized on the entire object.

QUESTION 362

You work as the application developer at Certkiller .com. You are developing a class definition. Your class definition must be able to interoperate with COM applications.

You must create a code segment that will allow COM applications to create instances of the class. COM applications must also be able to call the method named GetAddress.

Choose the code segment which you should use.

- A. public class Customer {
string addressString;
public Customer(string address) { addressString = address;
}
public string GetAddress() { return addressString;

```
}}  
B. public class Customer {  
    static string addressString;  
    public Customer() { }  
    public static string GetAddress() { return addressString;  
}}  
C. public class Customer {  
    string addressString;  
    public Customer() { }  
    public string GetAddress() { return addressString;  
}}  
D. public class Customer {  
    string addressString;  
    public Customer() { }  
    internal string GetAddress() { return addressString;  
}}
```

Answer: C

Explanation: The class should be declared with a parameter less constructor and the getAddress() method should be public.

A uses a constructor with Parameters.

B uses static members that are not supported in COM

D the method GetAddress() must be public to be accessible by COM.

QUESTION 363

You work as the application developer at Certkiller .com. You are creating a class library which must be able to access system environment variables.

You must set a call method which will only force a runtime SecurityException if the callers which are higher in the call stack, fail to have the required permissions.

Choose the call method which will do this.

- A. Use set.Demand();
- B. Use set.Assert();
- C. Use set.PermitOnly();
- D. Use set.Deny();

Answer: A

Explanation: Demand forces all callers in the call stack to have the specified permission.

PermitOnly will instruct the runtime to reduce the access by only allowing callers with the permissions explicitly stated and nothing else.

Assert will ignore the permissions of callers and allow them indiscriminately.

Deny will explicitly deny access if the caller has the specified permission.

QUESTION 364

You work as the application developer at Certkiller .com. You are creating a new method that will hash specific data with the Secure Hash Algorithm (SHA-1). The data must be passed to your method as a byte array named hashdata. The resultant data must then be passed to a byte array named hash. Choose the code segment which will achieve your goal.

- A. SHA1 sha = new SHA1CryptoServiceProvider();
byte[] hash = null;
sha.TransformBlock(
hashdata, 0, hashdata.Length, hash, 0);
- B. SHA1 sha = new SHA1CryptoServiceProvider();
byte[] hash = BitConverter.GetBytes(sha.GetHashCode());
- C. SHA1 sha = new SHA1CryptoServiceProvider();
byte[] hash = sha.ComputeHash(hashdata);
- D. SHA1 sha = new SHA1CryptoServiceProvider();
sha.GetHashCode();
byte[] hash = sha.Hash;

Answer: C

Explanation: Initialise SHA1 object and call the ComputeHash method supplying the hashdata as a parameter to return the hash code as an array of bytes. A TransferBlock is more appropriate for hashing part of a hashdata. Also it should be called with TransferEndBlock. B&C GetHashCode is the method inherited from the Object class. It will not perform a hash on the incoming hashdata.

QUESTION 365

You work as the application developer at Certkiller .com. You are creating a new method that must hash specific data by applying the MD5 algorithm. You must write the hash of the incoming parameter by using the MD5 algorithm. The data must be passed to your method as a byte array named message. The resultant data must then be placed into a byte array. Choose the code segment which will achieve your goal.

- A. HashAlgorithm algo = HashAlgorithm.Create("MD5");
byte[] hash = algo.ComputeHash(message);
- B. HashAlgorithm algo = HashAlgorithm.Create("MD5");
byte[] hash = BitConverter.GetBytes(algo.GetHashCode());
- C. HashAlgorithm algo;
algo = HashAlgorithm.Create(message.ToString());
byte[] hash = algo.Hash;
- D. HashAlgorithm algo = HashAlgorithm.Create("MD5");
byte[] hash = null;
algo.TransformBlock(hashdata, 0, message.Length, message, 0);

Answer: A

Explanation: Create a HashAlgorithm object based on the MD5 algorithm and call the ComputerHash method that will return the hash as an array of bytes.

B GetHashCode() will call the method inherited from object, it will not hash the message.

C The parameter of the Create method should specify the type of hashing algorithm to use not the message to be hashed.

D TransferBlock is more appropriate for hashing part of a message. Also it should be called with TransferEndBlock.

QUESTION 366

You work as the application developer at Certkiller .com. You have created a new dynamic assembly named Certkiller Assembly and must ensure that the assembly is saved to disk.

Choose the code segment which you should use.

A. AssemblyName myAssemblyName =
new AssemblyName();
myAssemblyName.Name = " Certkiller Assembly";
AssemblyBuilder myAssemblyBuilder =
AppDomain.CurrentDomain.DefineDynamicAssembly
(myAssemblyName, AssemblyBuilderAccess.Run);
myAssemblyBuilder.Save(" Certkiller Assembly.dll");

B. AssemblyName myAssemblyName =
new AssemblyName();
myAssemblyName.Name = " Certkiller Assembly";
AssemblyBuilder myAssemblyBuilder =
AppDomain.CurrentDomain.DefineDynamicAssembly
(myAssemblyName, AssemblyBuilderAccess.Save);
myAssemblyBuilder.Save(" Certkiller Assembly.dll");

C. AssemblyName myAssemblyName =
new AssemblyName();
AssemblyBuilder myAssemblyBuilder =
AppDomain.CurrentDomain.DefineDynamicAssembly
(myAssemblyName, AssemblyBuilderAccess.RunAndSave);
myAssemblyBuilder.Save(" Certkiller Assembly.dll");

D. AssemblyName myAssemblyName =
new AssemblyName(" Certkiller Assembly");
AssemblyBuilder myAssemblyBuilder =
AppDomain.CurrentDomain.DefineDynamicAssembly
(myAssemblyName, AssemblyBuilderAccess.Save);
myAssemblyBuilder.Save("c:\\ Certkiller Assembly.dll");

Answer: B

Explanation: Create an AssemblyName object and use it to construct an AssemblyBuilder with save privilege. Finally call the Save method on the AssemblyBuilder to write the assembly to disk.

A Creates an assembly that does not have the privilege to save to disk.

C does not provide a name the assembly

D attempts to define a physical file location, this is not compatible with AssemblyBuilder.Save

QUESTION 367

You work as the application developer at Certkiller .com. You are creating a new code segment which is to be used for user authentication and authorization purposes. The current application data store already stores the username, password, and roles.

You must establish the user security context, which should be used for the authorization checks like IsInRole. To authorize the user, you have started developing the following code segment:

```
if (!TestPassword(userName, password))
```

```
throw new Exception("user not authenticated");
```

```
String[] userRolesArray = LookupUserRoles(userName);
```

From the options below, choose the code which will make the code segment complete.

A. GenericIdentity ident = new GenericIdentity(userName);

GenericPrincipal currentUser =

new GenericPrincipal(ident, userRolesArray);

Thread.CurrentPrincipal = currentUser;

B. WindowsIdentity ident = new WindowsIdentity(userName);

WindowsPrincipal currentUser = new WindowsPrincipal(ident);

Thread.CurrentPrincipal = currentUser;

C. NTAccount userNTName = new NTAccount(userName);

GenericIdentity ident = new GenericIdentity(userNTName.Value);

GenericPrincipal currentUser= new GenericPrincipal(ident, userRolesArray);

Thread.CurrentPrincipal = currentUser;

D. IntPtr token = IntPtr.Zero;

token = LogonUserUsingInterop(userName, encryptedPassword);

WindowsImpersonationContext ctx =

WindowsIdentity.Impersonate(token);

Answer: A

Explanation: Because the application storing the credentials, the GenericIdentity & GenericPrincipal classes should be used instead of the WindowsIdentity\Principal classes.

B uses WindowsIdentity & WindowsPrincipal

C incorrectly uses NTAccount to initialise a GenericPrincipal. GenericPrincipal requires an implementation of IIdentity.

D the `WindowsIdentity.Impersonate()` is used for running code in the context of another user. Impersonation is not what is required.

QUESTION 368

You work as the application developer at Certkiller .com. You are creating a new application named at Certkiller App11. Certkiller App11 will be used for a Certkiller .com business partner. The Certkiller business partner has offices in Hong Kong.

You must write the code segment which will show all negative currency values by using a minus sign.

Choose the code segment which you should use.

- A. `NumberFormatInfo culture =
new CultureInfo("zh-HK").NumberFormat;
culture.NumberNegativePattern = 1;
return numberToPrint.ToString("C", culture);`
- B. `NumberFormatInfo culture =
new CultureInfo("zh-HK").NumberFormat;
culture.CurrencyNegativePattern = 1;
return numberToPrint.ToString("C", culture);`
- C. `CultureInfo culture =
new CultureInfo("zh-HK");
return numberToPrint.ToString("-(0)", culture);`
- D. `CultureInfo culture =
new CultureInfo("zh-HK");
return numberToPrint.ToString("()", culture);`

Answer: B

Explanation: Use `CurrencyNegativePattern` property set to 1 to display negative currency values with a minus sign.

A will give a minus sign for negative numbers but not for negative currencies.

C & D The culture has not been to display a minus sign for currency.

QUESTION 369

You work as the application developer at Certkiller .com. You are developing a new application. You must define the code segment which will create a common language runtime (CLR) unit of isolation within the new application.

Choose the code segment which you should use to accomplish this task.

- A. `AppDomainSetup mySetup = AppDomain.CurrentDomain.SetupInformation;
mySetup.ShadowCopyFiles = "true";`
- B. `System.Diagnostics.Process myProcess;
myProcess = new System.Diagnostics.Process();`
- C. `AppDomain domain;
domain = AppDomain.CreateDomain("CertkillerDomain");`

D. `System.ComponentModel.Component myComponent;`
`myComponent = new System.ComponentModel.Component();`

Answer: C

Explanation: Create a new `ApplicationDomain` using the `AppDomain.CreateDomain()` method.

A `ShadowCopyFiles` property of `AppDomainSetup` controls whether shadow copying is enabled or disabled.

B the `Process` class is used to represent an existing process running on a computer.

D The `ComponentModel.Component` class is used for sharing components between applications.

QUESTION 370

You work as the application developer at Certkiller .com. You are working on a new application named Certkiller App05. Certkiller App05 is configured to dynamically load assemblies from the application directory.

You must define the code segment that will dynamically load an assembly named Certkiller Ass25.dll into the current application domain.

Choose the code segment which you should use to accomplish this task.

- A. `AppDomain domain = AppDomain.CurrentDomain;`
`string myPath = Path.Combine(domain.BaseDirectory, " Certkiller Ass25.dll");`
`Assembly asm = Assembly.LoadFrom(myPath);`
- B. `AppDomain domain = AppDomain.CurrentDomain;`
`string myPath = Path.Combine(domain.BaseDirectory, " Certkiller Ass25.dll`
`Assembly asm = Assembly.Load(myPath);`
- C. `AppDomain domain = AppDomain.CurrentDomain;`
`string myPath = Path.Combine(domain.DynamicDirectory, " Certkiller Ass25.dll");`
`Assembly asm = AppDomain.CurrentDomain.Load(myPath);`
- D. `AppDomain domain = AppDomain.CurrentDomain;`
`Assembly asm = domain.GetData(" Certkiller Ass25.dll");`

Answer: A

Explanation: The `Assembly.LoadFrom()` method can be called to dynamically load an assembly from file.

B the `Load` method requires an `AssemblyName` object as a parameter.

C it is not possible to use `AppDomain.Load` to load an assembly from file.

D `AppDomain.GetData` gets information stored in the `AppDomain` for the specified assembly. It cannot load an assembly.

QUESTION 371

You work as the application developer at Certkiller .com. You are creating a new code segment. You must ensure that the data contained within an isolated storage file, named `Settings.dat`, is returned as a string. `Settings.dat` is machine-scoped.

Choose the code segment which will achieve your goal.

A. `IsolatedStorageFileStream isoStream;`
`isoStream = new IsolatedStorageFileStream("Settings.dat", FileMode.Open);`
`string result = new StreamReader(isoStream).ReadToEnd();`
B. `IsolatedStorageFile isoFile;`
`isoFile = IsolatedStorageFile.GetMachineStoreForAssembly();`
`IsolatedStorageFileStream isoStream;`
`isoStream = new IsolatedStorageFileStream("Settings.dat", FileMode.Open, isoFile);`
`string result = new StreamReader(isoStream).ReadToEnd();`
C. `IsolatedStorageFileStream isoStream;`
`isoStream = new IsolatedStorageFileStream("Settings.dat", FileMode.Open);`
`string result = isoStream.ToString();`
D. `IsolatedStorageFile isoFile;`
`isoFile = IsolatedStorageFile.GetMachineStoreForAssembly();`
`IsolatedStorageFileStream isoStream;`
`isoStream = new IsolatedStorageFileStream("Settings.dat", FileMode.Open, isoFile);`
`string result = isoStream.ToString();`

Answer: B

Explanation: Retrieve the `IsolatedStorageFile` for the machine store. Use an `IsolatedStorageFileStream` to read from the desired file within the machine store.

A & C do not get the `IsolatedStorageFile` for the machine context.

D returns a string representation of the `IsolatedStorageFileStream` object not a String of the files contents as the question requests.

QUESTION 372

You work as the application developer at Certkiller .com. You are creating a new class which contains a method named `GetCurrentRate`. `GetCurrentRate` extracts the current interest rate from a variable named `currRate`. `currRate` contains the current interest rate which should be used.

You develop serialized representations of the class and now need to write a code segment which updates the `currRate` variable with the current interest rate if an instance of the class is deserialized.

Choose the code segment which will accomplish this task.

A. `[OnSerializing]internal void UpdateValue (StreamingContext context) {`
`currRate = GetCurrentRate();`
`}`
B. `[OnSerializing]internal void UpdateValue(SerializationInfo info) {`
`info.AddValue("currentRate", GetCurrentRate());`
`}`
C. `[OnDeserializing]internal void UpdateValue(SerializationInfo info) {`
`info.AddValue("currentRate", GetCurrentRate());`
`}`

```
D. [OnDeserialized]internal void UpdateValue(StreamingContext context) {  
currRate = GetCurrentRate();  
}
```

Answer: D

Explanation: A method with the OnDeserialized attribute will be called after Deserialization and any instance variables can be set.

A & B the method will fire during serializing, the question is concerned with reconstructing the object during deserialization.

C the OnDeserializing attribute is useful for default values. OnDeserializing attribute works with a method that contains a StreamContext parameter and not a SerializationInfo parameter.

QUESTION 373

You work as the application developer at Certkiller .com. You have to develop a method which will clear a queue named badqueue.

Choose the code segment which will accomplish this task.

- A. foreach (object e in badqueue) {
q.Dequeue();
}
- B. foreach (object e in badqueue) {
Enqueue(null);
}
- C. badqueue.Clear();
- D. badqueue.Dequeue();

Answer: C

Explanation: Simply call the Clear() method to empty a queue.

A Dequeueing all of the items in a queue will also serve the same affect but it is a lot more roundabout.

B attempts to re-queue items that are already in the queue

D will de-queue only one item that is at the front of the queue.

QUESTION 374

You work as the application developer at Certkiller .com. You have to develop an application named Certkiller App21. When deployed, Certkiller App21 will be used by numerous users on the same computer. Certkiller App21 uses more than one assembly, and is configured to use isolated storage to store certain user information.

You must create a new directory named UserInfo in the isolated storage area which is scoped to the current Microsoft Windows identity and assembly.

Choose the code segment which will accomplish this task.

- A. IsolatedStorageFile store;

```
store = IsolatedStorageFile.GetUserStoreForAssembly();
store.CreateDirectory("UserInfo");
B. IsolatedStorageFile store;
store = IsolatedStorageFile.GetMachineStoreForAssembly();
store.CreateDirectory("UserInfo");
C. IsolatedStorageFile store;
store = IsolatedStorageFile.GetUserStoreForDomain();
store.CreateDirectory("UserInfo");
D. IsolatedStorageFile store;
store = IsolatedStorageFile.GetMachineStoreForApplication();
store.CreateDirectory("UserInfo");
```

Answer: A

Explanation: The user store for the assembly is the correct store that is required. It is returned by `IsolatedStorageFile.GetUserStoreForAssembly()`.
B,C & D return Isolated Storage File stores of incorrect scope

QUESTION 375

You work as the application developer at Certkiller .com. You are working on an existing application and must load a new assembly into this application. You must write the code segment that will require the common language runtime (CLR) to grant the assembly a permission set, as though the assembly was loaded from the local intranet zone. You must ensure that the default evidence for the assembly is overridden and must create the evidence collection. Choose the code segment which will accomplish this task.

```
A. Evidence evidence = new Evidence(
Assembly.GetExecutingAssembly().Evidence
);
B. Evidence evidence = new Evidence();
evidence.AddAssembly(new Zone(SecurityZone.Intranet));
C. Evidence evidence = new Evidence();
evidence.AddHost(new Zone(SecurityZone.Intranet));
D. Evidence evidence = new Evidence(
AppDomain.CurrentDomain.Evidence
);
```

Answer: C

Explanation: Use the `evidence.AddHost` method to add Zone evidence.
A simply gets the evidence of the Executing Assembly and assigns it to a new object, the question explicitly wants Intranet zone evidence.
B Adds assembly evidence, the question asks for host evidence because it is concerned with where the assembly was loaded from.
D does not create an Evidence object with Intranet zone evidence.

QUESTION 376

You work as the application developer at Certkiller .com. You are working on a new requirement. You have to create a class library that will open the network socket connections to computers on the Certkiller .com network.

The class library must be deployed to the global assembly cache, with full trust granted. To cater for network socket connections being used, you develop this code segment:

```
SocketPermission permission =  
new SocketPermission(PermissionState.Unrestricted);  
permission.Assert();
```

You discover though that there are certain existing applications which do not have the required permissions to open the network socket connections. You decide to cancel the assertion.

Choose the code segment which will accomplish this task.

- A. CodeAccessPermission.RevertAssert();
- B. CodeAccessPermission.RevertDeny();
- C. permission.Deny();
- D. permission.PermitOnly();

Answer: A

Explanation: CodeAccessPermission.RevertAssert() should be used to undo a previous Assert call.

B is used to revert a previous deny call.

C & D are used to reduce the CAS permissions, they do not undo a previous Assert call.

QUESTION 377

You work as the application developer at Certkiller .com. You create a new service application named Certkiller App29. You install Certkiller App29 on five application servers running in the Certkiller .com network. You then apply the code segment shown below. Note that line numbers are only included for reference purposes.

```
01 public void StartService(string serverName){  
02 ServiceController ctrl = new  
03 ServiceController(" Certkiller App29");  
04 if (ctrl.Status == ServiceControllerStatus.Stopped){  
05 }  
06 }
```

You want Certkiller App29 to start if it stops. You must create the routine which will start Certkiller App29 on the server defined by the serverName input parameter.

Choose the two lines of code which you should include in your code segment. Each correct answer presents only part of the complete solution. Choose two answers.

- A. Add this line of code between line 03 and line 04: ctrl.ServiceName = serverName;
- B. Add this line of code between line 03 and line 04: ctrl.MachineName = serverName;

- C. Add this line of code between line 03 and line 04:ctrl.Site.Name = serverName;
- D. Add this line of code between line 04 and line 05:ctrl.Continue();
- E. Add this line of code between line 04 and line 05:ctrl.Start();
- F. Add this line of code between line 04 and line 05:ctrl.ExecuteCommand(0);

Answer: B,E

Explanation: The ServiceController is capable of controller services on other computers, the MachineName should be specified. The service should be started with the Start() method if it is in the stopped state.

Setting the ServiceName to the machine name is incorrect.

No such property as SiteName

Continue cannot re-start a stopped service only a paused one.

ExecuteCommand is used to fire a custom command on the service.

QUESTION 378

You work as the application developer at Certkiller .com. You must write the code segment which will enable you to read the entire contents of a file named Data.txt into a single string variable.

Choose the code segment that will do this.

- A. string result = null;
StreamReader reader = new StreamReader("Data.txt");
result = reader.Read().ToString();
- B. string result = null;
StreamReader reader = new StreamReader("Data.txt");
result = reader.ReadToEnd();
- C. string result = string.Empty;
StreamReader reader = new StreamReader("Data.txt");
while (!reader.EndOfStream) {
result += reader.ToString();
}
- D. string result = null;
StreamReader reader = new StreamReader("Data.txt");
result = reader.ReadLine();

Answer: B

Explanation: Create a StreamReader based on the file and call the ReadToEnd() method to quickly read the entire file and return a string.

A & D does not read the entire file.

C calling ToString() on the reader will give a string representation of the stream and will not read from the stream.

QUESTION 379

You work as the application developer at Certkiller .com. You are writing a method

that will run through the credentials of the end user. Microsoft Windows groups must be used to authorize the user.

You must develop the code segment which will recognize if the user exists in the local group named Sales.

Choose the code segment that will do this.

- A. `WindowsIdentity currentUser = WindowsIdentity.GetCurrent();
foreach (IdentityReference grp in currentUser.Groups) {
NTAccount grpAccount =
((NTAccount)grp.Translate(typeof(NTAccount)));
isAuthorized = grpAccount.Value.Equals(Environment.MachineName + @"\Sales");
if (isAuthorized) break;
}`
- B. `WindowsPrincipal currentUser =
(WindowsPrincipal)Thread.CurrentPrincipal;
isAuthorized = currentUser.IsInRole("Sales");`
- C. `GenericPrincipal currentUser =
(GenericPrincipal) Thread.CurrentPrincipal;
isAuthorized = currentUser.IsInRole("Sales");`
- D. `WindowsPrincipal currentUser =
(WindowsPrincipal)Thread.CurrentPrincipal;
isAuthorized = currentUser.IsInRole(Environment.MachineName);`

Answer: B

Explanation: To check the role membership of the current Windows user, use the `IsInRole()` method of the `WindowsPrincipal` in the current thread.

A it is a lot more complicated to iterate through all the groups the user belongs to and checking for matches. The `Principal` classes are for this very purposes and should be used.

C uses `GenericPrincipal`. `WindowsPrincipal` should be used for windows accounts. There is an invalid cast from `WindowsPrincipal` to `GenericPrincipal`.

D does not specify the group correctly.

QUESTION 380

You work as the application developer at Certkiller .com. You must create a code segment that will perform these tasks:

1. Retrieves the name of each paused service.
2. Passes the name to the `Add` method of `Collection5`.

Choose the code segment which you should use.

- A. `ManagementObjectSearcher searcher =
new ManagementObjectSearcher(
"Select * from Win32_Service where State = 'Paused'");
foreach (ManagementObject svc in searcher.Get()) {
Collection5.Add(svc["DisplayName"]);`

```
}
B. ManagementObjectSearcher searcher =
new ManagementObjectSearcher( "Select * from Win32_Service", "State = 'Paused'");
foreach (ManagementObject svc in searcher.Get()) {
Collection5.Add(svc["DisplayName"]);
}
C. ManagementObjectSearcher searcher =
new ManagementObjectSearcher(
"Select * from Win32_Service");
foreach (ManagementObject svc in searcher.Get()) {
if ((string) svc["State"] == "Paused") {
Collection5.Add(svc["DisplayName"]);
}}
D. ManagementObjectSearcher searcher =
new ManagementObjectSearcher();
searcher.Scope = new ManagementScope("Win32_Service");
foreach (ManagementObject svc in searcher.Get()) {
if ((string)svc["State"] == "Paused") {
Collection5.Add(svc["DisplayName"]);
}}
```

Answer: A

Explanation: Use the ManagementObjectSearcher to search for all services with a paused state. Iterate over the returned collection and add the display name to Collection5.

B The constructor is invoked incorrectly.

C & D the query is incorrect. The searcher does not restrict to paused services.

QUESTION 381

You work as the application developer at Certkiller .com. You must create a code segment that will identify the first 100 bytes from a stream variable named Certkiller stream5.

The initial 100 bytes must be transferred to a byte array named byteArray. The code segment you write must assign the transferred bytes to an integer variable named bytesTransferred

Choose the code segment which you should use.

A. bytesTransferred = Certkiller stream5.Read(byteArray, 0, 100);

B. for (int i = 0;

i < 100;

i++) {

Certkiller stream5.WriteByte(byteArray[i]);

bytesTransferred = i;

if (! Certkiller stream5.CanWrite) {

break;


```
}}  
C. while (bytesTransferred < 100) {  
    Certkiller stream5.Seek(1, SeekOrigin.Current);  
    byteArray[bytesTransferred++] =  
    Convert.ToByte( Certkiller stream5.ReadByte());  
}  
D. Certkiller stream5.Write(byteArray, 0, 100);  
bytesTransferred = byteArray.Length;
```

Answer: A

Explanation: The Read() method accepts a byte array and the start position and number of bytes to read as parameters.

B & D The question indicates that data should be read from the stream not written to it.

C it is unnecessary to attempt to read byte by byte, the Read() method provides a very efficient way of reading into a byte array.

QUESTION 382

You work as the application developer at Certkiller .com. You are developing a new application named Certkiller App12. Certkiller App12 will be used to store customer information on Certkiller .com's customers who are dispersed across the continent.

You need to create internal utilities for Certkiller App12, and need to collect information on all Certkiller .com's customers that are located in Canada.

Choose the code segment which will perform this task.

```
A. foreach (CultureInfo culture in  
    CultureInfo.GetCultures(CultureTypes.SpecificCultures)) { // Output the region  
    information...}  
B. CultureInfo cultureInfo = new CultureInfo("CA");  
    // Output the region information...  
C. RegionInfo regionInfo = new RegionInfo("CA");  
    // Output the region information...  
D. RegionInfo regionInfo = new RegionInfo("");  
    if (regionInfo.Name == "CA") {  
        // Output the region information...}
```

Answer: C

Explanation: The RegionInfo class can be used to get information about a region.

A & B CultureInfo is used to control formatting, sorting & comparing of culture sensitive data. E.g currencies, calendar dates etc.

D Does not initialise the RegionInfo object correctly i.e to Canada.

QUESTION 383

You work as the application developer at Certkiller .com. You are developing a new application named Certkiller App06.

Certkiller App06 will be used to transmit confidential financial information over the network. To secure the confidential data, you create an X509 Certificate object named certificate and create a TcpClient object named client.

You must now create the code segment that creates an SslStream for communication by applying the Transport Layer Security 1.0 protocol. Choose the code segment which you should use.

- A. SslStream ssl = new SslStream(client.GetStream());
ssl.AuthenticateAsServer(
certificate, false, SslProtocols.None, true);
- B. SslStream ssl = new SslStream(client.GetStream());
ssl.AuthenticateAsServer(
certificate, false, SslProtocols.Ssl3, true);
- C. SslStream ssl = new SslStream(client.GetStream());
ssl.AuthenticateAsServer(
certificate, false, SslProtocols.Ssl2, true);
- D. SslStream ssl = new SslStream(client.GetStream());
ssl.AuthenticateAsServer(
certificate, false, SslProtocols.Tls, true);

Answer: D

QUESTION 384

You work as the application developer at Certkiller .com. You are developing a new method that must pass data to another method named Certkiller Me2. Your method accepts a string parameter named message.

The method you are writing must break the message parameter into individual lines of text. Each individual line must then be passed to the Certkiller Me2 method.

Choose the code segment which you should use.

- A. StringReader reader = new StringReader(message);
Certkiller Me2 (reader.ReadToEnd());
reader.Close();
- B. StringReader reader = new StringReader(message);
while (reader.Peek() != -1) {
string line = reader.Read().ToString();
Certkiller Me2 (line);
}reader.Close();
- C. StringReader reader = new StringReader(message);
Certkiller Me2 (reader.ToString());
reader.Close();
- D. StringReader reader = new StringReader(message);
while (reader.Peek() != -1) {
Certkiller Me2 (reader.ReadLine());
}reader.Close();

Answer: D

Explanation: `StreamReader.ReadLine()` allows for lines to be read line by line.

A `ReadToEnd()` will read the entire stream.

B `Read()` will not read the line but only the next character.

C will not read from the message but will just give a string representation of the reader.

QUESTION 385

You work as the application developer at Certkiller .com. You are developing a new method that must encrypt confidential data. The method must use the Data Encryption Standard (DES) algorithm. Your new method takes these parameters:

1. A byte array, named `message`, that must be encrypted by applying the DES algorithm.
2. A key, named `key`, which will be used to encrypt the data.
3. The initialization vector, named `iv`.

Once the data is encrypted, it must be added to the `MemoryStream` object.

Choose the code segment which will encrypt the specified data and add it to the `MemoryStream` object.

A. `DES des = new DESCryptoServiceProvider();`
`des.BlockSize = message.Length;`
`ICryptoTransform crypto = des.CreateEncryptor(key, iv);`
`MemoryStream cipherStream = new MemoryStream();`
`CryptoStream cryptoStream = new CryptoStream(cipherStream,`
`crypto, CryptoStreamMode.Write);`
`cryptoStream.Write(message, 0, message.Length);`

B. `DES des = new DESCryptoServiceProvider();`
`ICryptoTransform crypto = des.CreateDecryptor(key, iv);`
`MemoryStream cipherStream = new MemoryStream();`
`CryptoStream cryptoStream = new CryptoStream(cipherStream,`
`crypto, CryptoStreamMode.Write);`
`cryptoStream.Write(message, 0, message.Length);`

C. `DES des = new DESCryptoServiceProvider();`
`ICryptoTransform crypto = des.CreateEncryptor();`
`MemoryStream cipherStream = new MemoryStream();`
`CryptoStream cryptoStream = new CryptoStream(cipherStream,`
`crypto, CryptoStreamMode.Write);`
`cryptoStream.Write(message, 0, message.Length);`

D. `DES des = new DESCryptoServiceProvider();`
`ICryptoTransform crypto = des.CreateEncryptor(key, iv);`
`MemoryStream cipherStream = new MemoryStream();`
`CryptoStream cryptoStream = new CryptoStream(cipherStream,`
`crypto, CryptoStreamMode.Write);`
`cryptoStream.Write(message, 0, message.Length);`

Answer: D

Explanation: Use the DesCryptoServiceProvider to create a new encryptor. Create a CryptoStream that encrypt directly to the MemoryStream and call the Write() method to perform the encryption.

A Uses a blocksize set to size of the entire message

B creates a decryptor instead of an encryptor.

C does not initialize the encryptor with the key and iv correctly.

QUESTION 386

You work as the application developer at Certkiller .com. You have to create a new security policy for an application domain which must enforce the new Certkiller .com security policy. You write the code segment to do this:

```
PolicyLevel policy = PolicyLevel.CreateAppDomainLevel();
```

```
PolicyStatement noTrustStatement =
```

```
new PolicyStatement(
```

```
policy.GetNamedPermissionSet("Nothing"));
```

```
PolicyStatement fullTrustStatement =
```

```
new PolicyStatement(
```

```
policy.GetNamedPermissionSet("FullTrust"));
```

You must now ensure that all loaded assemblies default to the Nothing permission set. In addition to this, when an assembly comes from a trusted zone, your security policy must grant the assembly the FullTrust permission set. You must create the code groups to do this.

Choose the code segment which will achieve this objective.

A. CodeGroup group1 = new FirstMatchCodeGroup(
new ZoneMembershipCondition(SecurityZone.Trusted),
fullTrustStatement);

CodeGroup group2 = new UnionCodeGroup(
new AllMembershipCondition(),
noTrustStatement);

group1.AddChild(group2);

B. CodeGroup group1 = new FirstMatchCodeGroup(
new AllMembershipCondition(),
noTrustStatement);

CodeGroup group2 = new UnionCodeGroup(
new ZoneMembershipCondition(SecurityZone.Trusted),
fullTrustStatement);

group1.AddChild(group2);

C. CodeGroup group = new UnionCodeGroup(
new ZoneMembershipCondition(SecurityZone.Trusted),
fullTrustStatement);

D. CodeGroup group = new FirstMatchCodeGroup(
new AllMembershipCondition(),
noTrustStatement);

Answer: B

QUESTION 387

You work as the application developer at Certkiller .com. You have to define the code segment that will transfer the data of a byte array. The byte array is named dataToSend. Your code segment must use a NetworkStream object named netStream when transferring the data of the byte array. The cache size you use must be 8,192 bytes.

Which code segment should you use to accomplish the task?

- A. `MemoryStream memStream = new MemoryStream(8192);
memStream.Write(dataToSend, 0, (int) netStream.Length);`
- B. `MemoryStream memStream = new MemoryStream(8192);
netStream.Write(dataToSend, 0, (int) memStream.Length);`
- C. `BufferedStream bufStream = new BufferedStream(netStream, 8192);
bufStream.Write(dataToSend, 0, dataToSend.Length);`
- D. `BufferedStream bufStream = new BufferedStream(netStream);
bufStream.Write(dataToSend, 0, 8192);`

Answer: C

Explanation: To send data using a cache it is necessary to use a BufferedStream. The BufferedStream should be created with the cache size of 8192 bytes.

A & B do not employ caching.

D does not correctly initialise the BufferedStream to have a cache size of 8192 bytes.

QUESTION 388

You work as the application developer at Certkiller .com. You are developing a new client application named Certkiller App09. Certkiller App09 must have a utility screen. The screen must show a thermometer; which must indicate what the current status of processes are which are being executed by the application.

A rectangle, which will be the background of the thermometer, must be drawn on the screen. The rectangle must be filled with gradient shading, as shown in the accompanying exhibit.



Which code segment should you use to accomplish the task?

- A. `Rectangle rectangle = new Rectangle(10, 10, 450, 25);
LinearGradientBrush rectangleBrush =
new LinearGradientBrush(rectangle, Color.AliceBlue,
Color.CornflowerBlue,
LinearGradientMode.ForwardDiagonal);`

```
Pen rectanglePen = new Pen(rectangleBrush);
Graphics g = this.CreateGraphics();
g.DrawRectangle(rectanglePen, rectangle);
B. Rectangle rectangle = new Rectangle(10, 10, 450, 25);
LinearGradientBrush rectangleBrush =
new LinearGradientBrush(rectangle, Color.AliceBlue,
Color.CornflowerBlue,
LinearGradientMode.ForwardDiagonal);
Pen rectanglePen = new Pen(rectangleBrush);
Graphics g = this.CreateGraphics();
g.FillRectangle(rectangleBrush, rectangle);
C. RectangleF rectangle = new RectangleF(10f, 10f, 450f, 25f);
Point[] points = new Point[] { new Point(0, 0),
new Point(110, 145)};
LinearGradientBrush rectangleBrush =
new LinearGradientBrush(rectangle, Color.AliceBlue,
Color.CornflowerBlue,
LinearGradientMode.ForwardDiagonal);
Pen rectanglePen = new Pen(rectangleBrush);
Graphics g = this.CreateGraphics();
g.DrawPolygon(rectanglePen, points);
D. RectangleF rectangle = new RectangleF(10f, 10f, 450f, 25f);
SolidBrush rectangleBrush =
new SolidBrush(Color.AliceBlue);
Pen rectanglePen = new Pen(rectangleBrush);
Graphics g = this.CreateGraphics();
g.DrawRectangle(rectangleBrush, rectangle);
```

Answer: B

Explanation: Create a LinearGradientBrush and supply to the FillRectangle() method of the graphics object.

A DrawRectangle() will draw the outline of a rectangle without filling it.

C draws an unfilled Polygon..

D Uses a SolidBrush and will not achieve the desired gradient fill

QUESTION 389

You work as the application developer at Certkiller .com. You are creating a new method. Your method must be localized to Italy, and must search a string named searchList for a specific substring named searchValue.

Which code segment should you use to perform this task?

A. return searchList.IndexOf(searchValue);

B. CompareInfo comparer =

new CultureInfo("it-IT").CompareInfo;

return comparer.Compare(searchList, searchValue);

```
C. CultureInfo comparer = new CultureInfo("it-IT");
if (searchList.IndexOf(searchValue)
> 0) {
return true;
} else {
return false;
}
D. CompareInfo comparer =
new CultureInfo("it-IT").CompareInfo;
if (comparer.IndexOf(searchList,
searchValue) > 0) {
return true;
} else {
return false;
}
```

Answer: D

QUESTION 390

You work as the application developer at Certkiller .com. You are developing a new method that must decrypt, encrypted confidential data. The confidential data to decrypt is encrypted via the Triple DES (3-DES) algorithm.

Your new method takes these parameters:

1. A byte array, named cipherMessage that must be decrypted.
2. A key, named key
3. The initialization vector, named iv.

Choose the code segment which will decrypt the specified data via the TripleDES class. The decrypted data must be in string.

```
A. TripleDES des = new TripleDESCryptoServiceProvider();
des.BlockSize = cipherMessage.Length;
ICryptoTransform crypto = des.CreateDecryptor(key, iv);
MemoryStream cipherStream = new MemoryStream(cipherMessage);
CryptoStream cryptoStream =
new CryptoStream(
cipherStream, crypto, CryptoStreamMode.Read);
string message;
message = new StreamReader(cryptoStream).ReadToEnd();
B. TripleDES des = new TripleDESCryptoServiceProvider();
des.FeedbackSize = cipherMessage.Length;
ICryptoTransform crypto = des.CreateDecryptor(key, iv);
MemoryStream cipherStream = new MemoryStream(cipherMessage);
CryptoStream cryptoStream =
new CryptoStream(
cipherStream, crypto, CryptoStreamMode.Read);
string message;
```



```
message = new StreamReader(cryptoStream).ReadToEnd();
C. TripleDES des = new TripleDESCryptoServiceProvider();
ICryptoTransform crypto = des.CreateDecryptor();
MemoryStream cipherStream = new MemoryStream(cipherMessage);
CryptoStream cryptoStream =
new CryptoStream(
cipherStream, crypto, CryptoStreamMode.Read);
string message;
message = new StreamReader(cryptoStream).ReadToEnd();
D. TripleDES des = new TripleDESCryptoServiceProvider();
ICryptoTransform crypto = des.CreateDecryptor(key, iv);
MemoryStream cipherStream = new MemoryStream(cipherMessage);
CryptoStream cryptoStream =
new CryptoStream(
cipherStream, crypto, CryptoStreamMode.Read);
string message;
message = new StreamReader(cryptoStream).ReadToEnd();
```

Answer: D

QUESTION 391

You work as the application developer at Certkiller .com. You are developing a new application named Certkiller 06. Certkiller 06 will be used by users to perform an electronic survey that contains 30 True-or-False based questions.

You must set each answer to True. You also want to limit the amount of memory used by each survey.

Choose the storage option that you should use.

- A. BitVector32 answers = new BitVector32(1);
- B. BitVector32 answers = new BitVector32(-1);
- C. BitArray answers = new BitArray (1);
- D. BitArray answers = new BitArray(-1);

Answer: B

Explanation: C & D BitVector32 is more efficient than a BitArray when 32 or less binary flags are required. Primarily because it is a value type.

Note: we are not sure why B is preferred to A.

QUESTION 392

You work as the application developer at Certkiller .com. You are developing a new application named Certkiller 15. Certkiller 15 will be used to show processes running on remote computers. You need to write a method for the application. Your method must accomplish the following:

1. Accept the name of the remote computer as a string parameter named strComputer.

2. Return an ArrayList object that lists the names of each process running on that specific remote computer.

Choose the code segment that will accomplish the task.

A. `ArrayList al = new ArrayList();
Process[] procs = Process.GetProcessesByName(strComputer);
foreach (Process proc in procs) {
al.Add(proc);
}`

B. `ArrayList al = new ArrayList();
Process[] procs = Process.GetProcesses(strComputer);
foreach (Process proc in procs) {
al.Add(proc);
}`

C. `ArrayList al = new ArrayList();
Process[] procs = Process.GetProcessesByName(strComputer);
foreach (Process proc in procs) {
al.Add(proc.ProcessName);
}`

D. `ArrayList al = new ArrayList();
Process[] procs = Process.GetProcesses(strComputer);
foreach (Process proc in procs) {
al.Add(proc.ProcessName);
}`

Answer: D

Explanation: Call `Processes.GetProcesses()` supplying the name of the computer and then iterate through the returned collection of processes adding the process name to the arraylist.

A & C use `GetProcessByName()` and return processes on the current computer only.

B adds the entire process to the arraylist rather than just the process name.

QUESTION 393

You work as the application developer at Certkiller .com. You are developing a new application and must write a code segment that will serialize an object named data, of type `List<int>`, in a binary format.

Choose the code segment that will accomplish the task.

A. `BinaryFormatter formatter = new BinaryFormatter();
MemoryStream stream = new MemoryStream();
formatter.Serialize(stream, data);`

B. `BinaryFormatter formatter = new BinaryFormatter();
MemoryStream stream = new MemoryStream();
for (int i = 0;
i < data.Count;`

```
i++) {  
    formatter.Serialize(stream, data[i]);  
}  
C. BinaryFormatter formatter = new BinaryFormatter();  
byte[] buffer = new byte[data.Count];  
MemoryStream stream = new MemoryStream(buffer, true);  
formatter.Serialize(stream, data);  
D. BinaryFormatter formatter = new BinaryFormatter();  
MemoryStream stream = new MemoryStream();  
data.ForEach(delegate(int num)  
{ formatter.Serialize(stream, num);  
}  
);
```

Answer: A

Explanation: create a BinaryFormatter and a MemoryStream and simply use the formatter to serialize the data to the stream.

B Collections support serialization, hence it is not required to try to serialize each item independently.

C The MemoryStream is created to be non resizeable and it is not the correct size.

QUESTION 394

You work as the application developer at Certkiller .com. You are developing a new method that must compress an array of bytes. The array of bytes which should be compressed must be passed to the method in a parameter named document
Choose the code segment which will perform your task.

```
A. MemoryStream inStream = new MemoryStream(document);  
GZipStream zipStream = new GZipStream(inStream,  
CompressionMode.Compress);  
byte[] result = new byte[document.Length];  
zipStream.Write(result, 0, result.Length);  
return result;  
B. MemoryStream stream = new MemoryStream(document);  
GZipStream zipStream = new GZipStream(stream,  
CompressionMode.Compress);  
zipStream.Write(document, 0, document.Length);  
zipStream.Close();  
return stream.ToArray();  
C. MemoryStream outStream = new MemoryStream();  
GZipStream zipStream = new GZipStream(outStream,  
CompressionMode.Compress);  
zipStream.Write(document, 0, document.Length);  
zipStream.Close();  
return outStream.ToArray();
```

```
D. MemoryStream inStream = new MemoryStream(document);
GZipStream zipStream = new GZipStream(inStream,
CompressionMode.Compress);
MemoryStream outStream = new MemoryStream();
int b;
while ((b = zipStream.ReadByte()) != -1) {
outStream.WriteByte((byte)b);
} return outStream.ToArray();
```

Answer: C

Explanation: Create a new GZipStream that can compress data and writes to a new MemoryStream object. Call the Write() method of the GZipStream to compress the bytes to the MemoryStream.

A & B the GZipStream constructor should take a target stream not a source stream when compressing. The source data to compress is specified in the Write() method of GZipStream.

D attempts to process byte by byte. This is unnecessary because the Write method can handle any number of bytes in one go.

QUESTION 395

You work as the application developer at Certkiller .com. You are working on code segment that must use platform invoke to call a function from the Win32 Application Programming Interface (API). The code segment you have written is as follows:

```
int rc = MessageBox(hWnd, text, caption, type);
```

You must choose a method prototype. Choose the code segment that provides for this.

- A. [DllImport("user32")]public static extern int MessageBox(int hWnd, String text, String caption, uint type);
- B. [DllImport("user32")]public static extern int MessageBoxA(int hWnd, String text, String caption, uint type);
- C. [DllImport("user32")]public static extern int Win32API_User32_MessageBox(int hWnd, String text, String caption, uint type);
- D. [DllImport(@"C:\WINDOWS\system32\user32.dll")]public static extern int MessageBox(int hWnd, String text, String caption, uint type);

Answer: A

Explanation: Mark the prototype with the Dllimport attribute specifying the library\ dll that the function resides in.

B creates a prototype for the MessageBoxA function not MessageBox .

C it is not necessary to specify the physical path because user32.dll will be in the path

environment variable. Also it will not work with versions of windows (some may use c:\winnt\system32)

QUESTION 396

You work as the application developer at Certkiller .com. You are developing a new application that will print a report. The report must list language codes and region codes.

Choose the code segment that will accomplish this task.

- A. `foreach (CultureInfo culture in
CultureInfo.GetCultures(CultureTypes.SpecificCultures)) {
// Output the culture information...}`
- B. `CultureInfo culture = new CultureInfo("");
CultureTypes types = culture.CultureTypes;
// Output the culture information...`
- C. `foreach (CultureInfo culture in
CultureInfo.GetCultures(CultureTypes.NeutralCultures)) {
// Output the culture information...}`
- D. `foreach (CultureInfo culture in
CultureInfo.GetCultures(CultureTypes.ReplacementCultures)) {
// Output the culture information...}`

Answer: A

Explanation: `CultureTypes.SpecificCultures` will filter all language codes that are specific to a country\region.

B The `CultureInfo` object created is not associated with any cultures.

C will yield only neutral cultures, they will not be specific to a country\region.

D Replacement cultures are user-defined custom cultures.

QUESTION 397

You work as the application developer at Certkiller .com. Certkiller .com has its headquarters in Chicago and a branch office in Mexico.

You are developing a new application that will print a report. When the report is generated and printed by users in the Mexico branch office, the report must show the current date in the Mexican Spanish format.

Which of the following code segments will accomplish the task?

- A. `DateTimeFormatInfo dtfi = new CultureInfo("es-MX", false).DateTimeFormat;
DateTime dt = new DateTime(DateTime.Today.Year, DateTime.Today.Month,
DateTime.Today.Day);
string dateString = dt.ToString(dtfi.LongDatePattern);`
- B. `Calendar cal = new CultureInfo("es-MX", false).Calendar;
DateTime dt = new DateTime(DateTime.Today.Year, DateTime.Today.Month,
DateTime.Today.Day);
Strong dateString = dt.ToString();`

- C. `string dateString = DateTimeFormatInfo.CurrentInfo
GetMonthName(DateTime.Today.Month);`
- D. `string dateString = DateTime.Today.Month.ToString("es-MX");`

Answer: A

Explanation: Create a Mexican Spanish CultureInfo object. Convert the date to a string using the DateTimeFormatInfo returned by the CultureInfo object.

B does not use the CultureInfo object to convert the date to a string.

C does not use the Mexican Spanish culture.

D the DateTime.ToString() method cannot take a string code representation of the culture.

QUESTION 398

You work as the application developer at Certkiller .com. You are developing an application named Certkiller App09.

You are creating a method and want to view its output that returns a string. You are using Microsoft Visual Studio 2005 IDE to examine the method's output. You define the output of the method to the string variable named fName. You want certain information printed in a single line:

1. This message must be printed: Test Unsuccessful

1. When the value of fName is not equal to " Kara Lang", the value of fName must be printed.

The code segment that you use must simultaneously facilitate uninterrupted execution of Certkiller App09.

Which of the following code segments should you use to achieve your goal?

- A. `Debug.Assert(fName == " Kara Lang", "Test Unsuccessful: ", fName);`
- B. `Debug.WriteLineIf(fName != " Kara Lang", fName, "Test Unsuccessful");`
- C. `if (fName != " Kara Lang") {
Debug.Print("Test Unsuccessful: ");
Debug.Print(fName);
}`
- D. `if (fName != " Kara Lang") {
Debug.WriteLine("Test Unsuccessful: ");
Debug.WriteLine(fName);
}`

Answer: B

Explanation: Debug.WriteLineIf() will conditionally write the "Test Unsuccessful", it will not interrupt execution of the application.

A an Assert will stop execution of the application in debug mode if the condition is not met.

C & D could be used but they execute in the release configurations

QUESTION 399

You work as the application developer at Certkiller .com. You are working on an application named Certkiller App10. Certkiller App10 must be configured to use role-based security and authentication.

You must develop the code segment which will result in the runtime assigning an unauthenticated principal object to each running thread.

Choose the code segment which will accomplish the task.

- A. AppDomain domain = AppDomain.CurrentDomain;
domain.SetPrincipalPolicy(PrincipalPolicy.WindowsPrincipal);
- B. AppDomain domain = AppDomain.CurrentDomain;
domain.SetThreadPrincipal(new WindowsPrincipal(null));
- C. AppDomain domain = AppDomain.CurrentDomain;
domain.SetAppDomainPolicy(PolicyLevel.CreateAppDomainLevel());
- D. AppDomain domain = AppDomain.CurrentDomain;
domain.SetPrincipalPolicy(PrincipalPolicy.UnauthenticatedPrincipal);

Answer: D

Explanation: Setting the PrincipalPolicy for the AppDomain to UnauthenticatedPrincipal will default the Principal for each thread to an unauthenticated principal .

A sets the policy to WindowsPrincipal, threads will have their principal set according to the windows account that they are running as.

B SetThreadPrincipal() does not set the default policy for all new threads. Also a WindowsPrincipal is used instead of UnauthenticatedPrincipal.

C SetAppDomainPolicy is used to set the security policy level for the domain.

QUESTION 400

You work as the application developer at Certkiller .com. You are developing an application named Certkiller App12. You must the write multicast delegate that accepts a DateTime argument.

Choose the code segment which will accomplish the task.

- A. public delegate int PowerDeviceOn(bool result, DateTime autoPowerOff);
- B. public delegate bool PowerDeviceOn(object sender, EventArgs autoPowerOff);
- C. public delegate void PowerDeviceOn(DateTime autoPowerOff);
- D. public delegate bool PowerDeviceOn(DateTime autoPowerOff);

Answer: C

Explanation: A & B the delegates do not accept an argument of type DateTime

D The question does not explicitly mention a return type. Also with multicasting only the return value of the last method called as part of a multicast chain is returned. Hence return values do not tend to be very useful as far as multicasting is concerned.

QUESTION 401

You work as the application developer at Certkiller .com. You create a new class named User. The User class contains this code segment:

```
public class User {  
    string userId, userName, jobTitleName;  
    public string GetName() { return userName;  
    }  
    public string GetTitle() { return jobTitleName;  
    }  
}
```

You want to expose the User class to COM in a type library. You also want the COM interface to facilitate forward-compatibility across new versions of the User class.

What should you do to achieve your goal in these circumstances?

A. Include this attribute with the class definition:

```
[ClassInterface(ClassInterfaceType.None)]public class User {
```

B. Include this attribute with the class definition:

```
[ClassInterface(ClassInterfaceType.AutoDual)]public class User {
```

C Include this attribute with the class definition: [ComVisible(true)]public class User {

D. Specify the interface for the User class and then add this attribute with the class definition: [ClassInterface(ClassInterfaceType.None)]public class User : IUser {

Answer: D

QUESTION 402

You work as the application developer at Certkiller .com. You have been tasked with writing a multicast delegate that accepts a DateTime argument, and then returns a Boolean value.

Which code segment should you use to accomplish the task?

A. public delegate int PowerDeviceOn(bool, DateTime);

B. public delegate bool PowerDeviceOn(Object, EventArgs);

C. public delegate void PowerDeviceOn(DateTime);

D. public delegate bool PowerDeviceOn(DateTime);

Answer: D

Explanation: A & C does not return a type Bool
B does not accept a parameter of type DateTime

QUESTION 403

You work as the application developer at Certkiller .com. You must write a code segment that includes an undo buffer function. You want the undo function to store data modifications, but it must only allow the storage of strings. You want the undo function to undo the most recently performed data modifications first. Which code segment should you use to achieve your goal?

- A. Use: `Stack<string> undoBuffer = new Stack<string>();`
- B. Use: `Stack undoBuffer = new Stack();`
- C. Use: `Queue<string> undoBuffer = new Queue<string>();`
- D. Use: `Queue undoBuffer = new Queue();`

Answer: A

Explanation: A Stack caters for a last in first out scenario similar to what is required in an undo buffer. By using Generics you can force a strongly typed collection that takes strings only.

B is not strongly typed for strings, it will take any type of object.

C & D Queue is a First in First out collection, it is not appropriate in this instance.

QUESTION 404

You work as the application developer at Certkiller .com. You write the definition for a class named Vehicle by defining the following code segment:

```
public class Vehicle {  
    [XmlAttribute(AttributeName = "category")]  
    public string vehicleType;  
    public string model;  
    [XmlIgnore]  
    public int year;  
    [XmlElement(ElementName = "mileage")]  
    public int miles;  
    public ConditionType condition;  
    public Vehicle() {  
    }  
    public enum ConditionType {  
        [XmlEnum("Poor")] BelowAverage,  
        [XmlEnum("Good")] Average,  
        [XmlEnum("Excellent")] AboveAverage  
    }  
}
```

You next create an instance of the Vehicle class, and add the following data in the defined fields of the class instance:

Member	Value
Vehicle Type	car
model	Racer
year	2002
miles	15000
condition	AboveAverage

You must now identify the XML block that is generated when the Vehicle class

instance is serialized.

Choose the XML block that signifies the output of serializing the Vehicle class instance.

- A. `<?xml version="1.0" encoding="utf-8"?>
<Vehicle
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 vehicleType="car">
 <model>racer</model>
 <miles>15000</miles>
 <condition>AboveAverage</condition>
 </Vehicle>`
- B. `<?xml version="1.0" encoding="utf-8"?>
<Vehicle
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 category="car">
 <model>racer</model>
 <mileage>15000</mileage>
 <condition>Excellent</condition>
 </Vehicle>`
- C. `<?xml version="1.0" encoding="utf-8"?>
<Vehicle
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 category="car">
 <model>racer</model>
 <mileage>15000</mileage>
 <conditionType>Excellent</conditionType>
 </Vehicle>`
- D. `<?xml version="1.0" encoding="utf-8"?>
<Vehicle
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema">
 <category>car</category>
 <model>racer</model>
 <mileage>15000</mileage>
 <condition>Excellent</condition>
 </Vehicle>`

Answer: B

Explanation: The XML produced in B matches the class definition provided in the question.

Category is declared to be an attribute of the Vehicle element, this is not the case in

answer A and D.

During XML Serialization by default the user type variables are mapped to XML elements. In the case of answer C, the type itself has been mapped instead of the instance variable.

QUESTION 405

You work as the application developer at Certkiller .com. You create a code segment which will implement the class named Certkiller Class1. The code segment is shown here:

```
MyMethod function. public class Certkiller Class1 {  
public int MyMethod(int arg) {  
return arg;  
}}
```

You want the Certkiller Class1.MyMethod function to be dynamically called from a separate class within the assembly.

Choose the code segment which you should use to accomplish the task.

- A. Certkiller Class1 myClass = new Certkiller Class1();
Type t = typeof(Certkiller Class1);
MethodInfo m = t.GetMethod("MyMethod");
int i = (int)m.Invoke(this, new object[] { 1 });
- B. Certkiller Class1 myClass = new Certkiller Class1();
Type t = typeof(Certkiller Class1);
MethodInfo m = t.GetMethod("MyMethod");
int i = (int) m.Invoke(myClass, new object[] { 1 });
- C. Certkiller Class1 myClass = new Certkiller Class1();
Type t = typeof(Certkiller Class1);
MethodInfo m = t.GetMethod(" Certkiller Class1.MyMethod");
int i = (int)m.Invoke(myClass, new object[] { 1 });
- D. Type t = Type.GetType(" Certkiller Class1");
MethodInfo m = t.GetMethod("MyMethod");
int i = (int)m.Invoke(this, new object[] { 1 });

Answer: B

Explanation: Use reflection to get MethodInfo object that corresponds to the MyMethod member function. Call the Invoke() method of MethodInfo

A & D the Invoke method requires the object that the method will fire upon if its an instance method. myClass should have been passed.

C the getMethod() does not require the classname .

QUESTION 406

You work as the application developer at Certkiller .com. You are working on a component which serializes the Meeting class instances. The definition of the Meeting class is as follows:

```
public class Meeting {
```

```
private string title;
public int roomNumber;
public string[] invitees;
public Interview(){
}
public Interview (string t){
title = t;
} }

```

You configure the following procedure for your component:

```
Meeting myMeeting = new Meeting("Objectives");
myMeeting.roomNumber=20;
string[] attendees = new string[2]{ "Amy", "Ally" };
myMeeting.invitees = attendees;
XmlSerializer xs = new XmlSerializer(typeof(Meeting));
StreamWriter writer = new StreamWriter(@"C:\Meeting.xml");
xs.Serialize(writer, myMeeting);
writer.Close();

```

You want to find out which XML block will be written to the C:\Meeting.xml file when the procedure is executed.

Choose the XML block that shows which content will be written to the C:\Meeting.xml file?

A. `<?xml version="1.0" encoding="utf-8"?>`
`<Meeting xmlns:xsd="http://www.w3.org/2001/XMLSchema"`
`xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">`
`<title>Objectives</title>`
`<roomNumber>20</roomNumber>`
`<invitee>Amy</invitee>`
`<invitee>Ally</invitee>`
`</Meeting>`

B. `<?xml version="1.0" encoding="utf-8"?>`
`<Meeting xmlns:xsd="http://www.w3.org/2001/XMLSchema"`
`xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">`
`<roomNumber>20</roomNumber>`
`<invitees>`
`<string>Amy</string>`
`<string>Ally</string>`
`</invitees>`
`</Meeting>`

C. `<?xml version="1.0" encoding="utf-8"?>`
`<Meeting xmlns:xsd="http://www.w3.org/2001/XMLSchema"`
`xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"`
`title="Objectives">`
`<roomNumber>20</roomNumber>`
`<invitees>`
`<string>Amy</string>`

```
<string>Ally</string>
</invitees>
</Meeting>
D. <?xml version="1.0" encoding="utf-8"?>
<Meeting xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<roomNumber>20</roomNumber>
<invitees>
<string>Amy</string>
</invitees>
<invitees>
<string>Ally</string>
</invitees>
</Meeting>
```

Answer: B

Explanation: A & C show title member in the XML. Title is a private member hence will not be serialized to XML.

D Shows multiple Invitees. There is only one object of type Invitees in the class definition.

QUESTION 407

You work as the application developer at Certkiller .com. You want to modify the current security settings of a file named Certkiller Data.xml, as follows:

1. You must preserve all existing inherited access rules.
2. You must prevent the access rules from inheriting future modifications

Choose the code segment which will accomplish the task.

A. FileSecurity security = new FileSecurity(" Certkiller data.xml",
AccessControlSections.All);
security.SetAccessRuleProtection(true, true);
File.SetAccessControl(" Certkiller data.xml", security);
B. FileSecurity security = new FileSecurity();
security.SetAccessRuleProtection(true, true);
File.SetAccessControl(" Certkiller data.xml", security);
C. FileSecurity security = File.GetAccessControl(" Certkiller data.xml");
security.SetAccessRuleProtection(true, true);
D. FileSecurity security = File.GetAccessControl(" Certkiller data.xml");
security.SetAuditRuleProtection(true, true);
File.SetAccessControl(" Certkiller data.xml", security);

Answer: A

Explanation: Retrieve the full access control list for the file, prevent access rules from inheriting in the future by calling Security.SetAccessRuleProtection(). Finally

call File.SetAccessControl() to apply the amended FileSecurity to the file.
B does not preserve the existing access rules. It overwrites them.
C does not apply the amended FileSecurity object back to the file.
D FileSecurity.SetAuditRuleProtection() is used for controlling audit rules not access rules.

QUESTION 408

You work as the application developer at Certkiller .com. You want to modify a method that returns an ArrayList named Certkiller AL. You want to write a code segment which will result in all changes made to Certkiller AL being performed in a thread-safe way.

Choose the code segment which will accomplish the task.

- A.

```
ArrayList Certkiller al = new ArrayList();  
lock ( Certkiller al.SyncRoot){  
return Certkiller al;  
}
```
- B.

```
ArrayList Certkiller al = new ArrayList();  
lock ( Certkiller al.SyncRoot.GetType()){  
return Certkiller al;  
}
```
- C.

```
ArrayList Certkiller al = new ArrayList();  
Monitor.Enter( Certkiller al);  
Monitor.Exit( Certkiller al);  
return Certkiller al;
```
- D.

```
ArrayList Certkiller al = new ArrayList();  
ArrayList sync_ Certkiller al = ArrayList.Synchronized( Certkiller al);  
return sync_ Certkiller al;
```

Answer: D

Explanation: A & C the lock will be released when the method returns.
B Does not lock the arraylist but attempts to lock its type.

QUESTION 409

You work as the application developer at Certkiller .com. You want to test a new method that examines running processes. Your method is configured to return an ArrayList that reveals the name and full path of each module loaded by a running process named C:\ Certkiller Apps\Process5.
Choose the code segment that will show each module loaded by the specific running process?

- A.

```
ArrayList ar = new ArrayList();  
Process[] procs;  
ProcessModuleCollection modules;  
procs = Process.GetProcesses(@"Process5");
```



```
if (procs.Length > 0) { modules = procs[0].Modules;
foreach (ProcessModule mod in modules) {
ar.Add(mod.ModuleName);
}}
B. ArrayList ar = new ArrayList();
Process[] procs;
ProcessModuleCollection modules;
procs =
Process.GetProcesses(@"C:\ Certkiller Apps\Process5.exe");
if (procs.Length > 0) {
modules = procs[0].Modules;
foreach (ProcessModule mod in modules) {
ar.Add(mod.ModuleName);
}}
C. ArrayList ar = new ArrayList();
Process[] procs;
ProcessModuleCollection modules;
procs = Process.GetProcessesByName(@"Process5");
if (procs.Length > 0) {
modules = procs[0].Modules;
foreach (ProcessModule mod in modules) {
ar.Add(mod.FileName);
}}
D. ArrayList ar = new ArrayList();
Process[] procs;
ProcessModuleCollection modules;
procs = Process.GetProcessesByName(@"C:\ Certkiller Apps\Process5.exe");
if (procs.Length > 0) {
modules = procs[0].Modules;
foreach (ProcessModule mod in modules) {
ar.Add(mod.FileName);
}}
}}
```

Answer: C

Explanation: Process.GetProcessesByName() should be used to return all the processes that match a process name. The modules collection exposes all the modules loaded by the process and can be added to an ArrayList.

A & B GetProcesses() accepts a computer name for retrieving the processes on a remote computer. GetProcessesByName() should be used to return processes by their name.

D the path of the process is not part of the process name.

QUESTION 410

You work as the application developer at Certkiller .com. You create a new custom dictionary named MyDictionary.

Choose the code segment which will ensure that MyDictionary is type safe?

A. Class MyDictionary Implements Dictionary(Of String, String)
B. Class MyDictionary Inherits HashTable
C. Class MyDictionary Implements IDictionary
D. Class MyDictionary
End Class
Dim t As New Dictionary(Of String, String)
Dim dict As MyDictionary = CType(t, MyDictionary)

Answer: A

QUESTION 411

You work as the application developer at Certkiller .com. You create a new class named User. The User class contains the following code segment:

```
Private m_UserId As String
Private m_UserName As String
Private m_JobTitleName As String
Public Function GetName() As String
Return m_UserName
End Function
Public Function GetTitle() As String
Return m_JobTitleName
End Function
End Class
```

You want the User class exposed to COM in a type library. You want the COM interface to facilitate forward-compatibility over all new versions of the User class. How should you go about generating the COM interface to accomplish these tasks?

- A. Include this attribute with the class:
definition: <ClassInterface(ClassInterfaceType.None)> _
Public Class User
- B. Include this attribute with the class:
definition: <ClassInterface(ClassInterfaceType.AutoDual)> _
Public Class User
- C. Include this attribute with the class definition: <ComVisible(True)> _
Public Class User
- D. Specify the interface for the User class, and then include this attribute with the class definition: <ClassInterface(ClassInterfaceType.None)> _
Public Class User Implements IUser

Answer: D

QUESTION 412

You work as the application developer at Certkiller .com. You are developing a new application and must serialize the data object of type List(Of Integer) in a binary format.

Choose the code segment which will implement this task.

- A. Dim formatter As New BinaryFormatter()
Dim ms As New MemoryStream()formatter.Serialize(ms, data)
- B. Dim formatter As New BinaryFormatter()
Dim ms As New MemoryStream() For i As Integer = 1 To 20
formatter.Serialize(ms, data(i - 1))
Next
- C. Dim formatter As New BinaryFormatter()
Dim buffer As New Byte(data.Count) { }
Dim ms As New MemoryStream(buffer, True)formatter.Serialize(ms, data)
- D. Dim formatter As New BinaryFormatter()
Dim ms As New MemoryStream()While ms.CanRead
formatter.Serialize(ms, data)
End While

Answer: A

QUESTION 413

You work as the application developer at Certkiller .com. Certkiller .com has its headquarters in Chicago and a branch office in Hong Kong. The application you are developing will be used by all users located at the Hong Kong branch office. You want to show all negative currency values by using a minus sign. Which of the following code segments will accomplish the task?

- A. Dim objCulture As NumberFormatInfo = _
New CultureInfo("zh-HK").NumberFormatobjCulture.NumberNegativePattern = 1
Return NumberToPrint.ToString("C", objCulture)
- B. Dim objCulture As NumberFormatInfo = _
New CultureInfo("zh-HK").NumberFormatobjCulture.CurrencyNegativePattern = 1
Return NumberToPrint.ToString("C", objCulture)
- C. Dim objCulture As NumberFormatInfo = _
New CultureInfo("zh-HK").NumberFormatReturn NumberToPrint.ToString("-{0}",
objCulture)
- D. Dim objCulture As NumberFormatInfo = _
New CultureInfo("zh-HK").NumberFormatReturn NumberToPrint.ToString("()",
objCulture)

Answer: B

Explanation: Use CurrencyNegativePattern property set to 1 to display negative currency values with a minus sign.

A will give a minus sign for negative numbers but not for negative currencies.

C & D The culture has not been to display a minus sign for currency.

QUESTION 414

You work as the application developer at Certkiller .com. You are creating a new method that will hash specific data with the Secure Hash Algorithm (SHA-1). The data must be passed to your method as a byte array named message. The resultant data must then be passed to a byte array named hash. Choose the code segment which will achieve your goal.

- A. Dim objSHA As New SHA1CryptoServiceProvider
Dim hash() As Byte = NothingobjSHA.TransformBlock(message, 0, message.Length, hash, 0)
- B. Dim objSHA As New SHA1CryptoServiceProvider
Dim hash() As Byte = BitConverter.GetBytes(objSHA.GetHashCode())
- C. Dim objSHA As New SHA1CryptoServiceProvider
Dim hash() As Byte = objSHA.ComputeHash(message)
- D. Dim objSHA As New SHA1CryptoServiceProviderobjSHA.GetHashCode()
Dim hash() As Byte = objSHA.Hash

Answer: C

Explanation: Initialise SHA1 object and call the ComputeHash method supplying the message as a parameter to return the hash code as an array of bytes. A TransferBlock is more appropriate for hashing part of a message. Also it should be called with TransferEndBlock. B&C GetHashCode is the method inherited from the Object class. It will not perform a hash on the incoming message.

QUESTION 415

You work as the application developer at Certkiller .com. You create the following code segment:

```
Public Delegate Sub FaxDocs(ByVal sender As Object, _  
ByVal args as FaxArgs)
```

What should you do next to configure an event that will call FaxDocs?

Choose the code segment which you should use.

- A. Public Shared Event Fax As FaxDocs
- B. Public Shared Event FaxDocs As FaxArgs
- C. Public Class FaxArgs
Inherits EventArgs
Private coverPageInfo As String
Public Sub New(ByVal coverInfo As String)
Me.coverPageInfo = coverInfo
End Sub
Public ReadOnly Property CoverPageInformation As String
Get
Return Me.coverPageInfo
End Get

```
End Property
End Class
D. Public Class FaxArgs
Inherits EventArgs
Private coverPageInfo As String
Public ReadOnly Property CoverPageInformation As String
Get
Return Me.coverPageInfo
End Get
End Property
End Class
```

Answer: A

Explanation: An event is declared by using the event keyword followed by a delegate type and then a name for the event.

B fax is not a delegate type.

C&D do not declare events.

QUESTION 416

You work as the application developer at Certkiller .com. You are developing a new application. You must define the code segment which will create a common language runtime (CLR) unit of isolation within the new application. Choose the code segment which you should use to accomplish this task.

- A. Dim mySetup As AppDomainSetup = _
AppDomain.CurrentDomain.SetupInformationmySetup.ShadowCopyFiles = "true"
- B. Dim myProcess As System.Diagnostics.Process myProcess = New
System.Diagnostics.Process()
- C. Dim domain As AppDomain domain =
AppDomain.CreateDomain("CertkillerDomain")
- D. Dim myComponent As System.ComponentModel.ComponentmyComponent = New
System.ComponentModel.Component()

Answer: C

Explanation: Create a new ApplicationDomain using the AppDomain.CreateDomain() method.

A ShadowCopyFiles property of AppDomainSetup controls whether shadow copying is enabled or disabled.

B the Process class is used to represent an existing process running on a computer.

D The ComponentModel.Component class is used for sharing components between applications.

QUESTION 417

You work as the application developer at Certkiller .com. You are creating a class

library which must be able to access system environment variables.

You must set a call method which will only force a runtime SecurityException if the callers which are higher in the call stack, fail to have the required permissions.

Choose the call method which will do this.

- A. Demand()
- B. Assert()
- C. PermitOnly()
- D. Deny()

Answer: A

Demand forces all callers in the call stack to have the specified permission.

PermitOnly will instruct the runtime to reduce the access by only allowing callers with the permissions explicitly stated and nothing else.

Assert will ignore the permissions of callers and allow them indiscriminately.

Deny will explicitly deny access if the caller has the specified permission.

QUESTION 418

You work as the application developer at Certkiller .com. You are creating a new custom event handler that will be set up to automatically print all open documents. The custom event handler must also assist in identifying how many document copies must be printed.

You must determine which custom event arguments class to pass as a parameter to the custom event handler.

Choose the code segment which you should use to accomplish this task.

- A. Public Class PrintingArgs
Private _copies As Integer
Public Sub New(ByVal numberOfCopies As Integer)
Me._copies = numberOfCopies
End Sub
Public ReadOnly Property Copies() As Integer
Get
Return Me._copies
End Get
End Property
End Class
- B. Public Class PrintingArgs
Inherits EventArgs
Private _copies As Integer
Public Sub New(ByVal numberOfCopies As Integer)
Me._copies = numberOfCopies
End Sub
Public ReadOnly Property Copies() As Integer
Get
Return Me._copies

```
End Get
End Property
End Class
C. Public Class PrintingArgs
Private eventArgs As EventArgs
Public Sub New(ByVal args As EventArgs)
Me.eventArgs = args
End Sub
Public ReadOnly Property Args() As EventArgs
Get
Return eventArgs
End Get
End Property
End Class
D. Public Class PrintingArgs
Inherits EventArgs
Private copies As Integer
End Class
```

Answer: B

Explanation: The event handler will require a parameter of type EventArgs or a derived type. The derived type in this example will question states that the event handler helps specify the number of documents that require printing, this information will have to come from the derived EventArgs class in the form of an instance variable.

A & C do not derive from EventArgs hence cannot fit into the event handling model. D does not expose the copies instance variable.

QUESTION 419

You work as the application developer at Certkiller .com. You are working on a new application named Certkiller App05. Certkiller App05 is configured to dynamically load assemblies from the application directory.

You must define the code segment that will dynamically load an assembly named Certkiller Ass25.dll into the current application domain.

Choose the code segment which you should use to accomplish this task.

```
A. Dim domain As AppDomain = AppDomain.CurrentDomain
Dim myPath As String = _ Path.Combine(domain.BaseDirectory, " Certkiller Ass25.dll")
Dim asm As [Assembly] = [Assembly].LoadFrom(myPath)
B. Dim domain As AppDomain = AppDomain.CurrentDomain
Dim myPath As String = _ Path.Combine(domain.BaseDirectory, " Certkiller Ass25.dll")
Dim asm As [Assembly] = [Assembly].Load(myPath)
C. Dim domain As AppDomain = AppDomain.CurrentDomain
Dim myPath As String = _ Path.Combine(domain.DynamicDirectory,
" Certkiller Ass25.dll")
Dim asm As [Assembly] = _ AppDomain.CurrentDomain.Load(myPath)
```



```
D. Dim domain As AppDomain = AppDomain.CurrentDomain
Dim asm As [Assembly] = domain.GetData(" Certkiller Ass25.dll")
```

Answer: A

Explanation: The Assembly.LoadFrom() method can be called to dynamically load an assembly from file.

B the Load method requires an AssemblyName object as a parameter.

C it is not possible to use AppDomain.Load to load an assembly from file.

D AppDomain.GetData gets information stored in the AppDomain for the specified assembly. It cannot load an assembly.

QUESTION 420

You work as the application developer at Certkiller .com. You must write the code segment which will enable you to read the entire contents of a file named Data.txt into a single string variable.

Choose the code segment that will do this.

A. Dim result As String = Nothing

```
Dim reader As New StreamReader("Data.txt")result = reader.Read().ToString()
```

B. Dim result As String = Nothing

```
Dim reader as New StreamReader("Data.txt")result = reader.ReadToEnd()
```

C. Dim result As String = string.EmptyDim reader As New StreamReader("Data.txt")

```
While Not reader.EndOfStream
```

```
result &= reader.ToString()
```

```
End While
```

D. Dim result as String = Nothing

```
Dim reader As New StreamReader("Data.txt")result = reader.ReadLine()
```

Answer: B

Explanation: Create a StreamReader based on the file and call the ReadToEnd() method to quickly read the entire file and return a string.

A & D does not read the entire file.

C calling ToString() on the reader will give a string representation of the stream and will not read from the stream.

QUESTION 421

You work as the application developer at Certkiller .com. You must create a code segment that will perform these tasks: ?

Gets the name of each paused service. ?

Passes the name to the Add method of Collection5. Gets the name of each paused service. ?

Choose the code segment which you should use.

A. Dim searcher As ManagementObjectSearcher = _New ManagementObjectSearcher(_

```
"Select * from Win32_Service where State = 'Paused'")For Each svc As  
ManagementObject In searcher.Get()  
Collection5.Add(svc("DisplayName"))  
Next  
B. Dim searcher As ManagementObjectSearcher = _New ManagementObjectSearcher ( _  
"Select * from Win32_Service", "State = 'Paused'")For Each svc As ManagementObject  
In searcher.Get()  
Collection5.Add(svc("DisplayName"))  
Next  
C. Dim searcher As ManagementObjectSearcher = _ New ManagementObjectSearcher( _  
"Select * from Win32_Service")For Each svc As ManagementObject In searcher.Get()  
If svc("State").ToString() = "Paused" Then  
Collection5.Add(svc("DisplayName"))  
End If  
Next  
D. Dim searcher As New ManagementObjectSearcher()searcher.Scope = New  
ManagementScope("Win32_Service")For Each svc As ManagementObject In  
searcher.Get()  
If svc("State").ToString() = "Paused" Then  
Collection5.Add(svc("DisplayName"))  
End If  
Next
```

Answer: A

Explanation: Use the ManagementObjectSearcher to search for all services with a paused state. Iterate over the returned collection and add the display name to Collection5.

B The constructor is invoked incorrectly.

C & D the query is incorrect. The searcher does not restrict to paused services.

QUESTION 422

You work as the application developer at Certkiller .com. You are developing a new method that must pass data to another method named Process. Your method accepts a string parameter named message.

The method you are writing must break the message parameter into individual lines of text. Each individual line must then be passed to the Process method.

```
A. Dim reader As New  
StringReader(message)ProcessMessage(reader.ReadToEnd())reader.Close()  
B. Dim reader As New StringReader(message)While reader.Peek() <> -1  
Dim line as String = reader.Read().ToString()  
ProcessMessage(line)  
End Whilereader.Close()  
C. Dim reader As New  
StringReader(message)ProcessMessage(reader.ToString())reader.Close()
```

```
D. Dim reader As New StringReader(message)While reader.Peek() <> -1
ProcessMessage(reader.ReadLine())
End Whilereader.Close()
```

Answer: D

Explanation: StringReader.ReadLine() allows for lines to be read line by line.

A ReadToEnd() will read the entire stream.

B Read() will not read the line but only the next character.

C will not read from the message but will just give a string representation of the reader.

QUESTION 423

You work as the application developer at Certkiller .com. You are writing a method that will execute by using the credentials of the end user. Microsoft Windows groups must be used to authorize the user.

You must develop the code segment which will recognize if the user exists in the local group named Sales.

Choose the code segment that will do this.

```
A. Dim objUser As WindowsIdentity = WindowsIdentity.GetCurrentFor Each objGroup
As IdentityReference In objUser.Groups
Dim objNT As NTAccount = _
DirectCast(objGroup.Translate( _
Type.GetType("NTAccount")), NTAccount)
Dim blnAuth As Boolean = objNT.Value.Equals( _
Environment.MachineName & "\\Sales")
If blnAuth Then Exit For
Next
B. Dim objUser As WindowsPrincipal = _
DirectCast(Thread.CurrentPrincipal, WindowsPrincipal)
Dim blnAuth As Boolean = objUser.IsInRole("Sales")
C. Dim objUser As GenericPrincipal = _
DirectCast(Thread.CurrentPrincipal, GenericPrincipal)
Dim blnAuth As Boolean = objUser.IsInRole("Sales")
D. Dim objUser As WindowsPrincipal = _
DirectCast(Thread.CurrentPrincipal, WindowsPrincipal)
Dim blnAuth As Boolean = _
objUser.IsInRole(Environment.MachineName)
```

Answer: B

Explanation: To check the role membership of the current windows user, user the IsInRole() method of the WindowsPrincipal in the current thread.

A it is a lot more complicated to iterate through all the groups the user belongs to and checking for matches. The Principal classes are for this very purposes and should be used.

C uses GenericPrincipal. WindowsPrincipal should be used for windows accounts. There is an invalid cast from WindowsPrincipal to GenericPrincipal.
D does not specify the group correctly.

QUESTION 424

You work as the application developer at Certkiller .com. You are creating a new method that must hash specific data by applying the MD5 algorithm.
You must write the hash of the incoming parameter by using the MD5 algorithm.
The data must be passed to your method as a byte array named message. The resultant data must then be placed into a byte array.
Choose the code segment which will achieve your goal.

- A. Dim objAlgo As HashAlgorithm = HashAlgorithm.Create("MD5")
Dim hash() As Byte = objAlgo.ComputeHash(message)
- B. Dim objAlgo As HashAlgorithm = HashAlgorithm.Create("MD5")
Dim hash() As Byte = BitConverter.GetBytes(objAlgo.GetHashCode)
- C. Dim objAlgo As HashAlgorithmobjAlgo = HashAlgorithm.Create(message.ToString)
Dim hash() As Byte = objAlgo.Hash
- D. Dim objAlgo As HashAlgorithm = HashAlgorithm.Create("MD5")
Dim hash() As ByteobjAlgo.TransformBlock(message, 0, message.Length, hash, 0)

Answer: A

Explanation: Create a HashAlgorithm object based on the MD5 algorithm and call the ComputerHash method that will return the hash as an array of bytes.
B GetHashCode() will call the method inherited from object, it will not hash the message.
C The parameter of the Create method should specify the type of hashing algorithm to use not the message to be hashed.
D TransferBlock is more appropriate for hashing part of a message. Also it should be called with TransferEndBlock.

QUESTION 425

You work as the application developer at Certkiller .com. Certkiller .com has its headquarters in Chicago and a branch office in Mexico.
You are developing a new application that will print a report. When the report is generated and printed by users in the Mexico branch office, the report must show the current date in the Mexican Spanish format.
Which of the following code segments will accomplish the task?

- A. Dim DTFormat As DateTimeFormatInfo = _
New CultureInfo("es-MX", False).DateTimeFormatDim DT As New DateTime(_
DateTime.Today.Year, DateTime.Today.Month, DateTime.Today.Day)
Dim strDate As String = _
DT.ToString(DTFormat.LongDatePattern)
- B. Dim objCalendar As Calendar = _
New CultureInfo("es-MX", False).CalendarDim DT As New DateTime(_

```
DateTime.Today.Year, DateTime.Today.Month, DateTime.Today.Day)
Dim strDate As String = DT.ToString
C. Dim strDate As String = _
DateTimeFormatInfo.CurrentInfo.GetMonthName( _
DateTime.Today.Month)
D. Dim strDate As String = _
DateTime.Today.Month.ToString("es-MX")
```

Answer: A

Create a Mexican Spanish CultureInfo object. Convert the date to a string using the DateTimeFormatInfo returned by the CultureInfo object.

B does not use the CultureInfo object to convert the date to a string.

C does not use the Mexican Spanish culture.

D the DateTime.ToString() method cannot take a string code representation of the culture.

QUESTION 426

You work as the application developer at Certkiller .com. You are working on an application named Certkiller App10. Certkiller App10 must be configured to use role-based security and authentication.

You must develop the code segment which will result in the runtime assigning an unauthenticated principal object to each running thread.

Choose the code segment which will accomplish the task.

- A. Dim objDomain As AppDomain =
AppDomain.CurrentDomainobjDomain.SetPrincipalPolicy(_
PrincipalPolicy.WindowsPrincipal)
- B. Dim objDomain As AppDomain =
AppDomain.CurrentDomainobjDomain.SetThreadPrincipal(New
WindowsPrincipal(Nothing))
- C. Dim objDomain As AppDomain =
AppDomain.CurrentDomainobjDomain.SetAppDomainPolicy(_
PolicyLevel.CreateAppDomainLevel())
- D. Dim objDomain As AppDomain =
AppDomain.CurrentDomainobjDomain.SetPrincipalPolicy(_
PrincipalPolicy.UnauthenticatedPrincipal)

Answer: D

Explanation: Setting the PrincipalPolicy for the AppDomain to UnauthenticatedPrincipal will default the Principal for each thread to an unauthenticated principal .

A sets the policy to WindowsPrincipal, threads will have their principal set according the windows account that they are running as.

B SetThreadPrincipal() does not set the default policy for all new threads. Also a

WindowsPrincipal is used instead of UnauthenticatedPrincipal.
C SetAppDomainPolicy is used to set the security policy level for the domain.

QUESTION 427

You work as the application developer at Certkiller .com. You have to develop a method which will clear a queue named badqueue.
Choose the code segment which will accomplish this task.

- A. Dim e As Object For Each e In badqueueq.Dequeue()
Next
- B. Dim e As Object For Each e In badqueueq.Enqueue(Nothing)
Next
- C. badqueue.Clear()
- D. badqueue.Dequeue()

Answer: C

Explanation: Simply call the Clear() method to empty a queue.
A Dequeueing all of the items in a queue will also serve the same affect but it is a lot more roundabout.
B attempts to re-queue items that are already in the queue
D will de-queue only one item that is at the front of the queue.

QUESTION 428

You work as the application developer at Certkiller .com. You are working on a new requirement. You have to create a class library that will open the network socket connections to computers on the Certkiller .com network.

The class library must be deployed to the global assembly cache, with full trust granted. To cater for network socket connections being used, you develop this code segment:

```
Dim objPermission As SocketPermission = New  
_SocketPermission(System.Security.Permissions.PermissionState.Unrestricted)objPermission.Assert()
```

You discover though that there are certain existing applications which do not have the required permissions to open the network socket connections. You decide to cancel the assertion.

Choose the code segment which will accomplish this task.

- A. CodeAccessPermission.RevertAssert()
- B. CodeAccessPermission.RevertDeny()
- C. objPermission.Deny()
- D. objPermission.PermitOnly()

Answer: A

Explanation: CodeAccessPermission.RevertAssert() should be used to undo a previous Assert call.

B is used to revert a previous deny call.

C & D are used to reduce the CAS permissions, they do not undo a previous Assert call.

QUESTION 429

You work as the application developer at Certkiller .com. You are developing an application named Certkiller App05. Certkiller App05 is configured to use SOAP to exchange data with other applications deployed on the Certkiller .com network.

In your configuration, you specify that a class named Department inherits from ArrayList to pass objects to the other application. The Department object is named depart.

You must perform the configuration which will enable the application to serialize the Department object for transport via SOAP.

Choose the code segment which will accomplish this task.

- A. Dim formatter As New SoapFormatter()
Dim buffer As Byte() = New Byte(dept.Capacity) {}
Dim myStream As New MemoryStream(buffer) Dim o As Object For Each o In dept
formatter.Serialize(myStream, o)
Next
- B. Dim formatter As New SoapFormatter()
Dim buffer As Byte() = New Byte(dept.Capacity)
Dim myStream As New MemoryStream(buffer) formatter.Serialize(myStream, dept)
- C. Dim formatter As New SoapFormatter()
Dim myStream As New MemoryStream()
Dim o as Object For Each o In dept
formatter.Serialize(myStream, o)
Next
- D. Dim formatter As New SoapFormatter()
Dim myStream As New MemoryStream() formatter.Serialize(myStream, dept)

Answer: D

Explanation: Simply serialize the entire object to a stream using a SoapFormatter.

A&C attempt to serialize components of the object rather the object itself.

B attempts to serialize to an array, however the array will not be big enough to store the serialized object because it is not sized on the entire object.

QUESTION 430

You work as the application developer at Certkiller .com. You are working on code segment that must use platform invoke to call a function from the Win32

Application Programming Interface (API). The code segment you have written is as follows:

```
Dim r As Integer = MessageBox(hWnd, strText, strCaption, strType)
```

You must choose a method prototype. Choose the code segment that provides for this.

- A. <DllImport("user32")> _Function MessageBox(_
ByVal hWnd As IntPtr, ByVal text As String, _
ByVal Caption As String, ByVal t As UInt32) As IntegerEnd Function
- B. <DllImport("user32")> _Function MessageBoxA(_
ByVal hWnd As IntPtr, ByVal text As String, _
ByVal Caption As String, ByVal t As UInt32) As IntegerEnd Function
- C. <DllImport("user32")> _Function Win32API_User32_MessageBox (_
ByVal hWnd As IntPtr, ByVal text As String, _
ByVal Caption As String, ByVal t As UInt32) As IntegerEnd Function
- D. <DllImport("C:\WINDOWS\system32\user32.dll ")> _Function MessageBox(_
ByVal hWnd As IntPtr, ByVal text As String, _
ByVal Caption As String, ByVal t As UInt32) As IntegerEnd Function

Answer: A

Explanation: Mark the prototype with the Dllimport attribute specifying the library\dll that the function resides in.

B creates a prototype for the MessageBoxA function not MessageBox .

C it is not necessary to specify the physical path because user32.dll will be in the path environment variable. Also it will not work with versions of windows (some may use c:\winnt\system32)

QUESTION 431

You work as the application developer at Certkiller .com. You want to modify the current security settings of a file named Certkiller Data.xml, as follows:

1. You must preserve all existing inherited access rules.
2. You must prevent the access rules from inheriting future modifications

Choose the code segment which will accomplish the task.

- A. Dim objSecurity As New FileSecurity(_
" Certkiller Data.xml",
AccessControlSections.All)objSecurity.SetAccessRuleProtection(True, True)
File.SetAccessControl(" Certkiller Data.xml", objSecurity)
- B. Dim objSecurity As New FileSecurity()objSecurity.SetAccessRuleProtection(True, True)
File.SetAccessControl(" Certkiller Data.xml", objSecurity)
- C. Dim objSecurity As FileSecurity =
_File.GetAccessControl(" Certkiller Data.xml")objSecurity.SetAccessRuleProtection(True, True)
- D. Dim objSecurity As FileSecurity =_
File.GetAccessControl(" Certkiller Data.xml")objSecurity.SetAuditRuleProtection(True, True)
File.SetAccessControl(" Certkiller Data.xml", objSecurity)

Answer: A

Explanation: Retrieve the full access control list for the file, prevent access rules from inheriting in the future by calling `Security.SetAccessRuleProtection()`. Finally call `File.SetAccessControl()` to apply the amended `FileSecurity` to the file.

B does not preserve the existing access rules. It overwrites them.

C does not apply the amended `FileSecurity` object back to the file.

D `FileSecurity.SetAuditRuleProtection()` is used for controlling audit rules not access rules.

QUESTION 432

You work as the application developer at Certkiller .com. You are developing an application named Certkiller App09.

You are creating a method and want to view its output that returns a string. You are using Microsoft Visual Studio 2005 IDE to examine the method's output. You define the output of the method to the string variable named `fName`. You want certain information printed in a single line:

1. This message must be printed: Test Unsuccessful

1. When the value of `fName` is not equal to "Kara Lang", the value of `fName` must be printed.

The code segment that you use must simultaneously facilitate uninterrupted execution of Certkiller App09.

Which of the following code segments should you use to achieve your goal?

- A. `Debug.Assert(fName = " Kara Lang", "Test Unsuccessful: ", fName)`
- B. `Debug.WriteLineIf(fName <> " Kara Lang", _ fName, "Test Unsuccessful")`
- C. `If fName <> " Kara Lang" Then`
`Debug.Print("Test Unsuccessful: ")`
`Debug.Print(fName)`
`End If`
- D. `If fName <> " Kara Lang" Then`
`Debug.WriteLine("Test Unsuccessful: ")`
`Debug.WriteLine(fName)`
`End If`

Answer: B

Explanation: `Debug.WriteLineIf()` will conditionally write the "Test Unsuccessful", it will not interrupt execution of the application.

A an `Assert` will stop execution of the application in debug mode if the condition is not met.

C & D could be used but they execute in the release configurations

QUESTION 433

You work as the application developer at Certkiller .com. You are developing a new application named Certkiller App12. Certkiller App12 will be used to store customer information on Certkiller .com's customers who are dispersed across the continent.

You need to create internal utilities for Certkiller App12, and need to collect

information on all Certkiller .com's customers that are located in Canada.
Choose the code segment which will perform this task.

- A. For Each objCulture As CultureInfo In
_CultureInfo.GetCultures(CultureTypes.SpecificCultures)
...Next
- B. Dim objCulture As New CultureInfo("CA")
...
- C. Dim objRegion As New RegionInfo("CA")
...
- D. Dim objRegion As New RegionInfo("") If objRegion.Name = "CA" Then
...End If

Answer: C

Explanation: The RegionInfo class can be used to get information about a region.
A & B CultureInfo is used to control formatting, sorting & comparing of culture sensitive data. E.g currencies, calendar dates etc.
D Does not initialise the RegionInfo object correctly i.e to Canada.

QUESTION 434

You work as the application developer at Certkiller .com. You have created a new application named Certkiller App05. Certkiller App05 is configured to forward an e-mail message. The SMTP server on the local subnet is named Certkiller -SR31. You want to test Certkiller App05. You decide to use a source address of mia@ Certkiller .com; and a target address of dest@ Certkiller .com. Choose the code segment which you should use to test whether Certkiller App05 sends e-mail messages.

- A. Dim MailFrom As New MailAddress("mia@ Certkiller .com", "Mia")
Dim MailTo As New MailAddress("dest@ Certkiller .com", "Dest")
Dim Message As New MailMessage(MailFrom, MailTo) Message.Subject =
"Hello" Message.Body = "Testing" Message.Dispose()
- B. Dim SMTPClient As String = " Certkiller -SR31"
Dim MailFrom As String = mia@ Certkiller .com
Dim MailTo As String = dest@ Certkiller .com
Dim Subject As String = "Hello"
Dim Body As String = "Testing" Dim Message As New MailMessage(MailFrom, MailTo,
Subject, SMTPClient)
- C. Dim MailFrom As New MailAddress("mia@ Certkiller .com", "Mia")
Dim MailTo As New MailAddress("dest@ Certkiller .com", "Dest")
Dim Message As New MailMessage(MailFrom, MailTo) Message.Subject =
"Hello" Message.Body = "Testing"
Dim objClient As New SmtpClient(" Certkiller -SR31") objClient.Send(Message)
- D. Dim MailFrom As New MailAddress("mia@ Certkiller .com", "Mia")
Dim MailTo As New MailAddress("dest@ Certkiller .com", "Dest"))

```
Dim Message As New MailMessage(MailFrom, MailTo)Message.Subject =  
"Hello"Message.Body = "Testing"  
Dim Info As New SocketInformationDim Client As New Socket(Info)  
Dim Enc As New ASCIIEncodingDim Bytes() As Byte =  
Enc.GetBytes(Message.ToString)Client.Send(Bytes)
```

Answer: C

Explanation: To Send a simple mail message construct a MailMessage object and a SmtpClient object. Call the SmtpClient.Send instance method supplying the MailMessage object as a parameter.

A creates a MailMessage but then destroys it.

B creates a MailMessage but then does not do anything with it.

D tries to do something with sockets, this is unnecessary because there is a SMTP server available. The question implies delivering the mail via SMTP.

QUESTION 435

You work as the application developer at Certkiller .com. Certkiller .com has its headquarters in Chicago and a branch office in Mexico.

You are developing a new application that will print a report. When the report is generated and printed by users in the Mexico branch office, the report must show the current date in the Mexican Spanish format.

Which of the following code segments will accomplish the task?

- A. Dim DTFormat As DateTimeFormatInfo = _
New CultureInfo("es-MX", False).DateTimeFormatDim DT As New DateTime(_
DateTime.Today.Year, DateTime.Today.Month, DateTime.Today.Day)
Dim strDate As String = _
DT.ToString(DTFormat.LongDatePattern)
- B. Dim objCalendar As Calendar = _
New CultureInfo("es-MX", False).CalendarDim DT As New DateTime(_
DateTime.Today.Year, DateTime.Today.Month, DateTime.Today.Day)
Dim strDate As String = DT.ToString
- C. Dim strDate As String = _
DateTimeFormatInfo.CurrentInfo.GetMonthName(_
DateTime.Today.Month)
- D. Dim strDate As String = _
DateTime.Today.Month.ToString("es-MX")

Answer: A

QUESTION 436

You work as the application developer at Certkiller .com. You are creating a new code segment. You must ensure that the data contained within an isolated storage file, named Settings.dat, is returned as a string. Settings.dat is machine-scoped.

Choose the code segment which will achieve your goal.

A. Dim objStream As IsolatedStorageFileStreamobjStream = New IsolatedStorageFileStream(_
"Settings.dat", FileMode.Open)
Dim result As String = New StreamReader(objStream).ReadToEnd

B. Dim objFile As IsolatedStorageFileobjFile =
IsolatedStorageFile.GetMachineStoreForAssemblyDim objStream As IsolatedStorageFileStreamobjStream = New IsolatedStorageFileStream(_
"Settings.dat", FileMode.Open, objFile)
Dim result As String = New StreamReader(objStream).ReadToEnd

C. Dim objStream As IsolatedStorageFileStreamobjStream = New IsolatedStorageFileStream(_
"Settings.dat", FileMode.Open)
Dim result As String objStream.ToString

D. Dim objFile As IsolatedStorageFileobjFile =
IsolatedStorageFile.GetMachineStoreForAssemblyDim objStream As IsolatedStorageFileStreamobjStream = New IsolatedStorageFileStream(_
"Settings.dat", FileMode.Open, objFile)
Dim result As String = objStream.ToString

Answer: B

Explanation: Retrieve the IsolatedStorageFile for the machine store. Use an IsolatedStorageFileStream to read from the desired file within the machine store. A & C do not get the IsolatedStorageFile for the machine context. D returns a string representation of the IsolatedStorageFileStream object not a String of the files contents as the question requests.

QUESTION 437

You work as the application developer at Certkiller .com. You are developing a new method that must decrypt, encrypted confidential data. The confidential data to decrypt is encrypted via the Triple DES (3-DES) algorithm.

Your new method takes these parameters:

1. A byte array, named cipherMessage that must be decrypted.
2. A key, named key
3. The initialization vector, named iv.

Choose the code segment which will decrypt the specified data via the TripleDES class. The decrypted data must be in string.

A. Dim objDES As New TripleDESCryptoServiceProviderobjDES.BlockSize = cipherMessage.LengthDim objCrypto As ICryptoTransform = _
objDES.CreateDecryptor(key, iv)
Dim cipherStream As New MemoryStream(cipherMessage)
Dim cryptoStream As New CryptoStream(_
cipherStream, objCrypto, CryptoStreamMode.Read)
Dim message As Stringmessage = New StreamReader(cryptoStream).ReadToEnd

```
B. Dim objDES As New TripleDESCryptoServiceProviderobjDES.FeedbackSize =  
cipherMessage.LengthDim objCrypto As ICryptoTransform = _  
objDES.CreateDecryptor(key, iv)  
Dim cipherStream As New MemoryStream(cipherMessage)  
Dim cryptoStream As New CryptoStream( _  
cipherStream, objCrypto, CryptoStreamMode.Read)  
Dim message As Stringmessage = New StreamReader(cryptoStream).ReadToEnd  
C. Dim objDES As New TripleDESCryptoServiceProvider  
Dim objCrypto As ICryptoTransform = _  
objDES.CreateDecryptor()  
Dim cipherStream As New MemoryStream(cipherMessage)  
Dim cryptoStream As New CryptoStream( _  
cipherStream, objCrypto, CryptoStreamMode.Read)  
Dim message As Stringmessage = New StreamReader(cryptoStream).ReadToEnd  
D. Dim objDES As New TripleDESCryptoServiceProvider  
Dim objCrypto As ICryptoTransform = _  
objDES.CreateDecryptor(key, iv)  
Dim cipherStream As New MemoryStream(cipherMessage)  
Dim cryptoStream As New CryptoStream( _  
cipherStream, objCrypto, CryptoStreamMode.Read)  
Dim message As Stringmessage = New StreamReader(cryptoStream).ReadToEnd
```

Answer: D

QUESTION 438

You work as the application developer at Certkiller .com. You are creating a new class which contains a method named GetCurrentRate. GetCurrentRate extracts the current interest rate from a variable named currRate. currRate contains the current interest rate which should be used.

You develop serialized representations of the class and now need to write a code segment which updates the currRate variable with the current interest rate if an instance of the class is deserialized.

Choose the code segment which will accomplish this task.

- A. <OnSerializing> _Friend Sub UpdateValue (ByVal context As StreamingContext)
currRate = GetCurrentRate()
End Sub
- B. <OnSerializing> _ Friend Sub UpdateValue(ByVal info As SerializationInfo)
info.AddValue("currentRate", GetCurrentRate())
End Sub
- C. <OnDeserializing> _ Friend Sub UpdateValue(ByVal info As SerializationInfo)
info.AddValue("currentRate", GetCurrentRate())
End Sub
- D. <OnDeserialized> _Friend Sub UpdateValue (ByVal context As StreamingContext)
currRate = GetCurrentRate()
End Sub

Answer: D

Explanation: A method with the OnDeserialized attribute will be called after Deserialization and any instance variables can be set.

A & B the method will fire during serializing, the question is concerned with reconstructing the object during deserialization.

C the OnDeserializing attribute is useful for default values. OnDeserializing attribute works with a method that contains a StreamContext parameter and not a SerializationInfo parameter.

QUESTION 439

You work as the application developer at Certkiller .com. You have to develop an application named Certkiller App21. When deployed, Certkiller App21 will be used by numerous users on the same computer. Certkiller App21 uses more than one assembly, and is configured to use isolated storage to store certain user information. You must create a new directory named UserInfo in the isolated storage area which is scoped to the current Microsoft Windows identity and assembly. Choose the code segment which will accomplish this task.

- A. Dim objStore As IsolatedStorageFileobjStore = IsolatedStorageFile.GetUserStoreForAssemblyobjStore.CreateDirectory("UserInfo")
- B. Dim objStore As IsolatedStorageFileobjStore = IsolatedStorageFile.GetMachineStoreForAssemblyobjStore.CreateDirectory("UserInfo")
- C. Dim objStore As IsolatedStorageFileobjStore = IsolatedStorageFile.GetUserStoreForDomainobjStore.CreateDirectory("UserInfo")
- D. Dim objStore As IsolatedStorageFileobjStore = IsolatedStorageFile.GetUserStoreForApplicationobjStore.CreateDirectory("UserInfo")

Answer: A

Explanation: The user store for the assembly is the correct store that is required. It is returned by IsolatedStorageFile.GetUserStoreForAssembly().

B,C & D return Isolated Storage File stores of incorrect scope

QUESTION 440

You work as the application developer at Certkiller .com. You are creating a new method. Your method must be localized to Italy, and must search a string named searchList for a specific substring named searchValue.

Which code segment should you use to perform this task?

- A. Return SearchList.IndexOf(SearchValue)
- B. Dim objComparer As CompareInfo = _
New CultureInfo("it-IT").CompareInfoReturn objComparer.Compare(SearchList, SearchValue)
- C. Dim objComparer As CompareInfo = _


```
New CultureInfo("it-IT").CompareInfoIf SearchList.IndexOf(SearchValue) > 0 Then
Return TrueElse
Return FalseEnd If
D. Dim objComparer As CompareInfo = _
New CultureInfo("it-IT").CompareInfoIf objComparer.IndexOf(SearchList,
SearchValue) > 0 Then
Return TrueElse
Return FalseEnd If
```

Answer: D

QUESTION 441

You work as the application developer at Certkiller .com. You are developing a new method that must encrypt confidential data. The method must use the Data Encryption Standard (DES) algorithm. Your new method takes these parameters:

1. A byte array, named message, that must be encrypted by applying the DES algorithm.
2. A key, named key, which will be used to encrypt the data.
3. The initialization vector, named iv.

Once the data is encrypted, it must be added to the MemoryStream object.

Choose the code segment which will encrypt the specified data and add it to the MemoryStream object.

```
A. Dim objDES As New DESCryptoServiceProviderobjDES.BlockSize =
message.Length
Dim objCrypto As ICryptoTransform = obj
DES.CreateDecryptor(key, iv)
Dim cipherStream As New MemoryStream
Dim cryptoStream As New CryptoStream(cipherStream, objCrypto,
CryptoStreamMode.Write)
B. Dim objDES As New DESCryptoServiceProvider
Dim objCrypto As ICryptoTransform = objDES.CreateDecryptor(key, iv)
Dim cipherStream As New MemoryStream
Dim cryptoStream As New CryptoStream(cipherStream, objCrypto,
CryptoStreamMode.Write)
cryptoStream.Write(message, 0, message.Length)
C. Dim objDES As New DESCryptoServiceProvider
Dim objCrypto As ICryptoTransform = obj
DES.CreateDecryptor()
Dim cipherStream As New MemoryStream
Dim cryptoStream As New CryptoStream(cipherStream, objCrypto,
CryptoStreamMode.Write)
cryptoStream.Write(message, 0, message.Length)
D. Dim objDES As New DESCryptoServiceProvider
Dim objCrypto As ICryptoTransform = obj
DES.CreateEncryptor(key, iv)
```

```
Dim cipherStream As New MemoryStream
Dim cryptoStream As New CryptoStream(cipherStream, objCrypto,
CryptoStreamMode.Write)
cryptoStream.Write(message, 0, message.Length)
```

Answer: D

Explanation: Use the DesCryptoServiceProvider to create a new encryptor. Create a CryptoStream that encrypt directly to the MemoryStream and call the Write() method to perform the encryption.

A Uses a blocksize set to size of the entire message

B creates a decryptor instead of an encryptor.

C does not initialise the encryptor with the key and iv correctly.

QUESTION 442

You work as the application developer at Certkiller .com. You create a new service application named Certkiller App29. You install Certkiller App29 on five application servers running in the Certkiller .com network. You then apply the code segment shown below. Note that line numbers are only included for reference purposes.

```
01 Public Sub StartService(ByVal serverName As String)
02 Dim ctrl As ServiceController = _
03 New ServiceController(" Certkiller App29")
04 If ctrl.Status = ServiceControllerStatus.Stopped Then
05 End If
06 End Sub
```

You want Certkiller App29 to start if it stops. You must create the routine which will start Certkiller App29 on the server defined by the serverName input parameter.

Choose the two lines of code which you should include in your code segment. Each correct answer presents only part of the complete solution. Choose two answers.

- A. Add this of code between line 03 and line 04: ctrl.ServiceName = serverName
- B. Add this of code between line 03 and line 04: ctrl.MachineName = serverName
- C. Add this of code between line 03 and line 04: ctrl.Site.Name = serverName
- D. Add this of code between line 04 and line 05: ctrl.Continue()
- E. Add this of code between line 04 and line 05: ctrl.Start()
- F. Add this of code between line 04 and line 05: ctrl.ExecuteCommand(0)

Answer: B,E

Explanation: The ServiceController is capable of controller services on other computers, the MachineName should be specified. The service should be started with the Start() method if it is in the stopped state.

Setting the ServiceName to the machine name is incorrect.

No such property as SiteName

Continue cannot re-start a stopped service only a paused one.

ExecuteCommand is used to fire a custom command on the service.

QUESTION 443

You work as the application developer at Certkiller .com. You are working on a new application named Certkiller App20. Certkiller App20 is configured to perform a series of mathematical calculations.

You create a class named Certkiller AppClass and create a procedure named Certkiller AppSP. Certkiller AppSP must execute on an instance of the class.

You must configure the application's user interface so that it continues to respond for the duration that calculations are performed. You must write the code segment for calling the Certkiller AppSP procedure which will accomplish your objective. Choose the code segment which you should use.

A. Private Sub Certkiller AppSP()...End Sub Private Sub DoWork()

Dim myValues As New Certkiller AppClass()

Dim newThread As New Thread(_

New ThreadStart(AddressOf Certkiller AppSP))

newThread.Start(myValues)

End Sub

B. Private Sub Certkiller AppSP()...End Sub Private Sub DoWork()

Dim myValues As New Certkiller AppClass()

Dim delStart As New ThreadStart(_AddressOf Certkiller AppSP)

Dim newThread As New Thread(delStart)If newThread.IsAlive

ThennewThread.Start(myValues)

End If

End Sub

C. Private Sub Certkiller AppSP (_ByVal values As Certkiller AppClass)...End Sub

Private Sub DoWork()

Dim myValues As New Certkiller AppClass()

Application.DoEvents()

Certkiller AppSP(myValues)

Application.DoEvents()

End Sub

D. Private Sub Certkiller AppSP (_ByVal values As Object)...End Sub Private Sub DoWork()

Dim myValues As New Certkiller AppClass()

Dim newThread As New Thread(_

New ParameterizedThreadStart(_AddressOf Certkiller AppSP))

newThread.Start(myValues)

End Sub

Answer: D

Explanation: It is a requirement that the UI continues to respond, hence Certkiller AppSP should execute in a separate thread. Certkiller AppSP requires a parameter hence you should use the ParameterizedThreadStart delegate.

A& B attempt to supply a parameter to the ThreadStart delegate. This is not possible.
C Does not run in a new thread and hence may leave the UI unresponsive.

QUESTION 444

You work as the application developer at Certkiller .com. You are creating a new method. Your method must be localized to Italy, and must search a string named searchList for a specific substring named searchValue.

Which code segment should you use to perform this task?

- A. Return SearchList.IndexOf(SearchValue)
- B. Dim objComparer As CompareInfo = _
New CultureInfo("it-IT").CompareInfoReturn objComparer.Compare(SearchList,
SearchValue)
- C. Dim objComparer As CompareInfo = _
New CultureInfo("it-IT").CompareInfoIf SearchList.IndexOf(SearchValue) > 0 Then
Return TrueElse
Return FalseEnd If
- D. Dim objComparer As CompareInfo = _
New CultureInfo("it-IT").CompareInfoIf objComparer.IndexOf(SearchList,
SearchValue) > 0 Then
Return TrueElse
Return FalseEnd If

Answer: D

QUESTION 445

You work as the application developer at Certkiller .com. You are developing a new application named Certkiller 15. Certkiller 15 will be used to show processes running on remote computers. You need to write a method for the application. Your method must accomplish the following:

1. Accept the name of the remote computer as a string parameter named strComputer.
2. Return an ArrayList object that lists the names of each process running on that specific remote computer.

Choose the code segment that will accomplish the task.

- A. Dim al As New ArrayList()
Dim procs As Process() = _ Process.GetProcessesByName(strComputer)
Dim proc As ProcessFor Each proc In procs
al.Add(proc)
Next
- B. Dim al As New ArrayList()
Dim procs As Process() = Process.GetProcesses(strComputer)
Dim proc As ProcessFor Each proc In procs
al.Add(proc)
Next

```
C. Dim al As New ArrayList()  
Dim procs As Process() = _ Process.GetProcessesByName(strComputer)  
Dim proc As ProcessFor Each proc In procs  
al.Add(proc.ProcessName)  
Next  
D. Dim al As New ArrayList()  
Dim procs As Process() = Process.GetProcesses(strComputer)  
Dim proc As ProcessFor Each proc In procs  
al.Add(proc.ProcessName)  
Next
```

Answer: D

Explanation: Call Processes.GetProcesses() supplying the name of the computer and then iterate through the returned collection of processes adding the process name to the arraylist.

A & C use GetProcessByName() and return processes on the current computer only.

B adds the entire process to the arraylist rather than just the process name.

QUESTION 446

You work as the application developer at Certkiller .com. You want to modify a method that returns an ArrayList named Certkiller AL. You want to write a code segment which will result in all changes made to Certkiller AL being performed in a thread-safe way.

Choose the code segment which will accomplish the task.

```
A. Dim Certkiller al As ArrayList = New ArrayList()  
SyncLock  
Certkiller al.SyncRoot  
Return Certkiller al  
End SyncLock  
B. Dim Certkiller al As ArrayList = New ArrayList()  
SyncLock  
Certkiller al.SyncRoot.GetType()  
Return Certkiller al  
End SyncLock  
C. Dim Certkiller al As ArrayList = New ArrayList()  
Monitor.Enter( Certkiller al)  
Monitor.Exit( Certkiller al)  
Return Certkiller al  
D. Dim al As ArrayList = New ArrayList()  
Dim sync_ Certkiller al as ArrayList = ArrayList.Synchronized( Certkiller al)  
Return sync_ Certkiller al
```

Answer: D

Explanation: A & C the lock will be released when the method returns.
B Does not lock the arraylist but attempts to lock its type.

QUESTION 447

You work as the application developer at Certkiller .com. You are developing an application named Certkiller App12. You must the write multicast delegate that accepts a DateTime argument.

Choose the code segment which will accomplish the task.

- A. Public Delegate Function PowerDeviceOn(_
ByVal result As Boolean, _
ByVal autoPowerOff As DateTime) _
As Integer
- B. Public Delegate Function PowerDeviceOn(_
ByVal sender As Object, _
ByVal autoPowerOff As EventArgs) _
As Boolean
- C. Public Delegate Sub PowerDeviceOn(_
ByVal autoPowerOff As DateTime)
- D. Public Delegate Function PowerDeviceOn(_
ByVal autoPowerOff As DateTime) _
As Boolean

Answer: C

Explanation: A & B the delegates do not accept an argument of type DateTime
D The question does not explicitly mention a return type. Also with multicasting only the return value of the last method called as part of a multicast chain is returned. Hence return values do not tend to be very useful as far as multicasting is concerned.

QUESTION 448

You work as the application developer at Certkiller .com. You are developing a new application named Certkiller App06.

Certkiller App06 will be used to transmit confidential financial information over the network. To secure the confidential data, you create an X509 Certificate object named certificate and create a TcpClient object named client.

You must now create the code segment that creates an SslStream for communication by applying the Transport Layer Security 1.0 protocol.

Choose the code segment which you should use.

- A. Dim objSSL As New
SslStream(client.GetStream)objSSL.AuthenticateAsServer(certificate, False, _
SslProtocols.None, True)
- B. Dim objSSL As New
SslStream(client.GetStream)objSSL.AuthenticateAsServer(certificate, False, _
SslProtocols.Ssl3, True)

C. Dim objSSL As New
SslStream(client.GetStream)objSSL.AuthenticateAsServer(certificate, False, _
SslProtocols.Ssl2, True)
D. Dim objSSL As New
SslStream(client.GetStream)objSSL.AuthenticateAsServer(certificate, False, _
SslProtocols.Tls, True)

Answer: D

QUESTION 449

You work as the application developer at Certkiller .com. You want to test a new method that examines running processes. Your method is configured to return an ArrayList that reveals the name and full path of each module loaded by a running process named C:\ Certkiller Apps\Process5.
Choose the code segment that will show each module loaded by the specific running process?

A. Dim ar As New ArrayList()
Dim procs As Process()
Dim modules As ProcessModuleCollectionprocs = Process.GetProcesses("Process5")If
procs.Length > 0 Thenmodules = procs(0).Modules
For Each pm As ProcessModule In Modules
ar.Add(pm.ModuleName)
Next
End If
B. Dim ar As New ArrayList()
Dim procs As Process()
Dim modules As ProcessModuleCollectionprocs =
Process.GetProcesses("C:\TestApps\Process5.exe")If procs.Length > 0 Thenmodules =
procs(0).Modules
For Each pm As ProcessModule In Modules
ar.Add(pm.ModuleName)
Next
End If
C. Dim ar As New ArrayList()
Dim procs As Process()
Dim modules As ProcessModuleCollectionprocs =
Process.GetProcessesByName("Process5")If procs.Length > 0 Thenmodules =
procs(0).Modules
For Each pm As ProcessModule In Modules
ar.Add(pm.FileName)
Next
End If
D. Dim ar As New ArrayList()
Dim procs As Process()
Dim modules As ProcessModuleCollectionprocs =


```
_Process.GetProcessesByName("C:\TestApps\Process5.exe")If procs.Length > 0
Then modules = procs(0).Modules
For Each pm As ProcessModule In Modules
ar.Add(pm.FileName)
Next
End If
```

Answer: C

Explanation: Process.GetProcessesByName() should be used to return all the processes that match a process name. The modules collection exposes all the modules loaded by the process and can be added to an ArrayList.
A & B GetProcesses() accepts a computer name for retrieving the processes on a remote computer. GetProcessesByName() should be used to return processes by their name.
D the path of the process is not part of the process name.

QUESTION 450

You work as the application developer at Certkiller .com. You have to define the code segment that will transfer the data of a byte array. The byte array is named dataToSend. Your code segment must use a NetworkStream object named netStream when transferring the data of the byte array. The cache size you use must be 8,192 bytes.

Which code segment should you use to accomplish the task?

- A. Dim memStream As New MemoryStream(8192)memStream.Write(dataToSend, 0, _ CType(netStream.Length, Integer))
- B. Dim memStream As New MemoryStream(8192)netStream.Write(dataToSend, 0, _ CType(memStream.Length, Integer))
- C. Dim bufStream As New BufferedStream(netStream, 8192)bufStream.Write(dataToSend, 0, dataToSend.Length)
- D. Dim bufStream As New BufferedStream(netStream)bufStream.Write(dataToSend, 0, 8192)

Answer: C

Explanation: To send data using a cache it is necessary to use a BufferedStream. The BufferedStream should be created with the cache size of 8192 bytes.
A & B do not employ caching.
D does not correctly initialise the BufferedStream to have a cache size of 8192 bytes.

QUESTION 451

You work as the application developer at Certkiller .com. You must write a code segment that includes an undo buffer function. You want the undo function to store data modifications, but it must only allow the storage of strings. You want the undo function to undo the most recently performed data modifications first.

Which code segment should you use to achieve your goal?

- A. Dim undoBuffer As New Stack(Of String)
- B. Dim undoBuffer As New Stack()
- C. Dim undoBuffer As New Queue(Of String)
- D. Dim undoBuffer As New Queue()

Answer: A

Explanation: A Stack caters for a last in first out scenario similar to what is required in an undo buffer. By using Generics you can force a strongly typed collection that takes strings only.

B is not strongly typed for strings, it will take any type of object.

C & D Queue is a First in First out collection, it is not appropriate in this instance.

QUESTION 452

You work as the application developer at Certkiller .com. You are working on an existing application and must load a new assembly into this application.

You must write the code segment that will require the common language runtime (CLR) to grant the assembly a permission set, as though the assembly was loaded from the local intranet zone. You must ensure that the default evidence for the assembly is overridden and must create the evidence collection.

Choose the code segment which will accomplish this task.

- A. Dim objEvidence As New Evidence(_
Assembly.GetExecutingAssembly.Evidence
- B. Dim objEvidence As New EvidenceobjEvidence.AddAssembly(_
New Zone(SecurityZone.Intranet))
- C. Dim objEvidence As New EvidenceobjEvidence.AddHost(_
New Zone(SecurityZone.Intranet))
- D. Dim objEvidence As New Evidence(_
AppDomain.CurrentDomain.Evidence)

Answer: C

Explanation: Use the evidence.AddHost method to add Zone evidence.

A simply gets the evidence of the Executing Assembly and assigns it to a new object, the question explicitly wants Intranet zone evidence.

B Adds assembly evidence, the question asks for host evidence because it is concerned with where the assembly was loaded from.

D does not create an Evidence object with Intranet zone evidence.

QUESTION 453

You work as the application developer at Certkiller .com. You are creating a new code segment which is to be used for user authentication and authorization purposes. The current application data store already stores the username, password, and roles.

You must establish the user security context, which should be used for the authorization checks like `IsInRole`. To authorize the user, you have started developing the following code segment:

```
If TestPassword(UserName, Password) = False Then  
Throw New Exception("user not authenticated")  
End If
```

```
Dim RolesArray() As String = LookUpUserRoles(UserName)
```

From the options below, choose the code which will make the code segment complete.

- A.

```
Dim objID As New GenericIdentity(UserName)  
Dim objUser As New GenericPrincipal(objID, RolesArray)  
Thread.CurrentPrincipal = objUser
```
- B.

```
Dim objID As New WindowsIdentity(UserName)  
Dim objUser As New WindowsPrincipal(objID)  
Thread.CurrentPrincipal = objUser
```
- C.

```
Dim objNT As New NTAccount(UserName)  
Dim objID As New GenericIdentity(objNT.Value)  
Dim objUser As New GenericPrincipal(objID, RolesArray)  
Thread.CurrentPrincipal = objUser
```
- D.

```
Dim objToken As IntPtr = IntPtr.Zero  
objToken = LogonUserUsingInterop(UserName, EncryptedPassword)  
Dim objContext As WindowsImpersonationContext =_  
WindowsIdentity.Impersonate(objToken)
```

Answer: A

Explanation: Because the application storing the credentials, the `GenericIdentity` & `GenericPrincipal` classes should be used instead of the `WindowsIdentity`\Principal classes.

B uses `WindowsIdentity` & `WindowsPrincipal`

C incorrectly uses `NTAccount` to initialise a `GenericPrincipal`. `GenericPrincipal` requires an implementation of `IIdentity`.

D the `WindowsIdentity.Impersonate()` is used for running code in the context of another user. Impersonation is not what is required.

QUESTION 454

You work as the application developer at Certkiller .com. You create a code segment that will call a function from the Win32 Application Programming Interface (API) via platform invoke. The precise code segment is:

```
Dim PersonName as String = "N?el"
```

```
Dim Msg as String = " Thank you" + PersonName + " for coming "!"
```

```
Dim r As Boolean= User32API.MessageBox(0, Msg, PersonName, 0)
```

You must specify the prototype method that will efficiently assemble the string data.

Choose the code segment which will accomplish the task.

A. <DllImport("user32", CharSet:=CharSet.Ansi)> _Public Function MessageBox(ByVal hWnd As Int32, _ByVal text As String, ByVal caption As String, _ByVal t As UInt32) As BooleanEnd Function

B. <DllImport("user32", EntryPoint:="MessageBoxA", _CharSet:=CharSet.Ansi)> _Public Function MessageBox(ByVal hWnd As Int32, _<MarshalAs(UnmanagedType.LPWStr)> ByVal text As String, _<MarshalAs(UnmanagedType.LPWStr)> ByVal caption As String, _ByVal t As UInt32) As BooleanEnd Function

C. <DllImport("user32", CharSet:=CharSet.Unicode)> _Public Function MessageBox(ByVal hWnd As Int32, _ByVal text As String, ByVal caption As String, _ByVal t As UInt32) As BooleanEnd Function

D. DllImport("user32", EntryPoint:="MessageBoxA", _CharSet:=CharSet.Unicode)> _Public Function MessageBox(ByVal hWnd As Int32, _<MarshalAs(UnmanagedType.LPWStr)> ByVal text As String, _<MarshalAs(UnmanagedType.LPWStr)> ByVal caption As String, _ByVal t As UInt32) As BooleanEnd Function

Answer: C

QUESTION 455

You work as the application developer at Certkiller .com. You have created a new dynamic assembly named MyAssembly and must ensure that the assembly is saved to disk.

Choose the code segment which you should use.

A. Dim objAssembly As New AssemblyName()objAssembly.Name = "MyAssembly"Dim objBuilder As AssemblyBuilder = _AppDomain.CurrentDomain.DefineDynamicAssembly(_objAssembly, AssemblyBuilderAccess.Run)objBuilder.Save("MyAssembly.dll")

B. Dim objAssembly As New AssemblyName()objAssembly.Name = "MyAssembly"Dim objBuilder As AssemblyBuilder = _AppDomain.CurrentDomain.DefineDynamicAssembly(_objAssembly, AssemblyBuilderAccess.Save)objBuilder.Save("MyAssembly.dll")

C. Dim objAssembly As New AssemblyName()objAssembly.Name = "MyAssembly"Dim objBuilder As AssemblyBuilder = _AppDomain.CurrentDomain.DefineDynamicAssembly(_objAssembly, AssemblyBuilderAccess.RunAndSave)objBuilder.Save("MyAssembly.dll")

D. Dim objAssembly As New AssemblyName()objAssembly.Name = "MyAssembly"Dim objBuilder As AssemblyBuilder = _AppDomain.CurrentDomain.DefineDynamicAssembly(_objAssembly, AssemblyBuilderAccess.Save)objBuilder.Save("c:\MyAssembly.dll")

Answer: B

Explanation: Create an AssemblyName object and use it to construct an

AssemblyBuilder with save privilege. Finally call the Save method on the AssemblyBuilder to write the assembly to disk.

A Creates an assembly that does not have the privilege to save to disk.

C does not provide a name the assembly

D attempts to define a physical file location, this is not compatible with AssemblyBuilder.Save

QUESTION 456

You work as the application developer at Certkiller .com. You create a new class library, which contains the Department class. The class library is accessed by numerous applications. The Department class has this definition:

```
Public Class Department
```

```
Public name As String
```

```
Public manager As String
```

```
End Class
```

Each specific application has its own custom configuration to store department-specific information in its application configuration file. The configuration code is as follows:

```
<Department>
```

```
<name>Hardware</name>
```

```
<manager>AllyWagner</manager>
```

```
</Department>
```

You must define the code segment that creates a Department object instance. You must ensure that the field values retrieved from the application configuration file is used to create the Department object instance.

Choose the code segment which will achieve your goal in these circumstances.

A. Public Class deptElement

Inherits ConfigurationElement

Protected Overrides Sub DeserializeElement(_

ByVal reader As XmlReader, _

ByVal serializeCollectionKey As Boolean)

Dim dept As Department = New Department()

dept.name = ConfigurationManager.AppSettings("name")

dept.manager = _

ConfigurationManager.AppSettings("manager")

End Sub

End Class

B. Public Class deptElement

Inherits ConfigurationElement

Protected Overrides Sub DeserializeElement(_

ByVal reader As XmlReader, _

ByVal serializeCollectionKey As Boolean)

Dim dept As Department = New Department()

dept.name = reader.GetAttribute("name")

dept.manager = reader.GetAttribute("manager")

```
End Sub
End Class
C. Public Class deptHandler
Implements IConfigurationSectionHandler
Public Function Create(ByVal parent As Object, _
ByVal configContext As Object, _
ByVal section As System.Xml.XmlNode) As Object _
Implements IConfigurationSectionHandler.Create
Dim dept As Department = new Department()
dept.name = section.SelectSingleNode("name").InnerText
dept.manager = _
section.SelectSingleNode("manager").InnerText
Return dept
End Function
End Class
D. Public Class deptHandler
Implements IConfigurationSectionHandler
Public Function Create(ByVal parent As Object, _
ByVal configContext As Object, _
ByVal section As System.Xml.XmlNode) As Object _
Implements IConfigurationSectionHandler.Create
Dim dept As Department = new Department()
dept.name = section.Attributes("name").Value
dept.manager = section.Attributes("manager").Value
Return dept
End Function
End Class
```

Answer: C

QUESTION 457

You work as the application developer at Certkiller .com. You write the definition for a class named Vehicle by defining the following code segment:

```
Public Class Vehicle
<XmlAttribute(AttributeName:="category")> _
Public vehicleType As String
Public model As String
<XmlIgnore> _
Public year As Integer
<XmlElement(ElementName:="mileage")> _
Public miles As Integer
Public condition As ConditionType
Public Sub New()
End Sub
Public Enum ConditionType
<XmlEnum("Poor")> BelowAverage
```

```
<XmlEnum("Good")> Average
<XmlEnum("Excellent")> AboveAverage
End Enum
End Class
```

You next create an instance of the Vehicle class, and add the following data in the defined fields of the class instance:

Member	Value
Vehicle Type	car
model	Racer
year	2002
miles	15000
condition	AboveAverage

You must now identify the XML block that is generated when the Vehicle class instance is serialized.

Choose the XML block that signifies the output of serializing the Vehicle class instance.

A. <?xml version="1.0" encoding="utf-8"?>
<Vehicle
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 vehicleType="car">
 <model>racer</model>
 <miles>15000</miles>
 <condition>AboveAverage</condition>
</Vehicle>

B. <?xml version="1.0" encoding="utf-8"?>
<Vehicle
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 category="car">
 <model>racer</model>
 <mileage>15000</mileage>
 <condition>Excellent</condition>
</Vehicle>

C. <?xml version="1.0" encoding="utf-8"?>
<Vehicle
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 category="car">
 <model>racer</model>
 <mileage>15000</mileage>
 <conditionType>Excellent</conditionType>
</Vehicle>

D. <?xml version="1.0" encoding="utf-8"?>
<Vehicle
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema">


```
<category>car</category>
<model>racer</model>
<mileage>15000</mileage>
<condition>Excellent</condition>
</Vehicle>
```

Answer: B

Explanation: The XML produced in B matches the class definition provided in the question.

Category is declared to be an attribute of the Vehicle element, this is not the case in answer A and D.

During XML Serialization by default the user type variables are mapped to XML elements. In the case of answer C, the type itself has been mapped instead of the instance variable.

QUESTION 458

You work as the application developer at Certkiller .com. You create a method which will compress an array of bytes. A parameter named document is used to pass the array to your method.

You want to compress the received array of bytes or data, and then want to return the result as an array of bytes.

Choose the code segment which will achieve your goal.

A. Dim objStream As New MemoryStream(document)
Dim objDeflate As New DeflateStream(objStream, CompressionMode.Compress)
Dim result(document.Length) As Byteobj
Deflate.Write(result, 0, result.Length)Return result

B. Dim objStream As New MemoryStream(document)
Dim objDeflate As New DeflateStream(objStream, CompressionMode.Compress)obj
Deflate.Write(document, 0, document.Length)obj
Deflate.Close()Return objStream.ToArray

C. Dim objStream As New MemoryStream()
Dim objDeflate As New DeflateStream(objStream, CompressionMode.Compress)obj
Deflate.Write(document, 0, document.Length)obj
Deflate.Close()Return objStream.ToArray

D. Dim objStream As New MemoryStream()
Dim objDeflate As New DeflateStream(objStream, CompressionMode.Compress)
Dim outStream As New MemoryStreamDim b As IntegerWhile (b =
objDeflate.ReadByte)
outStream.WriteByte(CByte(b))
End While
Return outStream.ToArray

Answer: C

Explanation: The document is compressed and written to a new MemoryStream using the Deflate class. Finally the compressed data can be returned as an array of bytes using the ToArray method of the MemoryStream.

A does not compress and write the document, instead it is compressing and writing an empty array

B & D are reading and writing to the same document.

QUESTION 459

You work as the application developer at Certkiller .com. You are developing a new application named Certkiller App11.

Certkiller App11 will be used to retrieve values from a custom section of the application configuration file. The application configuration file's custom section uses XML as follows:

```
<ProjectSection name="NewProject">
<role name="it administrator" />
<role name="project manager" />
<role name="user support" />
</ProjectSection>
```

You must create a code segment for a class named Role. You want the Role class to be initialized, based on values that are retrieved from the custom section of the application configuration file.

Choose the code segment which will accomplish the task.

A. Public Class RoleInherits ConfigurationElementFriend _ElementName As String = "name"

```
<ConfigurationProperty("role")> _
Public ReadOnly Property Name() As String
Get
Return CType(Me("role"), String)
End Get
End Property
End Class
```

B. Public Class Role

```
Inherits ConfigurationElement
Friend _ElementName As String = "role"
<ConfigurationProperty("name", IsRequired:=True)> _
Public ReadOnly Property Name() As String
Get
Return CType(Me("name"), String)
End Get
End Property
End Class
```

C. Public Class Role

```
Inherits ConfigurationElement
Friend _ElementName As String = "role"
Private _name As String
```

```
<ConfigurationProperty("name")> _  
Public ReadOnly Property Name() As String  
Get  
Return _name  
End Get  
End Property  
End Class  
D. Public Class Role  
Inherits ConfigurationElement  
Friend _ElementName As String = "name"  
Private _name As String  
<ConfigurationProperty("role", IsRequired:=True)> _  
Public ReadOnly Property Name() As String  
Get  
Return _name  
End Get  
End Property  
End Class
```

Answer: B

QUESTION 460

You work as the application developer at Certkiller .com. You are defining a new class that will compare a specially-formatted string. No default collation comparisons are applicable. Choose the code segment which will enable you to implement the IComparable(Of String) interface.

- A. Public Class Person
Implements IComparable(Of String)Public Function CompareTo(ByVal other As String)
As _Integer Implements IComparable(Of String).CompareTo...End Function
End Class
- B. Public Class Person
Implements IComparable(Of String)Public Function CompareTo(ByVal other As Object)
As _Integer Implements IComparable(Of String).CompareTo...End Function
End Class
- C. Public Class Person
Implements IComparable(Of String)Public Function CompareTo(ByVal other As String)
_As Boolean Implements IComparable(Of String).CompareTo...End Function
End Class
- D. Public Class Person
Implements IComparable(Of String)Public Function CompareTo(ByVal other As Object)
_As Boolean Implements IComparable(Of String).CompareTo...End Function
End Class

Answer: A

QUESTION 461

You work as the application developer at Certkiller .com. You are defining a new custom exception class. Your code written for the custom exception class is as follows:

```
Public Class CustomException
Inherits ApplicationException
Public Shared COR_E_ARGUMENT As Int32 = &H80070057
Public Sub New(ByVal strMessage As String)
MyBase.New(strMessage)
HResult = COR_E_ARGUMENT
End SubEnd Class
```

You want to ensure that the new class is used to immediately return control to the COM caller. You also want the COM caller to have access to the error code. Choose the code segment which you should use to achieve these goals.

- A. Return Marshal.GetExceptionForHR(_ CustomException.COR_E_ARGUMENT)
- B. Return CustomException.COR_E_ARGUMENT
- C. Marshal.ThrowExceptionForHR(_ CustomException.COR_E_ARGUMENT)
- D. Throw New CustomException("Argument is out of bounds")

Answer: D

QUESTION 462

You work as the application developer at Certkiller .com. You are working on a new service application named Certkiller App1. Certkiller App1 periodically calls procedures which are called from a method named Method1. The procedures run quite long. You have written the following code segment:

```
Partial Class Certkiller App1 Inherits ServiceBase
Dim blnExit As Boolean = False Protected Overrides Sub OnStart(ByVal args() As String)
Do
Method1()
LoopWhile Not blnExit
End Sub
Protected Overrides Sub OnStop()
blnExit = True
End Sub
Private Sub Method1()
End SubEnd Class
```

You try and start the new service, but find that you cannot. You receive this error message instead: Could not start the Certkiller App1 service on the local computer. Error 1053: The service did not respond to the start or control request in a timely fashion.

You must ensure that Certkiller App1 starts successfully.
How will you accomplish the task?

- A. Shift the loop code into the constructor of the service class from the OnStart method.
- B. Drag a timer component to the design surface of the service, and then shift the calls to the long-running procedure from the OnStart method into the Tick event procedure of the timer. Configure the Enabled property of the timer as True. Call the Start method of the timer from the OnStart method.
- C. Add a class-level System.Timers.Timer variable to the service class code. Shift the call to the Method1 method into the Elapsed event procedure of the timer. Configure the Enabled property of the timer as True. Call the Start method of the timer from the OnStart method.
- D. Shift the loop code from the OnStart method into the Method1 method.

Answer: C

QUESTION 463

You work as the application developer at Certkiller .com. You have to create a new security policy for an application domain which must enforce the new Certkiller .com security policy. You write the code segment to do this:

```
Dim objPolicy As PolicyLevel = PolicyLevel.CreateAppDomainLevelDim
noTrustStatement As New PolicyStatement( _
objPolicy.GetNamedPermissionSet("Nothing"))
Dim fullTrustStatement As New PolicyStatement( _
objPolicy.GetNamedPermissionSet("FullTrust"))
```

You must now ensure that all loaded assemblies default to the Nothing permission set. In addition to this, when an assembly comes from a trusted zone, your security policy must grant the assembly the FullTrust permission set. You must create the code groups to do this.

Choose the code segment which will achieve this objective.

- A. Dim objGroup1 As CodeGroup = New FirstMatchCodeGroup(_
New ZoneMembershipCondition(SecurityZone.Trusted), _
fullTrustStatement)
Dim objGroup2 As CodeGroup = New UnionCodeGroup(_
New AllMembershipCondition, noTrustStatement)
- B. Dim objGroup1 As CodeGroup = New FirstMatchCodeGroup(_
New AllMembershipCondition, noTrustStatement)
Dim objGroup2 As CodeGroup = New UnionCodeGroup(_
New ZoneMembershipCondition(SecurityZone.Trusted), _
fullTrustStatement)
- C. Dim objGroup As CodeGroup = New UnionCodeGroup(_
New ZoneMembershipCondition(SecurityZone.Trusted), _
fullTrustStatement)
- D. Dim objGroup As CodeGroup = New FirstMatchCodeGroup(_
New ZoneMembershipCondition(SecurityZone.Trusted), _

fullTrustStatement)

Answer: B

QUESTION 464

You work as the application developer at Certkiller .com. You are developing a new client application named Certkiller App09. Certkiller App09 must have a utility screen. The screen must show a thermometer; which must indicate what the current status of processes are which are being executed by the application.

A rectangle, which will be the background of the thermometer, must be drawn on the screen. The rectangle must be filled with gradient shading, as shown in the accompanying exhibit.



Which code segment should you use to accomplish the task?

- A. Dim objRect As New Rectangle(10, 10, 450, 25)
Dim objBrush As New LinearGradientBrush(_objRect, Color.AliceBlue, Color.CornflowerBlue, _LinearGradientMode.ForwardDiagonal)
Dim objPen As New Pen(objBrush)
Dim g As Graphics = myForm.CreateGraphicsg.DrawRectangle(objPen, objRect)
- B. Dim objRect As New Rectangle(10, 10, 450, 25)
Dim objBrush As New LinearGradientBrush(_objRect, Color.AliceBlue, Color.CornflowerBlue, _LinearGradientMode.ForwardDiagonal)
Dim objPen As New Pen(objBrush)
Dim g As Graphics = myForm.CreateGraphicsg.FillRectangle(objBrush, objRect)
- C. Dim objRect As New RectangleF(10.0F, 10.0F, 450.0F, 25.0F)
Dim points() As System.Drawing.Point = _
{New Point(0, 0), New Point(110, 145)}
Dim objBrush As New LinearGradientBrush(_objRect, Color.AliceBlue, Color.CornflowerBlue, _LinearGradientMode.ForwardDiagonal)
Dim objPen As New Pen(objBrush)
Dim g As Graphics = myForm.CreateGraphicsg.DrawPolygon(objPen, points)
- D. Dim objRect As New Rectangle(10, 10, 450, 25)
Dim objBrush As New SolidBrush(Color.AliceBlue)
Dim objPen As New Pen(objBrush)
Dim g As Graphics = myForm.CreateGraphicsg.DrawRectangle(objPen, objRect)

Answer: B

Explanation: Create a LinearGradientBrush and supply to the FillRectangle() method of the graphics object.

- A DrawRectangle() will draw the outline of a rectangle without filling it.
 - C draws an unfilled Polygon..
 - D Uses a SolidBrush and will not achieve the desired gradient fill
-

QUESTION 465

You work as the application developer at Certkiller .com. You must create a code segment that will identify the first 100 bytes from a stream variable named Certkiller stream5.

The initial 100 bytes must be transferred to a byte array named byteArray. The code segment you write must assign the transferred bytes to an integer variable named bytesTransferred

Choose the code segment which you should use.

- A. bytesTransferred = Certkiller stream5.Read(byteArray, 0, 100)
- B. For i As Integer = 1 To 100
Certkiller stream5.WriteByte(byteArray(i))
bytesTransferred = i
If Not Certkiller stream5.CanWrite Then
Exit For
End If
Next
- C. While bytesTransferred < 100
Certkiller stream5.Seek(1, SeekOrigin.Current)
byteArray(bytesTransferred) = _
Convert.ToByte(Certkiller stream5.ReadByte())bytesTransferred += 1End While
- D. Certkiller stream5.Write(byteArray, 0, 100)bytesTransferred = byteArray.Length

Answer: A

Explanation: The Read() method accepts a byte array and the start position and number of bytes to read as parameters.

B & D The question indicates that data should be read from the stream not written to it.

C it is unnecessary to attempt to read byte by byte, the Read() method provides a very efficient way of reading into a byte array.

QUESTION 466

You work as the application developer at Certkiller .com. You are developing a new application named Certkiller 06. Certkiller 06 will be used by users to perform an electronic survey that contains 30 True-or-False based questions.

You must set each answer to True. You also want to limit the amount of memory used by each survey.

Choose the storage option that you should use.

- A. Dim answers As New BitVector32(1)
- B. Dim answers As New BitVector32(-1)
- C. Dim answers As New BitArray(1)

D. Dim answers As New BitArray(-1)

Answer: B

Explanation: C & D BitVector32 is more efficient than a BitArray when 32 or less binary flags are required. Primarily because it is a value type.

Note: we are not sure why B is preferred to A.

QUESTION 467

You work as the application developer at Certkiller .com. You are working on a new method named PersistToDB. PersistToDB returns no value, and takes the EventLogEntry parameter type.

You must create the specific code segment which will enable you to test whether the new method works as expected. The code segment you use must be able to access entries from the application log of local computers, and must then pass only specific entries on to PersistToDB. The relevant entries to be passed to PersistToDB are Error events and Warning events from the source named mySource.

Choose the code segment which would achieve your goal in these circumstances.

A. Dim myLog As New EventLog("Application", ".")
For Each entry As EventLogEntry In myLog.Entries
If entry.Source = "MySource" Then
PersistToDB(entry)
End If
Next

B. Dim myLog as New EventLog("Application", ".")
myLog.Source = "MySource"
For Each entry As EventLogEntry In myLog.Entries
If entry.EntryType = (EventLogEntryType.Error And _
EventLogEntryType.Warning) Then
PersistToDB(entry)
End If
Next

C. Dim myLog as New EventLog("Application", ".")
For Each entry As EventLogEntry In myLog.Entries
If entry.Source = "MySource" Then
If (entry.EntryType = EventLogEntryType.Error) Or _
(entry.EntryType = EventLogEntryType.Warning) Then
PersistToDB(entry)
End If
End If
Next

D. Dim myLog as New EventLog("Application", ".")
myLog.Source = "MySource"
For Each entry As EventLogEntry In myLog.Entries
If (entry.EntryType = EventLogEntryType.Error) Or _

```
(entry.EntryType = EventLogEntryType.Warning) Then  
PersistToDB(entry)  
End If  
Next
```

Answer: C

Explanation: It is necessary to create a new Application EventLog, iterate over all the EventLogEntries and call the PersistToDB method if the entry is a warning or error and the source is MySource.

A will PersistToDb irrespective of the type of log entry. The question explicitly states only warnings and errors should be persisted.

B features an incorrect test for warnings and errors.

D&B do not ensure that only MySource entries are persisted. Instead they overwrite the source.

QUESTION 468

You work as the application developer at Certkiller .com. You are developing a new method that must compress an array of bytes. The array of bytes which should be compressed must be passed to the method in a parameter named document
Choose the code segment which will perform your task.

A. Dim inStream As New MemoryStream(document)
Dim zipStream As New GZipStream(_inStream, CompressionMode.Compress)
Dim result(document.Length) As BytezipStream.Write(result, 0, result.Length)Return
result
B. Dim objStream As New MemoryStream(document)
Dim zipStream As New GZipStream(_
objStream, CompressionMode.Compress)zipStream.Write(document, 0,
document.Length)zipStream.Close()Return objStream.ToArray
C. Dim outStream As New MemoryStreamDim zipStream As New GZipStream(
_outStream, CompressionMode.Compress)zipStream.Write(document, 0,
document.Length)zipStream.Close()Return outStream.ToArray
D. Dim objStream As New MemoryStream(document)
Dim zipStream As New GZipStream(_objStream, CompressionMode.Compress)
Dim outStream As New MemoryStreamDim b As IntegerWhile (b =
zipStream.ReadByte)outStream.WriteByte(CByte(b))
End WhileReturn outStream.ToArray

Answer: C

QUESTION 469

You work as the application developer at Certkiller .com. You are developing a class definition. Your class definition must be able to interoperate with COM applications.

You must create a code segment that will allow COM applications to create

instances of the class. COM applications must also be able to call the method named GetAddress.

Choose the code segment which you should use.

A. Public Class Customer

Private m_AddressString As String

Public Sub New(ByVal Address As String)

m_AddressString = Address

End Sub

Public Function GetAddress() As String

Return m_AddressString

End Function

End Class

B. Public Class Customer

Shared m_AddressString As String

Public Sub New()

End Sub

Public Shared Function GetAddress() As String

Return m_AddressString

End Function

End Class

C. Public Class Customer

Private m_AddressString As String

Public Sub New()

End Sub

Public Function GetAddress() As String

Return m_AddressString

End Function

End Class

D. Public Class Customer

Private m_AddressString As String

Public Sub New()

End Sub

Private Function GetAddress() As String

Return m_AddressString

End Function

End Class

Answer: C

Explanation: The class should be declared with a parameter less constructor and the getAddress() method should be public.

A uses a constructor with Parameters.

B uses static members that are not supported in COM

D the method GetAddress() must be public to be accessible by COM.

QUESTION 470

You work as the application developer at Certkiller .com. You are developing a new application that will print a report. The report must list language codes and region codes.

Choose the code segment that will accomplish this task.

- A. For Each objCulture As CultureInfo In
_CultureInfo.GetCultures(CultureTypes.SpecificCultures)
...Next
- B. Dim objCulture As New CultureInfo("")
Dim objTypes As CultureTypes = objCulture.CultureTypes
...
- C. For Each objCulture As CultureInfo In
_CultureInfo.GetCultures(CultureTypes.NeutralCultures)
...Next
- D. For Each objCulture As CultureInfo In
_CultureInfo.GetCultures(CultureTypes.ReplacementCultures)
...Next

Answer: A

Explanation: CultureTypes.SpecificCultures will filter all language codes that are specific to a country\region.

B The CultureInfo object created is not associated with any cultures.

C will yield only neutral cultures, they will not be specific to a country\region.

D Replacement cultures are user-defined custom cultures.

QUESTION 471

You work as the application developer at Certkiller .com. You create a class named Certkiller Age. You want the Age objects to be sorted.

Choose the code segment which you should use.

- A. Public Class Age
Public Value As Integer
Public Function CompareTo(ByVal obj As Object) As Object
If TypeOf obj Is Age Then
Dim _age As Age = CType(obj, Age)
Return Value.CompareTo(obj)
End If
Throw New ArgumentException("object not an Age")
End Function
End Class
- B. Public Class Age
Public Value As Integer
Public Function CompareTo(ByVal iValue As Integer) As Object
Try

```
Return Value.CompareTo(iValue)
Catch
Throw New ArgumentException ("object not an Age")
End Try
End Function
End Class
C. Public Class Age
Implements IComparable
Public Value As Integer
Public Function CompareTo(ByVal obj As Object) As Integer _
Implements IComparable.CompareTo
If TypeOf obj Is Age Then
Dim _age As Age = CType(obj, Age)
Return Value.CompareTo(_age.Value)
End If
Throw New ArgumentException("object not an Age")
End Function
End Class
D. Public Class Age
Implements IComparable
Public Value As Integer
Public Function CompareTo(ByVal obj As Object) As Integer _
Implements IComparable.CompareTo
Try
Return Value.CompareTo((CType(obj, Age)).Value)
Catch
Return -1
End Try
End Function
End Class
```

Answer: C

QUESTION 472

You work as the application developer at Certkiller .com. You are working on a component which serializes the Meeting class instances. The definition of the Meeting class is as follows:

```
Public Class Meeting
Private title As String
Public roomNumber As Integer
Public invitees As String()
Public Sub New()
End Sub
Public Sub New(ByVal t As String)
title = t
End Sub
```

End Class

You configure the following procedure for your component:

```
Dim myMeeting As New Meeting("Objectives")
myMeeting.roomNumber = 20
Dim attendees As String() = New String(1) {" Amy", " Ally"}
myMeeting.invitees = attendees
Dim xs As New XmlSerializer(GetType(Meeting))
Dim writer As New StreamWriter("C:\Meeting.xml")
xs.Serialize(writer, myMeeting)
writer.Close()
```

You want to find out which XML block will be written to the C:\Meeting.xml file when the procedure is executed.

Choose the XML block that shows which content will be written to the C:\Meeting.xml file?

A. <?xml version="1.0" encoding="utf-8"?>
<Meeting xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<title>Goals</title>
<roomNumber>20</roomNumber>
<invitee>Amy</invitee>
<invitee>Ally</invitee>
</Meeting>

B. <?xml version="1.0" encoding="utf-8"?>
<Meeting xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<roomNumber>20</roomNumber>
<invitees>
<string>Amy</string>
<string> Ally</string>
</invitees>
</Meeting>

C. <?xml version="1.0" encoding="utf-8"?>
<Meeting xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
title="Objectives">
<roomNumber>20</roomNumber>
<invitees>
<string>Amy</string>
<string>Ally</string>
</invitees>
</Meeting>

D. <?xml version="1.0" encoding="utf-8"?>
<Meeting xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<roomNumber>20</roomNumber>

```
<invitees>
<string>Amy</string>
</invitees>
<invitees>
<string>Ally</string>
</invitees>
</Meeting>
```

Answer: B

Explanation: A & C show title member in the XML. Title is a private member hence will not be serialized to XML.

D Shows multiple Invitees. There is only one object of type Invitees in the class definition.

QUESTION 473

You work as the application developer at Certkiller .com. You create a code segment which will implement the class named Certkiller Class1. The code segment is shown here:

```
Public Class NewClass
Public Function MyMethod(ByVal Arg As Integer) As Integer
Return Arg
End Function
End Class
```

You want the Certkiller Class1.MyMethod function to be dynamically called from a separate class within the assembly.

Choose the code segment which you should use to accomplish the task.

- A. Dim objNewClass As New NewClassDim objType As Type =
objNewClass.GetTypeDim objInfo As MethodInfo = _
objType.GetMethod("MyMethod")
Dim objParams() As Object = {1}
Dim i As Integer = _
DirectCast(objInfo.Invoke(Me, objParams), Integer)
- B. Dim objNewClass As New NewClassDim objType As Type =
objNewClass.GetTypeDim objInfo As MethodInfo = objType.GetMethod("MyMethod")
Dim objParams() As Object = {1}
Dim i As Integer = _
DirectCast(objInfo.Invoke(objNewClass, objParams), Integer)
- C. Dim objNewClass As New NewClassDim objType As Type =
objNewClass.GetTypeDim objInfo As MethodInfo = _
objType.GetMethod("NewClass.MyMethod")
Dim objParams() As Object = {1}
Dim i As Integer = _
DirectCast(objInfo.Invoke(objNewClass, objParams), Integer)
- D. Dim objType As Type = Type.GetType("NewClass")


```
Dim objInfo As MethodInfo = objType.GetMethod("MyMethod")
Dim objParams() As Object = {1}
Dim i As Integer = _
DirectCast(objInfo.Invoke(Me, objParams), Integer)
```

Answer: B

Explanation: Use reflection to get MethodInfo object that corresponds to the MyMethod member function. Call the Invoke() method of MethodInfo

A & D the Invoke method requires the object that the method will fire upon if its an instance method. myClass should have been passed.

C the getMethod() does not require the classname .

QUESTION 474

You work as the application developer at Certkiller .com. You create a class library that contains a class hierarchy. The class hierarchy is specified in this code segment:

```
01 Public Class Group
02 Public Employees As Employee()
03 End Class
04
05 Public Class Employee
06 Public Name As String
07 End Class
08
09 Public Class Manager
10 Inherits Employee
11 Public Level As Integer
12 End Class
```

Line numbers are only shown above for reference purposes.

You create an instance of the Group class, and then populate the fields of the Group class's instance.

You use the Serialize method of the XmlSerializer class to serialize the instance. You realize that the attempt is unsuccessful when you receive

InvalidOperationException, and an error message which states this: "There was an error generating the XML document."

You must perform the necessary configuration which will allow you to use the Serialize method of the XmlSerializer class to serialize the instances. You want the XML output to include elements for all public fields in the class hierarchy.

What should you do to achieve your goal in these circumstances?

A. Add this code segment between lines 01 and 02 of the code segment:

```
<XmlArrayItem(Type:=GetType(Employee))> _
<XmlArrayItem(Type:=GetType(Manager))> _
```

B. Add this code segment between lines 01 and 02 of the code segment:

```
<XmlElement(Type:=GetType(Employee))> _
```

C. Add this code segment between lines 01 and 02 of the code segment:

<XmlArray(ElementName:="Employees")> _

D. Add this code segment between lines 05 and 06 of the code segment:

<XmlElement(Type:=GetType(Employee))>

And

Add this code segment between lines 10 and 11 of the code segment:

<XmlElement(Type:=GetType(Manager))>

Answer: A

QUESTION 475

You work as the Enterprise application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. The design of applications forms part of your responsibilities at Certkiller .com. Certkiller .com operates as an examination Web site.

You are developing a Web-based application for Certkiller .com. This application, upon completion, should allow users to take various online examinations. Every time a user takes on online test, you want the following business rules to be met:

1. Display a congratulatory message when a user passes a test.
2. Display a motivational message when a user fails a test.
3. Display a different message when a user meets the minimum requirements for a test.

The following Exhibit illustrates the pseudo-code that you wrote to meet these requirements:

Exhibit:

if pass

display congratulatory message

else if meeting minimum requirements

display different message

else

display motivational message

What conclusion can you draw?

- A. None of the requirements will be met.
- B. All the requirements will be met.
- C. All requirements, except the display of a different message when the user meets the minimum requirements, will be met.
- D. All the requirements, except the display of the motivational message when a user fails a test, will be met.

Answer: B

Explanation: All the requirements for the application will be met. A different message will be displayed in the event of the user passing, failing or just meeting the minimum requirements for a test. If the user passes, then the congratulatory message will be displayed, if the user meets the minimum requirements then the different message will be

displayed. Otherwise the user fails the test in which case the motivational message will be displayed.

Incorrect answers:

A: This is incorrect because this pseudo-code will yield the desired results.

C: This is only partly correct since the code will also result in the display of the different message in case the user meets the minimum requirements of a test.

D: This is only partly correct since the code will result in displaying the motivational message in case the user fails the test.

QUESTION 476

You work as the Enterprise application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. The design of applications forms part of your responsibilities at Certkiller .com.

You are currently developing Web-based applications for Certkiller .com. One of these applications that you developed is destined to allow the user to display multiple lines in a TextBox control. Each of the lines in the TextBox control is concatenated into a single string. Each message in the TextBox control will consist of more than five lines.

You now need to configure this Web-based application to meet these requirements. What should you do?

- A. You should include calling the Concat method in the application using a String instance.
- B. You should include calling the Append method in the application using a String instance.
- C. You should include calling the Add method in the application using a StringBuilder instance.
- D. You should include calling the Append method in the application using a StringBuilder instance.

Answer: D

Explanation: The StringBuilder instance has a larger internal buffer to handle larger strings and since you will have at least five lines concatenated in the same string, you should make use of a StringBuilder instance to call the Append method. Strings are immutable and every time a string is concatenated, at least two strings are de-referenced, but stay in memory until Garbage collection. The StringBuilder, due to its larger internal buffer is capable of maintaining a large internal buffer and only extends the buffer than required to do so. This makes using the StringBuilder unstance for efficient.

Incorrect answers:

A: You should not make use of the String class as it is unable to modify its contents in place. The String class will always return a new string when the contents are changed and this will result in a drop in the performance.

B: This is partly correct since you need to call the Append method, however you should make use of a StringBuilder instance and not the String instance.

C: This is incorrect as there is no such method named Add method. You need to make use of the Append method when using the StringBuilder class.

QUESTION 477

You work as the Enterprise application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. There is only one Web server at Certkiller .com. The design of applications forms part of your responsibilities at Certkiller .com. Certkiller .com operates as a manufacturing company.

You are currently developing Web-based applications for Certkiller .com. All the departments at Certkiller .com will have its own Web application for custom content and functionality that is department-specific. All these Web applications make use of third party .NET 1.1 components. These components are all shared by other Web applications within Certkiller .com.

You must meet the following requirements in your development of these Web-based applications:

1. The Web-based applications must require the shared components.
2. The Web-based applications must also require ASP.NET 2.0 features.

You should develop these applications with the least amount of developer effort and time. To this end you need to take a decision on how you will meet these requirements in your solution.

What should you do?

- A. You should upgrade the shared components to .NET 2.0
- B. You should enable directory browsing on the Web Server to access the shared components.
- C. You should place the shared components in the same directory as the main Web application.
- D. Since ASP.NET 2.0 Web applications are compatible with .NET 1.1 components you should not do anything.

Answer: D

Explanation: The ASP.NET 2.0 and ASP.NET 1.1 runtime can run on the same machine without any additional configuration settings required. The ASP.Net 1.1 components can benefit from the performance options that are available in ASP.NET 2.0 and ASP.NET 2.0 applications can continue to communicate with the ASP.NET 1.1 components. Thus there is no need to do anything.

Incorrect answers:

A: There is no need to upgrade the shared components to ASP.NET 2.0. This option would not be available if the components are third party and data access components should then be redesigned to take full advantage of the ASP.NET 2.0 benefits. In fact it would be simpler upgrading an ASP.NET 1.1 site to ASP.NET 2.0.

B: You should not enable directory browsing on the Web server because it can allow any user to see the directory structure of your Web site. And furthermore, directory browsing

will not allow different versions of ASP.NET to run.

C: The shared components should not be placed in the same directory as the main Web application. Merging the files into the same directory will create a problem with other Web applications accessing the shared component.

B: Evaluate the physical design for maintainability.

QUESTION 478

You work as the Enterprise application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. The design of applications forms part of your responsibilities at Certkiller .com. Certkiller .com operates as an online-retailer.

You are currently developing a Web-based application for Certkiller .com. This application will server as an order fulfillment application. Upon completion this application will allow the Certkiller .com users to enter a zip code into a TextBox control where they will be able to find all the packages that have been shipped to a particular geographical area. The application will take the TextBox value and construct a query similar to the one illustrated in the Exhibit below:

Exhibit:

```
SELECT * FROM Orders WHERE zip = '21006';
```

You now need to make sure that you mitigate the possibility of malicious code being inserted into the query strings passed to the SQL Server for parsing and execution.

What should you do?

- A. You should use a RequiredFieldValidator control on the TextBox.
- B. You should validate user input using stored procedures.
- C. You should build Transact-SQL statements directly from the TextBox input.
- D. You should concatenate user input from the TextBox.

Answer: B

Explanation: It is possible that malicious code can be inserted into user input variables that are concatenated with SQL statements and executed, i.e. the SQL injection attack. To prevent this from happening you should configure the Web-based application to validate all input prior to sending the request to the database by making use of least privilege accounts when accessing the database, and using stored procedures rather than dynamically constructed SQL when possible.

Incorrect answers:

A: You should not make use of the RequiredFieldValidator control on the TextBox. This will force the users to enter a value for the zip code, but would not prevent malicious code from being accepted as input.

C: You should not build the Transact-SQL statement directly from the TextBox input as it provides a user with an opportunity to insert malicious code. And executing the Transact-SQL statements directly from the TextBox input has to potential to harm your database.

D: You should not concatenate user input from the TextBox. The input from the TextBox

control should rather be validated prior to concatenation as invalidated concatenation input makes an application susceptible to SQL injection attacks.

C: Evaluate how the physical location of files affects the extensibility of the application.

QUESTION 479

You work as the Enterprise application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. The design of applications forms part of your responsibilities at Certkiller .com. Certkiller .com operates as a company that provides financial, investment and accounting services to its customers.

You are currently developing a Web-based application for Certkiller .com. This application will be used to maintain the investment account information for the Certkiller .com customers. This investment account information is sent as Extensible Markup Language (XML) documents from the Microsoft SQL Server 2005 database. Each XML document should contain customer feedback information. You want this application to allow you to contact the customers regarding the given feedback. Following are the requirements that should be met:

1. The Web-based application must retrieve each customer's contact details such as name, address, and e-mail address from the XML document.
2. You must be allowed to determine which geographical area has the most customer complaints.
3. The customer data should remain in XML format.
4. You must maximize performance of the query.

You thus need to make a decision as to which approach you can use to query the SQL Server data to meet these requirements.

What should you do?

- A. Query the SQL Server data using a SELECT statement with the FOR XML clause.
- B. Query the SQL Server data using a SELECT statement that calls the DataType.Xml method.
- C. Query the SQL Server data using a SELECT statement with an OPENXML function.
- D. Query the SQL Server data using a SELECT statement with the OPENROWSET function.

Answer: C

Explanation: The OPENXML function can be used to query data from an XML document. It is also possible to convert the XML data, store it in a temporary table, then query the data, but this schlep will be eliminated using the OPENXML function and also you should not change the data from XML because the Web site data must remain in XML format. Thus the database should be queried with the SELECT statement with an OPENXML function.

Incorrect answers:

A: The FOR XML clause is used to format the results of a query in XML format. In this case you need to query the data from an XML document. Thus this option is not required.

B: The `DataType.Xml` method returns an object that represents a specified data type, and will thus not allow you to query the XML document directly.

D: The `OPENROWSET` function is used for querying remote data sources and this is not what is required in this scenario.

QUESTION 480

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS547.

You are developing a Web-based client application for the Certkiller .com Web site. The Certkiller .com Web site sells subscriptions to courseware material. The Web application must allow users to browse subscription options, to purchase subscriptions, to add subscriptions to a wish list, to store bank account details, and to review products online. You must implement a standardized layout according to the company's branding on each page. The pages must also implement a daily advertisement above the main menu. The advertisement must be replaced every morning.

You want to reduce the effort required to maintain the Web application.

What should you do?

E. Add an `AdRotator` control to each Web page and place the daily advertisement in the Advertisement file.

F. Include the daily advertisement in a Master Page and set the `masterPageFile` attribute in the Web.config file.

G. Create a User Control for the daily advertisement and add the User Control to each Web page.

H. Include the daily advertisement in a Template Page and bind each Web page to the Template Page.

Answer: B

Explanation:

Master Pages allows you to create a common layout for across all pages that the Master Page is bound to. You can either bind the Master Page to each page in the Page directive on each page, or in the `masterPageFile` attribute of the Web.config file. If the `masterPageFile` attribute of the Web.config file is set to the location of the Master Page, any changes made to the Master Page will be propagated to each Web page. This will reduce the effort required to maintain the daily advertisement.

Incorrect Answers:

A: The `AdRotator` control is used to rotate between various advertisements contained in an `AdvertisementFile`. Advertisements are displayed on the basis on page impressions. It is possible to have only one advertisement in the `AdvertisementFile` and to change the advertisement every morning but this is not the purpose of the `AdRotator` control.

C: You could include the advertisement in a User control but you would need a Master Page to standardize the layout of each page. It would therefore require less effort to add

the advertisement to the Master Page.
D: ASP.NET does not support a Template Page.

QUESTION 481

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS547.

You are developing a Web-based client application for the Certkiller .com Web site. The Certkiller .com Web site sells subscriptions to courseware material. The Web application must allow users to browse subscription options, to purchase subscriptions, to add subscriptions to a wish list, to store bank account details, and to review products online. You must implement a standardized layout on each page. You must also ensure that all controls maintain a consistent appearance according to the company's branding.
What should you do?

- A. Implement Themes and Master Pages.
- B. Implement Web Parts and User Controls.
- C. Implement User Controls and Profile properties.
- D. Implement Web Parts and Master Pages.

Answer: A

Explanation: Master Pages allows you to create a common layout for across all pages that the Master Page is bound to. You can either bind the Master Page to each page in the Page directive on each page, or in the masterPageFile attribute of the Web.config file. Themes allow you to maintain a consistent appearance for the controls across Web pages, and entire Web application, or all Web applications on a server.

Incorrect Answers:

- B: Web Parts allow users to customize content, appearance and behavior of Web pages, while User Controls allow you to reuse code across Web pages. Neither is used to implement consistent layout nor consistent appearance of controls.
- C: Profile properties is a provider framework that stores settings for individual users, while User Controls allow you to reuse code across Web pages. Neither is used to implement consistent layout nor consistent appearance of controls.
- D: Web Parts allow users to customize content, appearance and behavior of Web pages. It does not implement consistent layout or consistent appearance of controls.

QUESTION 482

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. Internet Information Services

(IIS) is installed on Certkiller -WS547. Certkiller .com has its headquarters in Washington and branch offices in Miami, Dallas and San Francisco. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01 that is located at headquarters. Certkiller -DB01 hosts a database named CK_Sales that stores sales information for the company. You are developing a Web-based client application for Certkiller .com. The Web application connects all branch offices to the CK_Sales database. You need to develop a user interface that allows Sales personnel at each branch office to enter data regarding Returned goods. The Returned Goods data includes the customer's name, the product code, and the invoice number. You need to implement the appropriate user interface controls for entry of Returned Goods data.

What should you do?

- A. Use a TextBox control for the customer's name, a TextBox control for the invoice number and a TextBox control for the product code.
- B. Use a DropDownList control for the customer's name, a DropDownList control for the invoice number and a DropDownList control for the product code.
- C. Use a DropDownList control for the customer's name, a TextBox control for the invoice number and a DropDownList control for the product code.
- D. Use a TextBox control for the customer's name, a TextBox control for the invoice number and a DropDownList control for the product code.

Answer: C

Explanation:

The main data that can be read from a database is the product code and the customer's name. You can implement a data bound DropDownList to display the product code and customer name. A TextBox is a free-form input box that can be used for the invoiced price.

Incorrect Answers:

A: While it is possible that all data can be entered in TextBox controls, it would be difficult to verify the accuracy of the data. Allowing Sales personnel to select the appropriate customer name and product code from a DropDownList would greatly reduce data input errors.

B: A DropDownList for a price range would be inappropriate.

D: While it is possible that the customer name can be entered in TextBox controls, it would be difficult to verify the accuracy of the data. Allowing Sales personnel to select the appropriate customer name from a DropDownList would greatly reduce data input errors.

QUESTION 483

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS547.

You are developing a Web-based client application for Certkiller .com. You want users of the Web application to input a date on the Web form regardless of their local date format. You add three DropDownList controls named Year, Month and Day to the Web application. You want the date entered through these DropDownList controls will be displayed on subsequent pages in the user's local date format.

What should you do?

- A. Instantiate a DateTime object using the values from the DropDownList controls.
- B. Instantiate a DateTime object using the values from the GetDate method.
- C. Let the users select their location and set the CurrentCulture property of the executing thread to the associated CultureInfo object.
- D. Set the enableClientBasedCulture attribute in the Web.config file to true.

Answer: A, C

Explanation: You must instantiate a DateTime object that accepts the values that the user entered in the DropDownList controls. The user should then select his or her location from a DropDownList. This location must be used to configure the CurrentCulture property of the executing thread to the associated CultureInfo object.

Incorrect Answers:

B: You want the user to input a date into the Web Form. The GetDate method does not allow user input.

D: The enableClientBasedCulture attribute takes the culture settings of the browser. Although this will work, the culture settings in the browser may be misconfigured.

QUESTION 484

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS547.

You are developing a Web-based client application for the Certkiller .com Web site. The Certkiller .com Web site sells subscriptions to courseware material. Customers must be able to specify the term of subscription by specifying the start and end dates of their subscriptions in TextBox controls, and must specify their location in a DropDownList control. You must ensure that the values entered into the TextBox controls are dates that have not yet passed. You must also ensure that the start date is no more than 3 months in advance and that the end date is at least two weeks after the start date. Customers who want an open-ended subscription do not need to specify an end date.

You decide to use RequiredFieldValidator controls to verify the start date TextBox control and the DropDownList control, and a RangeValidator control to verify the start date TextBox control.

Does your solution satisfy the requirements for this project?

- A. Yes.
- B. No, a RangeValidator does not verify the validity of a date.
- C. No, a CompareValidator is required to verify the validity of the end date.
- D. No, a CompareValidator is required to verify that the start date has not already passed.
- E. No, a RequiredFieldValidator is required for the end date TextBox control.

Answer: C

Explanation: This solution does not meet requirements because it fails to ensure that the end date is at least two weeks after the start date. The RequiredFieldValidator verifies that a start date has been specified and that a location has been selected. The RangeValidator ensure that the start date has not already passed. You also need a CompareValidator to compare the end date to the start date and ensure that the end date is at least two weeks after the start date.

Incorrect Answers:

A: This solution does not meet requirements because it fails to ensure that the end date is at least two weeks after the start date. The RequiredFieldValidator verifies that a start date has been specified and that a location has been selected. The RangeValidator ensure that the start date has not already passed. You also need a CompareValidator to compare the end date to the start date and ensure that the end date is at least two weeks after the start date.

B: The RangeValidator ensure that the start date has not already passed and is therefore required.

D: A CompareValidator compare the values in two controls. It can be used to ensure that the values in the two controls are identical or are within a certain range of each other. It is not be used to compare the value in the start date Text Box with the current date.

E: A RequiredFieldValidator should not be added for the end date TextBox control as customers must be able to specify open-ended subscriptions. These customers will not enter an end date.

QUESTION 485

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. Certkiller .com runs all its Web applications on a Windows Server 2003 Web server named Certkiller -SR24. All Web applications on Certkiller -SR24 are hosted in Internet Information Services (IIS). IIS 6.0 is installed on Certkiller -SR24. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. IIS 5.0 is installed on Certkiller -WS547.

You are developing a Web-based client application for the Certkiller .com Web site. The Certkiller .com Web site sells subscriptions to courseware material. The courseware that is available from Certkiller .com includes recently developed instructional videos. Your Web application must make these videos available to subscribers. The Web application must include a multimedia delivery mechanism must support all bandwidths, including dial-up. Subscribers must also be able to

watch portion of the video without downloading it completely. You want to ensure that download speeds are as close to real-time as possible and that the download process has a minimal impact on the overall performance of the Web application. What should you do?

- A. Use Internet Information Services (IIS) to stream each video as requested by the subscriber.
- B. Cut the videos into smaller files. Use Internet Information Services (IIS) to download each file completely and play that file before downloading the next file.
- C. Use Microsoft Windows Media Services to stream each video as requested by the subscriber.
- D. Cut the videos into smaller files. Use Microsoft Windows Media Services to download each file completely and play that file before downloading the next file.

Answer: C

Explanation: Microsoft Windows Media Services allows you to stream video and start playback before the download is complete. Microsoft Windows Media Services also supports all bandwidth types and has a minimal impact on overall performance as it does not consume IIS application resources other than the communication channel.

Incorrect Answers:

- A: IIS provides basic multimedia streaming and will have a negative impact on overall Web application performance.
- B, C: Cutting the video into smaller files will not ensure that all bandwidth are supported, and that subscribers can start watching the video before the download is complete.

QUESTION 486

You work as the Enterprise application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Your responsibilities at Certkiller .com include the design and development of applications. Certkiller .com offers its customers financial and accounting services.

You are developing a Web-based application for Certkiller .com. This application will allow the Certkiller .com employees to manage their investments and retirement benefits. With this application employees will be able to investigate various hypothetical scenarios to determine the best investments options. The calculation used in this application is rather complex and based on a common calculation algorithm. To this end you decided to provide other developers with a component to encapsulate the algorithm and basic user interface elements.

Following are the requirements that your component should meet:

1. The component must display two TextBox Web server controls.
2. The component must display one Button Web server controls.
3. The component must be available only to your application for security reasons.
4. The component must be available in the Visual Studio designer.

You thus decide to design the component to implement the IComponent interface.

And now you need to make a decision as to whether the solution will meet the requirements.

What conclusion can you draw?

- A. All the requirements will be met.
- B. None of the requirements will be met.
- C. Only the requirement stating that the component should be available in the Visual Studio designer will be met.
- D. Only the requirements stating that the component must display two TextBox-, and one Button Web server control, will be met.

Answer: C

Explanation: Classes that implement the IComponent interface can be made available to developers in the Visual Studio designer and accessible from the Visual Studio toolbox, thus only the availability of the component in the Visual Studio designer requirement will be met. To meet all the requirement a Web User control would be most appropriate.

Incorrect answers:

- A: This option is incorrect since all the requirements will not be met only the requirement stating the component should be available in the Visual Studio designer will be met.
- B: This is incorrect since only one of the requirements will be met and not none.
- D: This is incorrect since only the requirement stating the component should be available in the Visual Studio designer will be met, and not the TextBox or Button control requirement.

QUESTION 487

You work as the Enterprise application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Your responsibilities at Certkiller .com include the design and development of applications. Certkiller .com operates as an online-retailer.

You are currently developing a component for CertK ign.com. This component will be used to log the raw HTTP request and response for a Web application. You need to ensure that the component will (1) be modular and (2) provide extensibility to log other information in future.

You need to make a decision as to which design pattern you should use to meet the requirements of this component.

What should you do?

- A. Use an Observer
- B. Use a Front Controller
- C. Use an Intercepting Filter
- D. Use a Page Controller

Answer: C

Explanation: The Intercepting Filter design pattern provides a processing mechanism before and after an application processes a request or a response. Since you need to log the raw HTTP request and response with a pattern that provides modularity and extensibility, this would be the appropriate choice. Because the processing of the request and response occurs before the application or page processing, filter components could be added, modified, removed or their order shuffled without affecting the processing in the application.

Incorrect answers:

A: The Observer design pattern does not meet the requirements for this component because it does not provide a mechanism for input or output pre-processing or post-processing. It will describe how to have observers, or subscribers monitor a subject object's state changes. This will introduce unnecessary complexity and should not be used in this scenario.

B: The Front Controller is used to centralize all control for the entire Web application. This is not appropriate in this scenario.

D: The Page Controller pattern describes a component that receives a user request for a page, retrieves the requested data, and determines the appropriate response. It is highly appropriate in a centralized application processing environment and not to intercept data before or after processing.

QUESTION 488

You work as the Enterprise application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Your responsibilities at Certkiller .com include the design and development of applications. Certkiller .com operates as retailer.

You are currently developing an application for Certkiller .com. This application, upon completion will be used to process, validate, and approve credit card purchases. This application will make use of an unmanaged COM component. You now need to ensure that the application will release the COM component resources as soon as the client application is finished using it. To this end you need to make implement the appropriate interface.

What should you do?

- A. Implement the IContainer interface.
- B. Implement the IBindingList interface.
- C. Implement the IComponent interface.
- D. Implement the IDisposable interface.

Answer: D

Explanation

: When one implements the IDisposable interface, one must implement the Dispose method to allow for the release of resources explicitly. The Dispose method will release any unmanaged COM resources in this scenario.

Incorrect answers:

A: The IContainer interface is implemented as a container to tract zero or more

components. And although the IContainer interface also inherits the IDisposable interface, you will still need to provide more functionality than is required in this case.

B: The IBindingList interface exposes the functionality to support both simple and complex binding to a data source. This is not what is required in this scenario.

C: The IComponent interface is implemented to server as a user interface in Visual Studio Designer and although the IComponent interface also inherits the IDisposable interface, you will still need to provide more functionality than is required in this case.

QUESTION 489

You work as the Enterprise application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Your responsibilities at Certkiller .com include the design and development of applications. Certkiller .com operates as a construction company that specializes in erecting and maintaining projects.

You are currently creating an ASP .NET Web-Based application for Certkiller .com. This application will be used to view current and historical information regarding each project. This application accesses project information that is stored on a table within a relational database.

You design the Project class to represent the commercial construction project. Each project is tracked by means of a unique project identifier. This identifier is also assigned to projects prior to the commencement of a project and prior to resources being assigned to it. You now need to design the interface of the Project class in such a way as to ensure that the project identifier is assigned.

What should you do?

- A. Randomly generate a unique project identifier in the default constructor.
- B. Randomly generate a unique project identifier in the default constructor. Accept the project identifier as a parameter in an overloaded constructor.
- C. Call a stored procedure to increment the unique project identifier in the default constructor.
- D. Call a stored procedure to increment the unique project identifier in the default constructor. Accept the project identifier as a parameter in an overloaded constructor.

Answer: D

Explanation: In this scenario a project needs a unique identifier for creation and tracking the project. When using the default constructor, it is important that a new project (yet without an identifier) is uniquely identified. Because the identifier information is located in a relational database, you should increment the last used project identifier using a stored procedure. When tracking an existing project, the project instance will represent an existing project, thus the overload constructor should take a valid project identifier as input.

Incorrect answers:

A: You should not randomly generate a unique project identifier. Even if it seems

unlikely, the project identifier may be the same as an existing project. Because the relational database stores project information, you should rather increment the last used project identifier via a stored procedure to ensure unique identifiers being assigned.

B: This option is only partly correct, however, you should not randomly generate a unique project identifier. Even if it seems unlikely, the project identifier may be the same as an existing project. Because the relational database stores project information, you should rather increment the last used project identifier via a stored procedure to ensure unique identifiers being assigned.

C: This option only represents half of the solution.

QUESTION 490

You work as the Web application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Your responsibilities at Certkiller .com include the design and development of applications. Certkiller .com operates as a College of Education.

Certkiller .com is divided into many different faculties that operate independent from each other. However, and each faculty has to make use of the Administration building staff quarters if they are to conduct meetings as this is the only facility that is suitable for this purposes. To this end you have written an application that will allow users to reserve the Administration building staff quarters for meetings.

Usually when a user requests the Administration facilities for a meeting for a specific time and date, a record is written to a database; e-mail invitations and agendas are sent to all requested participants. This process to generate the invitations and agendas does take some time. You want to ensure that invitations are sent out in the order in which meeting requests are received. To this end you decide to store the MeetingRequestID in one of the members of the Systems.Collections class to ensure that you process the records invitations in the correct order. You thus need to choose the appropriate collection class to meet this requirement.

What should you do?

- A. Use the ArrayList collection class.
- B. Use the Stack collection class.
- C. Use the Queue collection class.
- D. Use the HashTable collection class.

Answer: C

Explanation: Systems.Colelction is a namespace in the .NET framework that contains classes which define various objects suc as lists, dictionaries and queues. In this case you should create a Queue collection class. A Queue is used to store a list of objects to be processed on a First-in, First-out basis. In this scenario the requests are added to a queue as they are received. As the application has time it pulls the first item from the queue and processes it. Thus you will ensure first-in, first-out processing.

Incorrect answers:

A: You should not use the ArrayList collection class as this construct allows for sorting, but does not guarantee a first-in, first-out processing.

B: You should not use the Stack collection class as this construct will allow you to retrieve requests in a last-in, first-out basis and this is not what is specified in the requirements.

D: You should not use the HashTable collection class as this data structure will not guarantee first-in, first-out processing.

QUESTION 491

You work as the Enterprise application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Your responsibilities at Certkiller .com include the design and development of applications. Certkiller .com offers its customers financial and accounting services.

Certkiller .com makes use of a front-end Web site that allows its customers to view their accounts and to manage their financial affairs. This financial affair management includes the ability to shift funds from e.g. a savings account to a mortgage account or to a credit card account, as well as paying bills online. You are currently developing a component to centralize all financial transactions between customer accounts. All financial data is stored in a SQL Server database.

You want the transaction process to perform the following steps:

1. Verify that the customer has sufficient funds (to cover the transfer fees as well.)
2. Debit the amount from the source account to main customer account.
3. Credit the amount to the destination account from the main customer account.

For a transaction to be considered completed all these steps must be fulfilled successfully. The component must notify the application in the event of an error and roll back the pending transaction.

You now need to make a decision as to which exception handling method you can use to meet these transactional requirements.

What should you do?

A. The SqlTransaction object must be placed inside a using statement.

B. The SqlTransaction object must be placed inside a finally block.

C. Make use of a catch block to catch all exceptions.

Roll back the current transaction.

Re-throw the exception.

D. Make use of a catch block to catch all exceptions.

Re-throw the exception.

Use a finally block to roll back the current transaction.

Answer: C

Explanation: Using a Catch block to catch all new exceptions and rolling back the current transaction and then re-throwing the exception will ensure that the application is notified and the transaction rolled back in the event of errors occurring during the transaction.

Incorrect answers:

A: You should not place the SqlTransaction object inside a using statement because it will not have any effect on transaction rollbacks and application notifications.

B: You should not place the SqlTransaction object inside a finally block because it will not have any effect on transaction rollbacks and application notifications.

D: This procedure is wrong and you also should not make use of a finally block to rollback the current transaction because a successful transaction should be committed and code in the finally block is executed if an error occurs or not. The object of the exception-handling method should be to roll back only in the event of errors occurring or when the transaction is not successful.

B: Decide how a component will handle exceptions. Considerations include catching and throwing a new exception; catching, wrapping, and throwing the wrapped exception; catching and terminating, and so on.

QUESTION 492

You work as the Enterprise application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Your responsibilities at Certkiller .com include the design and development of applications. You are currently designing a component for Certkiller .com. This component will be used to simplify data access to disparate data sources. These sources are varied and include both Oracle and flat-file databases. the Web application will use the component to retrieve and update the underlying data sources.

You need to design an exception handling mechanism for this component that will meet the following requirements:

1. The Web application must not require a status message that indicates success or failure.
2. The Web application requires error messages when they occur in the component.
3. All error messages must be thorough and detailed.
4. All error messages must indicate the origin of the error, i.e. where and when the error occurred.
5. All error messages should be user friendly.

You need to make a choice as to which exception handling method you could use to meet these requirements.

What should you do? (Each correct answer presents part of the solution. Choose three.)

- A. Catch each exception and throw a new custom exception.
- B. Catch each exception and re-throw the exception.
- C. Set the new exception Data property to a custom error message.
- D. Set the new exception Message property to a custom error message.
- E. Set the new exception Data property to the original exception.
- F. Throw the new exception by wrapping it around the original exception. The InnerException property will return the original exception.

Answer: A, D, F

Explanation: To ensure that the error message is detailed as well as containing the original error message's origins and that the message be user friendly you should first catch each new exception and throw a new custom exception, then you should throw the new exception by wrapping it around the original exception and set the Message property of the new exception to a custom error message. (With wrapping, the InnerException property will ensure that the original exception data will give you the necessary feedback on what went wrong.

Incorrect answers:

B: Rethrowing an exception will result in more overhead rather than allowing the exception to propagate up the call stack in normal fashion.

C: The Data property is an IDictionary object and there is no need for additional data that has to be sent from the component, except for the information in the original exception. You should rather wrap the original exception and use the InnerException property to access it.

E: Setting the new exception Data property to the original exception will not meet the requirements because the Data property is an IDictionary object and not an InnerException property

QUESTION 493

You work as the Enterprise application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Your responsibilities at Certkiller .com include the design and development of applications. You are currently designing a component for Certkiller .com. This component will be used to synthesize information from various Web service providers. The Web application will use this component to populate various list-bound controls on its Web pages.

You need to design an exception handling mechanism for this component that will meet the following requirements:

1. The Web application must receive a status code indicating success or failure.
2. The Web application requires error messages when they occur in the component.
3. All error messages must indicate the origin of the error, i.e. where and when the error occurred.
4. All error messages should be user friendly.

You need to make a choice as to which exception handling method you could use to meet these requirements.

What should you do?

A. Allow the original exception to propagate to the application in case of an error occurring.

Else, return true to indicate success.

B. Always return a status code.

Allow the original exception to propagate to the application in case of an error occurring.

C. Always return a status code.

Catch the original exception and wrap it in a new custom exception in case of an error

occurring.

Set the Message property to custom message.

D. Catch the original exception and wrap it in a new custom exception in case of an error occurring.

Set the Message property to custom message.

Else, return true to indicate success.

Answer: C

Explanation: Your component is supposed to send a status code that indicates success or failure. The requirement and the solution do not indicate the sending mechanism for the status code, but one can assume that an output parameter could be involved. The exception handling mechanism will ensure that the error message is both detailed and contain the origins of the error and you can ensure that the message is user-friendly if you (1) always return a status code, (2) catch the original exception and wrap it in a new custom exception. And set the Message property to custom.

Incorrect answers:

A: This exception handling mechanism does not have an always return status code and you should thus not make use of this option. Even though the returning true would indicate success, a return value could not be sent to the caller if an exception was thrown. Thus this option does not meet the requirements.

B: You should not make use of an exception handling mechanism that propagates the original exception to the application as this will not be a user-friendly message which is one of the requirements that should be met.

D: This option does not mention the Always return a status code which means that it cannot be used in this scenario.

QUESTION 494

You work as the Enterprise application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Your responsibilities at Certkiller .com include the design and development of applications. Certkiller .com operates as a Medical Facility.

You are currently creating a Web-based application for Certkiller .com. This application, upon completion, is destined to be used by the Certkiller .com employees to manage patient information, medication that patients have been prescribed, and follow-up medication that patients have been prescribed. You plan to create a component that retrieves patient data from an Oracle database. This component must provide information regarding the patient's name, address, and contact telephone numbers of next of kin.

To this end you need the component to meet the following requirements:

1. It must provide individual records of patients as quickly as possible.
2. It must prevent the data from being tampered with or deleted.
3. It must be memory efficient.

You now need to decide which data tier object to use in order to meet these requirements.

What should you do?

- A. Use the DataSet object
- B. Use the OracleDataReader object.
- C. Use the OleDbDataReader object.
- D. Use an XmlDocument object.

Answer: B

Explanation: A DataReader class will allow you to quickly read data as a connected read-only, forward-only firehouse cursor. DataReader objects are useful for populating controls or displaying data directly in a connected environment. Choosing the OracleDataReader object would be the solution because the patient data is stored in an Oracle database. It is recommended to use the most specific .NET data provider to provide optimal performance.

Incorrect answers:

A: A DataSet object is a disconnected representation of a relational data that allows for the retrieval, sorting, filtering, and updating of data. When updating occurs it could also be similar to tampering. Thus this option is not the solution.

C: The OleDbDataReader class implements the same IDataReader interface as the OracleDataReader class, but will not provide optimal performance on an Oracle database. Thus this is not the solution.

D: An XmlDocument class is a node-based representation of hierarchical data. One makes use of this object to access XML data, not relational data.

QUESTION 495

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01 and a Windows Server 2003 Web server named Certkiller -SR24. Certkiller -DB01 hosts a database named CK_Products that stores product data for the company. All Certkiller .com's Web applications are hosted in Internet Information Services (IIS) 6.0 on Certkiller -SR24. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. Internet Information Services (IIS) 5.0 is installed on Certkiller -WS547.

You are developing a Web-based client application for the Certkiller .com Web site. Your Web application contains a Web Form named ProductDetails.aspx that displays product details in a DataGrid control. The data displayed in the DataGrid must be read-only but must allow sorting and filtering. The data structure must also allow paging if the data set is large. You need to ensure that the data structure has a minimal impact on the overall performance of the Web application.

What should you do?

- A. Implement a DataAdapter object.
- B. Implement a TableAdapter object.

- C. Implement a DataTable object.
- D. Implement a DataReader object.

Answer: C

Explanation: A DataTable can be stored on the Web server to allow sorting, filtering and paging without requiring a round trip to the database server.

Incorrect Answers:

A, B: DataAdapters and TableAdapters are not used to display data. They are used to synchronize the data structure with the underlying database.

D: A DataReader must retrieve the data from the database server whenever the data must be sorted, filtered or paged. This will have a negative impact on the overall performance of the Web application.

QUESTION 496

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01 and a Windows Server 2003 Web server named Certkiller -SR24. Certkiller -DB01 hosts a database named CK_Products that stores product data for the company. All Certkiller .com's Web applications are hosted in Internet Information Services (IIS) 6.0 on Certkiller -SR24. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. IIS 5.0 is installed on Certkiller -WS547.

You are developing a Web application for the Certkiller .com e-Commerce Web site. The Web allows registered users to purchase products from the Certkiller .com Web site. Users are allowed to place purchase orders only after registering online and logging in using ASP.NET form authentication. The UserLogon method is used to authenticate the user while the UserInfo method is used to all of the user's details, including username, location and shopping preferences. The user details are stored in user-specific XML files. Should the user-specific XML file not be found when a user successfully logs on, a FileNotFoundException is generated. You want the UserInfo method to display an error message on the Web Form. The error message must state the type of error and the cause of the error, it must be user-friendly, and it must not expose any code.

What should you do?

- A. Have the exception propagate automatically.
- B. Catch and re-throw the exception.
- C. Catch, wrap and throw the wrapped exception.
- D. Catch and throw a custom application exception.

Answer: C

Explanation: You need to catch the exception so that the necessary processing to handle the exception can occur. If the exception cannot be recover, you must wrap

the exception in a new exception and throw the new exception back to the caller. This allows the user interface to display a user-friendly error message that states the type of error and the cause of the error and does not expose the underlying code.

Incorrect Answers:

A: Allowing the exception to propagate automatically will result in no processing taking place and no error message will be displayed.

B: Re-throwing the exception will expose underlying code in a detailed error message that is not user-friendly.

D: There is no need to generate a custom application exception when a FileNotFoundException is already generated.

QUESTION 497

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01 and a Windows Server 2003 Web server named Certkiller -SR24. Certkiller -DB01 hosts a database named CK_Products that stores product data for the company. All Certkiller .com's Web applications are hosted in Internet Information Services (IIS) 6.0 on Certkiller -SR24. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. IIS 5.0 is installed on Certkiller -WS547.

You are developing a Web application for the Certkiller .com e-Commerce Web site. The Web application allows registered Certkiller .com users to store their credit card details online. Selected users have a credit account at Certkiller .com that allows them to purchase goods on credit and pay for the goods at a later date. Your Web application must allow these users to check their credit balance and to settle outstanding payments online. Employees in the Accounting department at Certkiller .com have access to a restricted area of the Web application where they have access to all user accounts. You need to ensure that only the registered user can perform transaction against his or her credit account. You also need to ensure that only Accounting department employees may create new credit accounts and that Accounting department employees can only access the restricted area of the Web application while at work. You need to create an audit log to track account access.

What should you do? (Each correct answer presents part of the solution. Choose four.)

- A. Audit the transaction type.
- B. Audit the AccountID.
- C. Audit the UserName.
- D. Audit the client timestamp.
- E. Audit the client IP address.
- F. Audit the Web server timestamp.

Answer: B, C, E, F

Explanation: You need to audit the username to know who accessed the account, you need to audit the account to know which account was accessed, you need to audit the Web server timestamp to know when the account was accessed, and you need to audit the client IP address to know where the account was accessed from and to ensure that the account was accessed from Certkiller .com.

Incorrect Answers:

A: You do not need to audit the transaction type, only account access.

D: You should audit the Web server timestamp rather than the client timestamp. The client timestamp is relative to the location and configuration of the client. If the client is configured with the wrong time, you would have no way of knowing exactly when the account was accessed.

QUESTION 498

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01 and a Windows Server 2003 Web server named Certkiller -SR24. Certkiller -DB01 hosts a database named CK_Products that stores product data for the company. All Certkiller .com's Web applications are hosted in Internet Information Services (IIS) 6.0 on Certkiller -SR24. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. IIS 5.0 is installed on Certkiller -WS547.

You are developing a Web application for the Certkiller .com e-Commerce Web site. The Web application allows Certkiller .com to track the traffic forwarded to the Certkiller .com Web site from an advertisement placed on the Web site of its affiliates. The Marketing department at Certkiller .com will keep statistics regarding traffic sent from the affiliate Web sites. Your application must log the URL of the affiliate Web site that redirects traffic to the Certkiller .com Web site, and must manage an incremental hit counter for every customer that is redirected to the Certkiller .com Web site.

What should you do? (Each correct answer presents part of the solution. Choose two.)

- A. Create an ASP.NET session variable to manage the incremental hit counter.
- B. Create an ASP.NET application variable to manage the incremental hit counter.
- C. Use the PreviousPage property value of the IsCrossPostBack property.
- D. Use the PreviousPage property value of the IsPostBack property.

Answer: B, C

Explanation: The IsCrossPostBack property evaluates to true when the Web page is posted from a different Web page. When true, the IsCrossPostBack property contains a PreviousPage property that holds the URL of the posting Web page. You should also create an ASP.NET application variable to manage the incremental hit counter. An application variable is stored on the Web server and is available to all users and sessions.

Incorrect Answers:

A: A session variable is specific to a user session and is not available to all users and all sessions.

D: The IsPostBack property evaluates to true when a Web page posts back to itself. If evaluates to false if the postback comes from a different Web page.

C: Choose event monitoring mechanisms, such as System Monitor and logs.

D: Decide monitoring levels based on requirements.

QUESTION 499

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01 and a Windows Server 2003 Web server named Certkiller -SR24. Certkiller -DB01 hosts a database named CK_Sales that stores sales data for the company. All Certkiller .com's Web applications are hosted in Internet Information Services (IIS) 6.0 on Certkiller -SR24. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. IIS 5.0 is installed on Certkiller -WS547.

You have developed a Web application that allows Certkiller .com employees in the Sales department to enter daily sales transactions. The Web application allows users to manage data and generates weekly sales reports by executing several Transact-SQL (T-SQL) queries against the CK_Sales database. Sales department users report that T-SQL queries take a long time to produce the weekly reports. You need to diagnose the cause of the poor performance of the weekly reports. What should you do?

A. Use Windows Performance Monitor on Certkiller -SR24 to monitor the performance of the Web application.

B. Use the SQL Profiler tool on Certkiller -DB01 to monitor the execution time of the T-SQL queries.

C. Write stored procedures to replace the T-SQL queries.

D. Use the Trace Viewer to monitor tracing information for the Web application.

Answer: B

Explanation: The SQL Profiler tool is used to monitor T-SQL queries, stored procedures, deadlocks and timeouts in SQL Server 2005.

Incorrect Answers:

A: The Windows Performance Monitor is used to monitor system performance. It can be used to monitor ASP.NET applications by using an ASP.NET performance counter; however, the performance problem is related to the T-SQL queries. Windows Performance Monitor cannot be used to monitor the execution of T-SQL queries.

C: You need to diagnose the performance problem associated with the T-SQL queries. Replacing them with stored procedures is not part of a diagnosis but is a possible solution.

D: The Trace Viewer is used to view request and response trace information for the Web application. It is not used to monitor performance.

QUESTION 500

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains a Web server named Certkiller -SR24. All Certkiller .com's Web applications are hosted in Internet Information Services (IIS) 6.0 on Certkiller -SR24. Certkiller -SR24 also hosts a database named CK_Sales that stores sales data for the company. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. IIS 5.0 is installed on Certkiller -WS547.

A fellow developer has developed a Web application that allows Certkiller .com sales representatives to enter daily sales transactions to a flat file on their portable Windows XP Professional computers while at customer locations. The sales transactions are then exported to the CK_Sales database at the end of the day. The following morning data from the current CK_Sales database is imported to the flat file. This Web application is hosted in a virtual IIS directory named SalesRepData and uses several data bound controls to display data from the CK_Sales database. The connection string for the data bound controls is stored in the Web application's Web.config file.

You need to ensure that the connection string is not human-readable. To accomplish this task you run the following command from the command prompt:

```
Aspnet_regiis -pd "connectionStrings" -app "/SalesRepData"
```

Does your solution satisfy the requirements for this project?

- A. Yes.
- B. No, you should use the -pe switch in place of the -pd switch.
- C. No, you should use the -pa switch in place of the -pd switch.
- D. No, you should use the -pz switch in place of the -pd switch.

Answer: B

Explanation: The -pe switch of the aspnet_regiis.exe utility encrypts the section of the Web.config file that is specified after the -pe switch while the -pd switch decrypts it.

Incorrect Answers:

A: Your solution does not meet the security requirements. The -pd switch of the aspnet_regiis.exe utility decrypts the section of the Web.config file that is specified after the -pd switch. You should use the -pe switch that encrypts the section of the Web.config file that is specified after the -pe switch.

C: The -pa switch of the aspnet_regiis.exe utility grants permissions to the user account or group that is specified after the -pa switch. This does not ensure that the connectionStrings section of the Web.config file is not human-readable.

D: The -pz switch of the aspnet_regiis.exe utility deletes the key container specified after

the -pz switch. This does not ensure that the connectionStrings section of the Web.config file is not human-readable.

QUESTION 501

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. IIS 5.0 is installed on Certkiller -WS547.

You are testing a Web application that will be integrated into the existing Certkiller .com e-Commerce Web site. A fellow developer added the following Web.config file to the Web application:

```
<?xml version="1.0" encoding="utf-8" ?>
<configuration>
<system.Web>
<customErrors mode="Off" />
<authentication mode="Windows" />
<authorization>
<allow roles="BetaTesters" />
<deny users="*" />
</authorization>
<trace enabled="false" requestLimit="10" pageOutput="false"
traceMode="SortByTime" localOnly="true" />
<sessionState mode="InProc"
stateConnectionString="tcpip=127.0.0.1:42424"
sqlConnectionString="data source=127.0.0.1; Initial Catalog=ASPState;
Integrated Security=true" cookieless="false" timeout="20" />
</system.Web>
</configuration>
```

You need to determine the functionality of the Web.config file.

Which of the following functionality is provided by the Web.config file?

- A. No user will be able to access the application.
- B. Detailed error messages will be displayed to all users.
- C. Users in the Administrators group have access to the application.
- D. Users with Windows user accounts will be used to access the application.

Answer: B, D

Explanation: The authentication mode is set to Windows. This means that the users' Windows credentials will be evaluated to determine if the user should have access to the application. However, the Authorization element allows access to users in the BetaTesters role and denies access to all other users. The customErrors mode is set to Off. This means that no custom error pages will be used and the default error message will be displayed. The default error messages are detailed messages that are displayed to all users.

Incorrect Answers:

A: The authentication mode is set to Windows. This means that the user's Windows credentials will be evaluated to determine if the user should have access to the application. However, the Authorization element allows access to users in the BetaTesters role and denies access to all other users.

C: The authentication mode is set to Windows. This means that the user's Windows credentials will be evaluated to determine if the user should have access to the application. However, the Authorization element allows access to users in the BetaTesters role and denies access to all other users.

QUESTION 502

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains a Web server named Certkiller -SR24. All Certkiller .com's Web applications are hosted in Internet Information Services (IIS) 6.0 on Certkiller -SR24. Certkiller -SR24 also hosts a database named CK_Sales that stores sales data for the company. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. Certkiller -WS547 is running ASP.NET Development Server embedded in Visual Studio .NET 2005. Internet Information Services (IIS) is not installed to Certkiller -WS547.

You are testing a Web application that will be integrated into the existing Certkiller .com e-Commerce Web site. The application is an inventory management system that incorporates a data access component named GetData. The GetData component retrieves data from the CK_Sales database. You need to ensure that the GetData component executes successfully before deploying the application to the production environment.

What should you do?

- A. Perform a unit test of the GetData component in Internet Information Services (IIS).
- B. Perform a unit test of the GetData component in ASP.NET Development Server.
- C. Perform a load test of the GetData component in ASP.NET Development Server.
- D. Perform a load test of the GetData component in Internet Information Services (IIS).

Answer: A

Explanation: Unit testing verifies that a component provides the required functionality and identifies any exceptions that may be generated by the code. This testing must be performed in IIS as all Certkiller .com's Web applications are hosted in IIS on Certkiller -SR24.

Incorrect Answers:

B: You should perform unit testing in IIS as all Certkiller .com's Web applications are hosted in IIS on Certkiller -SR24.

C, D:

Load testing is used to test the application when large numbers of users access the application. You need to test functionality of the GetData component. Unit testing

verifies that a component provides the required functionality. You should also perform the unit testing in IIS as all Certkiller .com's Web applications are hosted in IIS on Certkiller -SR24.

QUESTION 503

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains a Web server named Certkiller -SR24. All Certkiller .com's Web applications are hosted in Internet Information Services (IIS) 6.0 on Certkiller -SR24. Certkiller -SR24 also hosts a database named CK_Sales that stores sales data for the company. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. IIS 5.0 is installed on Certkiller -WS547.

You are redeveloping a Web application for the Certkiller .com e-Commerce Web site. The current Web application allows registered Certkiller .com users to purchase goods online and pay for them by credit card. The Web application uses custom a component named AuthenticateCustomers is used to validate customers when they place orders. User details of registered users are stored in the CK_Sales database in a table named Customers. You want to expand the functionality of the Web application to allow only selected users to place orders for products that are out of stock. You decide to add new methods to the AuthenticateCustomers component to accommodate the new functionality. You need to ensure that the AuthenticateCustomers component executes successfully in the production environment. You need to accomplish this task as quickly as possible. What should you do?

- A. Perform unit testing on all methods of the AuthenticateCustomers component.
- B. Perform unit testing on the new methods of the AuthenticateCustomers component.
- C. Perform load testing on the new methods of the AuthenticateCustomers component.
- D. Perform load testing on all methods of the AuthenticateCustomers component.

Answer: B

Explanation: Unit testing verifies that the methods of a component provides the required functionality and identifies any exceptions that may be generated by the code. The existing component has all already deployed successfully to the production environment; therefore you do not need to test the existing methods of the component, only the new methods.

Incorrect Answers:

- A: You should only perform unit testing of the new methods. The existing component has all already deployed successfully to the production environment; therefore you do not need to test the existing methods of the component.
- C: Load testing is used to test the application when large numbers of users access the application. You need to test functionality of the GetData component. Unit testing used to test functionality.
- D: Load testing is used to test the application when large numbers of users access the

application. You need to test functionality of the GetData component. Unit testing used to test functionality. You should only perform unit testing of the new methods. The existing component has all already deployed successfully to the production environment; therefore you do not need to test the existing methods of the component.

QUESTION 504

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains a Web server named Certkiller -SR24. All Certkiller .com's Web applications are hosted in Internet Information Services (IIS) 6.0 on Certkiller -SR24. Certkiller -SR24 also hosts a database named CK_Sales that stores sales data for the company. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. Certkiller -WS547 is running ASP.NET Development Server embedded in Visual Studio .NET 2005. Internet Information Services (IIS) is not installed to Certkiller -WS547.

You are developing a navigation application. You add an ImageMap control to a Web page named NYCity.aspx and set its ImageUrl property to the URL of an image that represents the street map of central New York. When a user clicks on an area that represents a building, the Web application displays the street address for that building on the same page. A custom component named StreetAddress retrieves the data from a local Web service that contains the address of all buildings on the map.

You need to ensure that the StreetAddress component executes successfully before deploying the Web application to the production environment. You successfully performed unit testing on the StreetAddress component and the Web service. What should you do next?

- A. Perform an integration test of the StreetAddress component and the Web service in Internet Information Services (IIS).
- B. Perform an integration test of the StreetAddress component and the Web service in ASP.NET Development Server.
- C. Perform a load test of the StreetAddress component and the Web service in Internet Information Services (IIS).
- D. Perform a load test of the StreetAddress component and the Web service in ASP.NET Development Server.

Answer: A

Explanation: Integration testing determines how well to components work together and should be performed after unit testing of the individual components. This testing must be performed in IIS as all Certkiller .com's Web applications are hosted in IIS on Certkiller -SR24.

Incorrect Answers:

B: You should perform integration testing in IIS as all Certkiller .com's Web applications are hosted in IIS on Certkiller -SR24.

C, D: Load testing is used to test the application when large numbers of users access the application. You need to test functionality of the components. You have already completed unit testing you should now determine how well the two components work together. Integration testing determines how well two components work together. You should also perform the integration testing in IIS as all Certkiller .com's Web applications are hosted in IIS on Certkiller -SR24

B: Identify component interactions and dependencies.

QUESTION 505

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01 and a Windows Server 2003 Web server named Certkiller -SR24. Certkiller -DB01 hosts a database named CK_Sales that stores sales data for the company. All Certkiller .com's Web applications are hosted in Internet Information Services (IIS) 6.0 on Certkiller -SR24. You use a Microsoft Windows Sever 2003 computer named Certkiller -WS547 as your development computer. Certkiller -WS547 is running ASP.NET Development Server embedded in Visual Studio .NET 2005 and Internet Information Services (IIS).

You have developed a Web application that allows Certkiller .com employees in the Sales department to enter daily sales transactions into the CK_Sales database and allows the manager of the Sales department to generate weekly sales from the CK_Sales database. A data access component named SalesReport to retrieves data for the sales reports by executing several Transact-SQL (T-SQL) queries against the CK_Sales database. Access permissions to the Web application are based on the user accounts in Windows Active Directory. You set Windows as the authentication mode for the Web application in the Web.config file as shown in the following Exhibit:

```
<authentication mode="Windows" />
<authorization />
```

You successfully perform unit testing of the SalesReport component and integration testing with the Web service on Certkiller -WS547. However, when the Web application is deployed to the staging server, the SalesReport component fails to function.

Which application setting is the most likely cause of the problem?

- A. The Impersonation setting.
- B. The Authentication mode setting.
- C. The SQL Server security setting.
- D. The Authorization setting.

Answer: A

Explanation: You should consider the Impersonation setting as it is responsible for passing the identity of the user to the database when Windows authentication is used. It seems the wrong identity is being passed to the database.

Incorrect Answers:

B: The authentication mode is set to Windows. This setting is correct as access permissions to the Web application are based on the user accounts in Windows Active Directory. You therefore need Windows authentication.

C: The components tested successfully, therefore there should be not problem with the SQL Server security settings.

D: The authorization element is blank. You are using user accounts in Windows Active Directory to determine access permissions to the Web application. You therefore do not need to grant or deny access in the authorization element.

QUESTION 506

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains a Web server named Certkiller -SR24. All Certkiller .com's Web applications are hosted in Internet Information Services (IIS) 6.0 on Certkiller -SR24. Certkiller -SR24 also hosts a database named CK_Sales that stores sales data for the company. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. IIS 5.0 is installed on Certkiller -WS547.

You have developed a Web application that allows Certkiller .com employees in the Sales department to generate weekly sales reports. The Web application uses a custom component named SalesReport to retrieves data for the sales reports by executing several Transact-SQL (T-SQL) queries against the CK_Sales database. You add code to SalesReport component to open a new connection to the CK_Sales database, retrieve the required data, and close the connection. You must ensure that the connection is closed even if the SalesReport component throws an exception. What should you do? (Each correct answer presents a complete solution. Choose two.)

- A. Enclose the connection code within a using block.
- B. Enclose the connection code within a try...catch...finally block and close the connection in a finally block.
- C. Use the private keyword when declaring the connection object.
- D. Use the public keyword when declaring the connection object.

Answer: A, B

Explanation: You can ensure that the connection is closed by enclosing the code in a using block or a try...catch...finally block. The using block ensures that an object is disposed of if the code throws an exception. If you use the try...catch...finally block, you must include code in the finally block to explicitly close the connection.

Incorrect Answers:

C, D: The private and public keywords are access modifiers that determine what code can access the object. They do not ensure that an object is disposed of if the code throws an exception.

QUESTION 507

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Your responsibilities at Certkiller .com include the deployment of applications. Certkiller .com offers its customers financial and accounting services.

Certkiller .com has a multi-tiered Web application for Certkiller .com which was deployed several months ago. This application is to allow clients to manage own financial portfolios. This financial portfolio management includes the ability to shift funds from e.g. a savings account to a mortgage account or to a credit card account, as well as paying bills online, and even manage their stocks and investments. The portfolio data is stored in a SQL Server 2005 database which is accessed via stored procedures.

Recently the Certkiller .com Customer Care - line received calls from clients lodging complaints. These complaints all indicate application performance has deteriorated significantly since the original deployment. You investigated the problem and discovered from preliminary testing that the database operations are the most likely culprits for the deteriorated application performance. You need to investigate the longest running stored procedures without affecting the performance of the overall application in a negative way.

What should you do?

- A. Analyze the workload on the server using the Database Engine Tuning Advisor.
- B. Trace and analyze usage of the stored procedures using the SQL Server Profiler.
- C. Monitor the stored procedure performance by creating custom performance counters.
- D. Monitor the calls from the application to the database using CLR Profiler.

Answer: B

Explanation: The SQL Server Profiler utility allows one to monitor the SQL Server database performance and to trace the SQL Server events. You are able to select the types of events that you desire to trace, the duration of the trace as well as where to save the data that is collected. In this scenario you are required to monitor the performance of stored procedures used in the application without affecting the application performance adversely. This means that monitoring must only affect the performance of stored procedures and not the other application components. You can achieve this type of monitoring with SQL Server Profiler.

Incorrect answers:

- A: This Database Engine Tuning Advisor optimizes the physical database by creating indexes, indexed views, and partitions based on a sample workload. Thus you should not make use of the Database Engine Tuning Advisor to analyze workloads on the server as it will not track the performance of stored procedures
- C: Custom performance counters are created to indicate custom events within an application and you should not create custom performance counters because the SQL Server Profiler provides standard stored procedure events.
- D: The CLR Profiler is intended to trace the base performance of a .NET application

beyond the managed code. It should not be used to monitor calls between an application and a database because it will not determine the longest running stored procedures and their performance.

C: Track page response times.

QUESTION 508

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Certkiller .com operates as an on-line marketing organization that makes use of Web-based applications.

To carry out your duties of support and deployment of applications, you need the ability to quickly locate bugs in the existing Certkiller .com applications that were deployed across Certkiller .com. You must ensure that all errors and warnings are traced. You need to make sure that no unnecessary information is tracked, and thus decided to configure a TraceSwitch object. This TraceSwitch object will be used in many Web applications.

Now you only need to decide on which configuration setting to set the TraceSwitch object.

What should you do?

- A. The TraceSwitch tracing level should be set to Info.
- B. The TraceSwitch tracing level should be set to Error.
- C. The TraceSwitch tracing level should be set to Verbose.
- D. The TraceSwitch tracing level should be set to Warning.

Answer: D

Explanation: The Warning tracing level will display both error messages and warning messages and would thus be the setting required in this scenario.

Incorrect answers:

A: The Info tracing level will display not only error messages and warning messages, but also informational messages which you do not want to trace.

B: The Error tracing level only displays error messages and not the warnings.

C: The Verbose tracing level will also display all unnecessary information that you do not want to trace.

QUESTION 509

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Your responsibilities at Certkiller .com include the deployment of applications. Certkiller .com operates as an online auctioneer.

You have just deployed a Web site for Certkiller .com. This Web site will be used by customers to place and monitor their bids online. The application makes use of business components to update and retrieve bid information from a SQL Server database. You need to monitor this application and track any errors that may be caused by customer activity on the Web site. To this end you decide to create a

custom TraceSwitch object named CustomerSwitch to toggle the tracing level as required.

Following are the tracing requirements that should be met:

1. All errors should be traced.
2. Application-specific warning messages should NOT be traced.
3. Application-specific informational messages should NOT be traced.

You then test the application and found that no messages are being traced. You need to remedy the situation.

What should you do?

- A. The CustomerSwitch value should be changed to 1.
- B. The CustomerSwitch value should be changed to 1.
Then restart the Web application.
- C. The CustomerSwitch value should be changed to 4.
- D. The CustomerSwitch value should be changed to 4.
Then recompile the Web application.

Answer: A

Explanation: There are several available trace levels to which a custom TraceSwitch like CustomerSwitch can be set. These are: Off - numerical value of 0; Error - numerical value of 1; Warning - numerical value of 2; Info - numerical value of 3 and verbose - numerical of 4. each of these level builds on the other, so that the Warning setting for instance will include both errors and warnings, and the Info level setting will include errors, warnings, and informational messages, etc. in this case you only need to trace errors. Thus you should change the CustomerSwitch setting to 1.

Incorrect answers:

- B: Restarting the Web application should not be done because once the Web.config file is saved, the new application settings will apply.
- C: Setting the value to 4 would also trace unnecessary information.
- D: You should not recompile the Web application because once the Web.config file is saved, the new application settings will apply.
- B: Monitor and analyze security aspects.
- C: Track bugs that result from customer activity.
- D: Choose when to use ASP.NET 2.0 Health Monitoring APIs.

QUESTION 510

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Your responsibilities at Certkiller .com include the deployment of applications. Certkiller .com operates as a vehicle manufacturer. Certkiller .com makes use of an intra-net Web application for users to track work on assembly lines within all departments of the Certkiller .com facilities. This Web application uses ASP .NET 2.0 Membership to manage user accounts for the application. A user is allowed to recover their password using a PasswordRecovery

control. Every time a user recovers a password, you want to have the event recorded in the Application event log of the server. To this end you configure the application to use the ASP .NET 2.0 Health Monitoring API. Following are the settings that you configured:

1. Enable health monitoring by modifying the Web.config file by setting the enabled attribute of the Health Monitoring element to true.
2. Create an event mapping for the PasswordRecoveryEvent event.

Now you need to take a decision as to whether your configuration will meet the requirements.

What conclusion can you draw?

- A. The configuration meets the requirements.
- B. The configuration does not meet the requirements. You should create mapping for the WebFailureAuditEvent event.
- C. The configuration does not meet the requirements. You should create mapping for the WebAuthenticationFailureAuditEvent- and the WebAuthenticationSuccessAuditEvent events.
- D. The configuration does not meet the requirements. There is no event class in the Health Monitoring API to monitor password recovery events.

Answer: D

Explanation: There is not an event class in the Health Monitoring API to monitor password recovery events. In fact there are no event classes for password related events such as password recovery or password changes.

Incorrect answers:

- A: This is incorrect as the configuration does not allow for events to be recorded in the Application event log of the server using the ASP .NET 2.0 Health Monitoring API.
- B: The WebFailureAuditEvent event is a generic base class for all ASP .NET related audit events. This class does not provide a means of detecting a password recovery or password change. Thus you should not use the WebFailureAuditEvent event.
- C: The WebAuthenticationSuccessAuditEvent and WebAuthenticationFailureAuditEvent will provide information regarding authentication failures. However, a password recovery or password change is not an authentication event.

QUESTION 511

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Your responsibilities at Certkiller .com include the deployment of applications. Certkiller .com operates as manufacturer and online retailer offering their customers a shopping experience twenty four hours a day seven days a week.

You created a Web Application for Certkiller .com. This application will allow users to view product information and make online purchases. This application is distributed across a Web Farm. You want to be able to determine if critical errors occurs with the application because it will help tremendously in the event of you

being required to rectify any application issues before it affects the users. To this end you decided to use application monitoring. It is critical that the application monitoring does not affect performance.

You thus did the following:

1. Configure ASP .NET 2.0 Health Monitoring API in the Web.config file.
2. Configure the minInterval attribute of each rule to a low value.

Now you need to take a decision as to whether this application will meet the requirements.

What conclusions can you draw?

- A. The configurations will meet the requirements.
- B. The configurations will not meet the requirements. ASP .NET 2.0 Health Monitoring API will not work in an environment where an application is distributed across a Web farm.
- C. The configurations will not meet the requirements. ASP .NET 2.0 Health Monitoring cannot be configured in a Web.config file.
- D. The configurations will not meet the requirements. The minInterval attribute should be configured to a high value.

Answer: D

Explanation: Making use of ASP .NET 2.0 Health Monitoring can affect the performance of an application. To ensure that this is not the case, you should configure the minInterval attribute for each rule in the rules section to increase the minimum time interval between events that are captured.

Incorrect answers:

- A: This is wrong because performance will be affected if the minInterval value is set too low. The time interval between captures events will cause the APIs to monitor the application more often which means deterioration in performance.
- B: This is incorrect since it is possible to configure ASP .NET 2.0 Health Monitoring APIs to monitor live ASP .NET applications across a Web farm.
- C: You can configure the ASP .NET 2.0 Health Monitoring APIs in a Web.config file.

QUESTION 512

You work as the Enterprise application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. The design of applications forms part of your responsibilities at Certkiller .com. Certkiller .com operates as an examination Web site.

You are developing a Web-based application for Certkiller .com. This application, upon completion, should allow users to take various online examinations. Every time a user takes on online test, you want the following business rules to be met:

1. Display a congratulatory message when a user passes a test.
2. Display a motivational message when a user fails a test.
3. Display a different message when a user meets the minimum requirements for a test.

The following Exhibit illustrates the pseudo-code that you wrote to meet these requirements:

Exhibit:

```
if pass
display congratulatory message
else if meeting minimum requirements
display different message
else
display motivational message
What conclusion can you draw?
```

- A. None of the requirements will be met.
- B. All the requirements will be met.
- C. All requirements, except the display of a different message when the user meets the minimum requirements, will be met.
- D. All the requirements, except the display of the motivational message when a user fails a test, will be met.

Answer: B

Explanation: All the requirements for the application will be met. A different message will be displayed in the event of the user passing, failing or just meeting the minimum requirements for a test. If the user passes, then the congratulatory message will be displayed, if the user meets the minimum requirements then the different message will be displayed. Otherwise the user fails the test in which case the motivational message will be displayed.

Incorrect answers:

- A: This is incorrect because this pseudo-code will yield the desired results.
- C: This is only partly correct since the code will also result in the display of the different message in case the user meets the minimum requirements of a test.
- D: This is only partly correct since the code will result in displaying the motivational message in case the user fails the test.

QUESTION 513

You work as the Enterprise application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. The design of applications forms part of your responsibilities at Certkiller .com.

You are currently developing Web-based applications for Certkiller .com. One of these applications that you developed is destined to allow the user to display multiple lines in a TextBox control. Each of the lines in the TextBox control is concatenated into a single string. Each message in the TextBox control will consist of more than five lines.

You now need to configure this Web-based application to meet these requirements. What should you do?

- A. You should include calling the Concat method in the application using a String instance.
- B. You should include calling the Append method in the application using a String instance.
- C. You should include calling the Add method in the application using a StringBuilder instance.
- D. You should include calling the Append method in the application using a StringBuilder instance.

Answer: D

Explanation: The StringBuilder instance has a larger internal buffer to handle larger strings and since you will have at least five lines concatenated in the same string, you should make use of a StringBuilder instance to call the Append method. Strings are immutable and every time a string is concatenated, at least two strings are de-referenced, but stay in memory until Garbage collection. The StringBuilder, due to its larger internal buffer is capable of maintaining a large internal buffer and only extends the buffer than required to do so. This makes using the StringBuilder unstance for efficient.

Incorrect answers:

- A: You should not make use of the String class as it is unable to modify its contents in place. The String class will always return a new string when the contents are changed and this will result in a drop in the performance.
- B: This is partly correct since you need to call the Append method, however you should make use of a StringBuilder instance and not the String instance.
- C: This is incorrect as there is no such method named Add method. You need to make use of the Append method when using the StringBuilder class.

QUESTION 514

You work as the Enterprise application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. There is only one Web server at Certkiller .com. The design of applications forms part of your responsibilities at Certkiller .com. Certkiller .com operates as a manufacturing company.

You are currently developing Web-based applications for Certkiller .com. All the departments at Certkiller .com will have its own Web application for custom content and functionality that is department-specific. All these Web applications make use of third party .NET 1.1 components. These components are all shared by other Web applications within Certkiller .com.

You must meet the following requirements in your development of these Web-based applications:

1. The Web-based applications must require the shared components.
 2. The Web-based applications must also require ASP.NET 2.0 features.
- You should develop these applications with the least amount of developer effort and time. To this end you need to take a decision on how you will meet these requirements in your solution.

What should you do?

- A. You should upgrade the shared components to .NET 2.0
- B. You should enable directory browsing on the Web Server to access the shared components.
- C. You should place the shared components in the same directory as the main Web application.
- D. Since ASP.NET 2.0 Web applications are compatible with .NET 1.1 components you should not do anything.

Answer: D

Explanation: The ASP.NET 2.0 and ASP.NET 1.1 runtime can run on the same machine without any additional configuration settings required. The ASP.Net 1.1 components can benefit from the performance options that are available in ASP.NET 2.0 and ASP.NET 2.0 applications can continue to communicate with the ASP.NET 1.1 components. Thus there is no need to do anything.

Incorrect answers:

- A: There is no need to upgrade the shared components to ASP.NET 2.0. This option would not be available if the components are third party and data access components should then be redesigned to take full advantage of the ASP.NET 2.0 benefits. In fact it would be simpler upgrading an ASP.NET 1.1 site to ASP.NET 2.0.
- B: You should not enable directory browsing on the Web server because it can allow any user to see the directory structure of your Web site. And furthermore, directory browsing will not allow different versions of ASP.NET to run.
- C: The shared components should not be placed in the same directory as the main Web application. Merging the files into the same directory will create a problem with other Web applications accessing the shared component.
- B: Evaluate the physical design for maintainability.

QUESTION 515

You work as the Enterprise application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. The design of applications forms part of your responsibilities at Certkiller .com. Certkiller .com operates as an online-retailer.

You are currently developing a Web-based application for Certkiller .com. This application will server as an order fulfillment application. Upon completion this application will allow the Certkiller .com users to enter a zip code into a TextBox control where they will be able to find all the packages that have been shipped to a particular geographical area. The application will take the TextBox value and construct a query similar to the one illustrated in the Exhibit below:

Exhibit:

```
SELECT * FROM Orders WHERE zip = '21006'
```

You now need to make sure that you mitigate the possibility of malicious code being inserted into the query strings passed to the SQL Server for parsing and execution.

What should you do?

- A. You should use a RequiredFieldValidator control on the TextBox.
- B. You should validate user input using stored procedures.
- C. You should build Transact-SQL statements directly from the TextBox input.
- D. You should concatenate user input from the TextBox.

Answer: B

Explanation: It is possible that malicious code can be inserted into user input variables that are concatenated with SQL statements and executed, i.e. the SQL injection attack. To prevent this from happening you should configure the Web-based application to validate all input prior to sending the request to the database by making use of least privilege accounts when accessing the database, and using stored procedures rather than dynamically constructed SQL when possible.

Incorrect answers:

A: You should not make use of the RequiredFieldValidator control on the TextBox. This will force the users to enter a value for the zip code, but would not prevent malicious code from being accepted as input.

C: You should not build the Transact-SQL statement directly from the TextBox input as it provides a user with an opportunity to insert malicious code. And executing the Transact-SQL statements directly from the TextBox input has the potential to harm your database.

D: You should not concatenate user input from the TextBox. The input from the TextBox control should rather be validated prior to concatenation as invalid concatenated input makes an application susceptible to SQL injection attacks.

C: Evaluate how the physical location of files affects the extensibility of the application.

QUESTION 516

You work as the Enterprise application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. The design of applications forms part of your responsibilities at Certkiller .com. Certkiller .com operates as a company that provides financial, investment and accounting services to its customers.

You are currently developing a Web-based application for Certkiller .com. This application will be used to maintain the investment account information for the Certkiller .com customers. This investment account information is sent as Extensible Markup Language (XML) documents from the Microsoft SQL Server 2005 database. Each XML document should contain customer feedback information. You want this application to allow you to contact the customers regarding the given feedback. Following are the requirements that should be met:

1. The Web-based application must retrieve each customer's contact details such as name, address, and e-mail address from the XML document.
2. You must be allowed to determine which geographical area has the most customer complaints.

3. The customer data should remain in XML format.

4. You must maximize performance of the query.

You thus need to make a decision as to which approach you can use to query the SQL Server data to meet these requirements.

What should you do?

A. Query the SQL Server data using a SELECT statement with the FOR XML clause.

B. Query the SQL Server data using a SELECT statement that calls the DataType.Xml method.

C. Query the SQL Server data using a SELECT statement with an OPENXML function.

D. Query the SQL Server data using a SELECT statement with the OPENROWSET function.

Answer: C

Explanation: The OPENXML function can be used to query data from an XML document. It is also possible to convert the XML data, store it in a temporary table, then query the data, but this schlep will be eliminated using the OPENXML function and also you should not change the data from XML because the Web site data must remain in XML format. Thus the database should be queried with the SELECT statement with an OPENXML function.

Incorrect answers:

A: The FOR XML clause is used to format the results of a query in XML format. In this case you need to query the data from an XML document. Thus this option is not required.

B: The DataType.Xml method returns an object that represents a specified data type, and will thus not allow you to query the XML document directly.

D: The OPENROWSET function is used for querying remote data sources and this is not what would be required in this scenario.

QUESTION 517

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS547.

You are developing a Web-based client application for the Certkiller .com Web site. The Certkiller .com Web site sells subscriptions to courseware material. The Web application must allow users to browse subscription options, to purchase subscriptions, to add subscriptions to a wish list, to store bank account details, and to review products online. You must implement a standardized layout according to the company's branding on each page. The pages must also implement a daily advertisement above the main menu. The advertisement must be replaced every morning.

You want to reduce the effort required to maintain the Web application.

What should you do?

- A. Add an AdRotator control to each Web page and place the daily advertisement in the Advertisement file.
- B. Include the daily advertisement in a Master Page and set the masterPageFile attribute in the Web.config file.
- C. Create a User Control for the daily advertisement and add the User Control to each Web page.
- D. Include the daily advertisement in a Template Page and bind each Web page to the Template Page.

Answer: B

Explanation: Master Pages allows you to create a common layout for across all pages that the Master Page is bound to. You can either bind the Master Page to each page in the Page directive on each page, or in the masterPageFile attribute of the Web.config file. If the masterPageFile attribute of the Web.config file is set to the location of the Master Page, any changes made to the Master Page will be propagated to each Web page. This will reduce the effort required to maintain the daily advertisement.

Incorrect Answers:

- A: The AdRotator control is used to rotate between various advertisements contained in an AdvertisementFile. Advertisements are displayed on the basis on page impressions. It is possible to have only one advertisement in the AdvertisementFile and to change the advertisement every morning but this is not the purpose of the AdRotator control.
- C: You could include the advertisement in a User control but you would need a Master Page to standardize the layout of each page. It would therefore require less effort to add the advertisement to the Master Page.
- D: ASP.NET does not support a Template Page.

QUESTION 518

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS547.

You are developing a Web-based client application for the Certkiller .com Web site. The Certkiller .com Web site sells subscriptions to courseware material. The Web application must allow users to browse subscription options, to purchase subscriptions, to add subscriptions to a wish list, to store bank account details, and to review products online. You must implement a standardized layout on each page. You must also ensure that all controls maintain a consistent appearance according to the company's branding.

What should you do?

- A. Implement Themes and Master Pages.
- B. Implement Web Parts and User Controls.
- C. Implement User Controls and Profile properties.

D. Implement Web Parts and Master Pages.

Answer: A

Explanation: Master Pages allows you to create a common layout for across all pages that the Master Page is bound to. You can either bind the Master Page to each page in the Page directive on each page, or in the masterPageFile attribute of the Web.config file. Themes allow you to maintain a consistent appearance for the controls across Web pages, and entire Web application, or all Web applications on a server.

Incorrect Answers:

B: Web Parts allow users to customize content, appearance and behavior of Web pages, while User Controls allow you to reuse code across Web pages. Neither is used to implement consistent layout nor consistent appearance of controls.

C: Profile properties is a provider framework that stores settings for individual users, while User Controls allow you to reuse code across Web pages. Neither is used to implement consistent layout nor consistent appearance of controls.

D: Web Parts allow users to customize content, appearance and behavior of Web pages. It does not implement consistent layout or consistent appearance of controls.

QUESTION 519

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS547. Certkiller .com has it headquarters in Washington and branch offices in Miami, Dallas and San Francisco. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01 that is located at headquarters. Certkiller -DB01 hosts a database named CK_Sales that stores sales information for the company. You are developing a Web-based client application for Certkiller .com. The Web application connects all branch offices to the CK_Sales database. You need to develop a user interface that allows Sales personnel at each branch office to enter data regarding Returned goods. The Returned Goods data includes the customer's name, the product code, and the invoice number. You need to implement the appropriate user interface controls for entry of Returned Goods data. What should you do?

- A. Use a TextBox control for the customer's name, a TextBox control for the invoice number and a TextBox control for the product code.
- B. Use a DropDownList control for the customer's name, a DropDownList control for the invoice number and a DropDownList control for the product code.
- C. Use a DropDownList control for the customer's name, a TextBox control for the invoice number and a DropDownList control for the product code.
- D. Use a TextBox control for the customer's name, a TextBox control for the invoice number and a DropDownList control for the product code.

Answer: C

Explanation: The main data that can be read from a database is the product code and the customer's name. You can implement a data bound DropDownList to display the product code and customer name. A TextBox is a free-form input box that can be used for the invoiced price.

Incorrect Answers:

A: While it is possible that all data can be entered in TextBox controls, it would be difficult to verify the accuracy of the data. Allowing Sales personnel to select the appropriate customer name and product code from a DropDownList would greatly reduce data input errors.

B: A DropDownList for a price range would be inappropriate.

D: While it is possible that the customer name can be entered in TextBox controls, it would be difficult to verify the accuracy of the data. Allowing Sales personnel to select the appropriate customer name from a DropDownList would greatly reduce data input errors.

QUESTION 520

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS547.

You are developing a Web-based client application for Certkiller .com. You want users of the Web application to input a date on the Web form regardless of their local date format. You add three DropDownList controls named Year, Month and Day to the Web application. You want the date entered through these DropDownList controls will be displayed on subsequent pages in the user's local date format.

What should you do?

A. Instantiate a DateTime object using the values from the DropDownList controls.

B. Instantiate a DateTime object using the values from the GetDate method.

C. Let the users select their location and set the CurrentCulture property of the executing thread to the associated CultureInfo object.

D. Set the enableClientBasedCulture attribute in the Web.config file to true.

Answer: A, C

Explanation:

You must instantiate a DateTime object that accepts the values that the user entered in the DropDownList controls. The user should then select his or her location from a DropDownList. This location must be used to configure the CurrentCulture property of the executing thread to the associated CultureInfo object.

Incorrect Answers:

B: You want the user to input a date into the Web Form. The GetDate method does not allow user input.

D: The enableClientBasedCulture attribute takes the culture settings of the browser. Although this will work, the culture settings in the browser may be misconfigured.

QUESTION 521

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. Internet Information Services (IIS) is installed on Certkiller -WS547.

You are developing a Web-based client application for the Certkiller .com Web site. The Certkiller .com Web site sells subscriptions to courseware material. Customers must be able to specify the term of subscription by specifying the start and end dates of their subscriptions in TextBox controls, and must specify their location in a DropDownList control. You must ensure that the values entered into the TextBox controls are dates that have not yet passed. You must also ensure that the start date is no more than 3 months in advance and that the end date is at least two weeks after the start date. Customers who want an open-ended subscription do not need to specify an end date.

You decide to use RequiredFieldValidator controls to verify the start date TextBox control and the DropDownList control, and a RangeValidator control to verify the start date TextBox control.

Does your solution satisfy the requirements for this project?

- A. Yes.
- B. No, a RangeValidator does not verify the validity of a date.
- C. No, a CompareValidator is required to verify the validity of the end date.
- D. No, a CompareValidator is required to verify that the start date has not already passed.
- E. No, a RequiredFieldValidator is required for the end date TextBox control.

Answer: C

Explanation: This solution does not meet requirements because it fails to ensure that the end date is at least two weeks after the start date. The RequiredFieldValidator verifies that a start date has been specified and that a location has been selected. The RangeValidator ensure that the start date has not already passed. You also need a CompareValidator to compare the end date to the start date and ensure that the end date is at least two weeks after the start date.

Incorrect Answers:

A: This solution does not meet requirements because it fails to ensure that the end date is at least two weeks after the start date. The RequiredFieldValidator verifies that a start date has been specified and that a location has been selected. The RangeValidator ensure that the start date has not already passed. You also need a CompareValidator to compare the end date to the start date and ensure that the end date is at least two weeks after the start date.

B: The RangeValidator ensure that the start date has not already passed and is therefore required.

D: A CompareValidator compare the values in two controls. It can be used to ensure that the values in the two controls are identical or are within a certain range of each other. It is not be used to compare the value in the start date Text Box with the current date.

D: A RequiredFieldValidator should not be added for the end date TextBox control as customers must be able to specify open-ended subscriptions. These customers will not enter an end date.

QUESTION 522

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. Certkiller .com runs all its Web applications on a Windows Server 2003 Web server named Certkiller -SR24. All Web applications on Certkiller -SR24 are hosted in Internet Information Services (IIS). IIS 6.0 is installed on Certkiller -SR24. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. IIS 5.0 is installed on Certkiller -WS547.

You are developing a Web-based client application for the Certkiller .com Web site. The Certkiller .com Web site sells subscriptions to courseware material. The courseware that is available from Certkiller .com includes recently developed instructional videos. Your Web application must make these videos available to subscribers. The Web application must include a multimedia delivery mechanism must support all bandwidths, including dial-up. Subscribers must also be able to watch portion of the video without downloading it completely. You want to ensure that download speeds are as close to real-time as possible and that the download process has a minimal impact on the overall performance of the Web application. What should you do?

A. Use Internet Information Services (IIS) to stream each video as requested by the subscriber.

B. Cut the videos into smaller files. Use Internet Information Services (IIS) to download each file completely and play that file before downloading the next file.

C. Use Microsoft Windows Media Services to stream each video as requested by the subscriber.

D. Cut the videos into smaller files. Use Microsoft Windows Media Services to download each file completely and play that file before downloading the next file.

Answer: C

Explanation: Microsoft Windows Media Services allows you to stream video and start playback before the download is complete. Microsoft Windows Media Services also supports all bandwidth types and has a minimal impact on overall performance as it does not consume IIS application resources other than the communication channel.

Incorrect Answers:

A: IIS provides basic multimedia streaming and will have a negative impact on overall Web application performance.

B, D: Cutting the video into smaller files will not ensure that all bandwidth are supported, and that subscribers can start watching the video before the download is complete.

QUESTION 523

You work as the Enterprise application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Your responsibilities at Certkiller .com include the design and development of applications. Certkiller .com offers its customers financial and accounting services.

You are developing a Web-based application for Certkiller .com. This application will allow the Certkiller .com employees to manage their investments and retirement benefits. With this application employees will be able to investigate various hypothetical scenarios to determine the best investments options. The calculation used in this application is rather complex and based on a common calculation algorithm. To this end you decided to provide other developers with a component to encapsulate the algorithm and basic user interface elements.

Following are the requirements that your component should meet:

1. The component must display two TextBox Web server controls.
2. The component must display one Button Web server controls.
3. The component must be available only to your application for security reasons.
4. The component must be available in the Visual Studio designer.

You thus decide to design the component to implement the IComponent interface. And now you need to make a decision as to whether the solution will meet the requirements.

What conclusion can you draw?

- A. All the requirements will be met.
- B. None of the requirements will be met.
- C. Only the requirement stating that the component should be available in the Visual Studio designer will be met.
- D. Only the requirements stating that the component must display two TextBox-, and one Button Web server control, will be met.

Answer: C

Explanation: Classes that implement the IComponent interface can be made available to developers in the Visual Studio designer and accessible from the Visual Studio toolbox, thus only the availability of the component in the Visual Studio designer requirement will be met. To meet all the requirements a Web User control would be most appropriate.

Incorrect answers:

A: This option is incorrect since all the requirements will not be met only the requirement stating the component should be available in the Visual Studio designer will be met.

B: This is incorrect since only one of the requirements will be met and not none.

D: This is incorrect since only the requirement stating the component should be available in the Visual Studio designer will be met, and not the TextBox or Button control requirement.

QUESTION 524

You work as the Enterprise application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Your responsibilities at Certkiller .com include the design and development of applications. Certkiller .com operates as an online-retailer.

You are currently developing a component for CertK ign.com. This component will be used to log the raw HTTP request and response for a Web application. You need to ensure that the component will (1) be modular and (2) provide extensibility to log other information in future.

You need to make a decision as to which design pattern you should use to meet the requirements of this component.

What should you do?

- A. Use an Observer
- B. Use a Front Controller
- C. Use an Intercepting Filter
- D. Use a Page Controller

Answer: C

Explanation: The Intercepting Filter design pattern provides a processing mechanism before and after an application processes a request or a response. Since you need to log the raw HTTP request and response with a pattern that provides modularity and extensibility, this would be the appropriate choice. Because the processing of the request and response occurs before the application or page processing, filter components could be added, modified, removed or their order shuffled without affecting the processing in the application.

Incorrect answers:

A: The Observer design pattern does not meet the requirements for this component because it does not provide a mechanism for input or output pre-processing or post-processing. It will describe how to have observers, or subscribers monitor a subject object's state changes. This will introduce unnecessary complexity and should not be used in this scenario.

B: The Front Controller is sued to centralize all control for the entire Web application. This is not appropriate in this scenario.

D: The Page Controller pattern describes a component that receives a user request for a page, retrieves the requested data, and determines the appropriate response. It is highly appropriate in a centralized application processing environment and not to intercept data before or after processing.

QUESTION 525

You work as the Enterprise application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Your responsibilities at Certkiller .com include the design and development of applications. Certkiller .com operates as retailer.

You are currently developing an application for Certkiller .com. This application, upon completion will be used to process, validate, and approve credit card purchases. This application will make use of an unmanaged COM component. You now need to ensure that the application will release the COM component resources as soon as the client application is finished using it. To this end you need to make implement the appropriate interface. What should you do?

- A. Implement the IContainer interface.
- B. Implement the IBindingList interface.
- C. Implement the IComponent interface.
- D. Implement the IDisposable interface.

Answer: D

Explanation: When one implements the IDisposable interface, one must implement the Dispose method to allow for the release of resources explicitly. The Dispose method will release any unmanaged COM resources in this scenario.

Incorrect answers:

A: The IContainer interface is implemented as a container to tract zero or more components. And although the IContainer interface also inherits the IDisposable interface, you will still need to provide more functionality than is required in this case.

B: The IBindingLis interface exposes the functionality to support both simple and complex binding to a data source. This is not what is required in this scenario.

C

: The IComponent interface is implemented to server as a user interface in Visual Studio Designer and although the IComponent interface also inherits the IDisposable interface, you will still need to provide more functionality than is required in this case.

QUESTION 526

You work as the Enterprise application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Your responsibilities at Certkiller .com include the design and development of applications. Certkiller .com operates as a construction company that specializes in erecting and maintaining projects.

You are currently creating an ASP .NET Web-Based application for Certkiller .com. This application will be used to view current and historical information regarding each project. This application accesses project information that is stored on a table within a relational database.

You design the Project class to represent the commercial construction project. Each project is tracked by means of a unique project identifier. This identifier is also assigned to projects prior to the commencement of a project and prior to resources being assigned to it. You now need to design the interface of the Project class in such a way as to ensure that the project identifier is assigned.
What should you do?

- A. Randomly generate a unique project identifier in the default constructor.
- B. Randomly generate a unique project identifier in the default constructor. Accept the project identifier as a parameter in an overloaded constructor.
- C. Call a stored procedure to increment the unique project identifier in the default constructor.
- D. Call a stored procedure to increment the unique project identifier in the default constructor. Accept the project identifier as a parameter in an overloaded constructor.

Answer: D

Explanation

In this scenario a project needs a unique identifier for creation and tracking the project. When using the default constructor, it is important that a new project (yet without an identifier) is uniquely identified. Because the identifier information is located in a relational database, you should increment the last used project identifier using a stored procedure. When tracking an existing project, the project instance will represent an existing project, thus the overload constructor should take a valid project identifier as input.

Incorrect answers:

- A: You should not randomly generate a unique project identifier. Even if it seems unlikely, the project identifier may be the same as an existing project. Because the relational database stores project information, you should rather increment the last used project identifier via a stored procedure to ensure unique identifiers being assigned.
- B: This option is only partly correct, however, you should not randomly generate a unique project identifier. Even if it seems unlikely, the project identifier may be the same as an existing project. Because the relational database stores project information, you should rather increment the last used project identifier via a stored procedure to ensure unique identifiers being assigned.
- C: This option only represents half of the solution.

QUESTION 527

You work as the Web application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Your responsibilities at Certkiller .com include the design and development of applications. Certkiller .com operates as a College of Education.

Certkiller .com is divided into many different faculties that operate independent from each other. However, and each faculty has to make use of the Administration

building staff quarters if they are to conduct meetings as this is the only facility that is suitable for this purposes. To this end you have written an application that will allow users to reserve the Administration building staff quarters for meetings. Usually when a user requests the Administration facilities for a meeting for a specific time and date, a record is written to a database; e-mail invitations and agendas are sent to all requested participants. This process to generate the invitations and agendas does take some time. You want to ensure that invitations are sent out in the order in which meeting requests are received. To this end you decide to store the MeetingRequestID in one of the members of the Systems.Collections class to ensure that you process the records invitations in the correct order. You thus need to choose the appropriate collection class to meet this requirement.

What should you do?

- A. Use the ArrayList collection class.
- B. Use the Stack collection class.
- C. Use the Queue collection class.
- D. Use the HashTable collection class.

Answer: C

Explanation: Systems.Collections is a namespace in the .NET framework that contains classes which define various objects such as lists, dictionaries and queues. In this case you should create a Queue collection class. A Queue is used to store a list of objects to be processed on a First-in, First-out basis. In this scenario the requests are added to a queue as they are received. As the application has time it pulls the first item from the queue and processes it. Thus you will ensure first-in, first-out processing.

Incorrect answers:

- A: You should not use the ArrayList collection class as this construct allows for sorting, but does not guarantee a first-in, first-out processing.
- B: You should not use the Stack collection class as this construct will allow you to retrieve requests in a last-in, first-out basis and this is not what is specified in the requirements.
- D: You should not use the HashTable collection class as this data structure will not guarantee first-in, first-out processing.

QUESTION 528

You work as the Enterprise application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Your responsibilities at Certkiller .com include the design and development of applications. Certkiller .com offers its customers financial and accounting services. Certkiller .com makes use of a front-end Web site that allows its customers to view their accounts and to manage their financial affairs. This financial affair management includes the ability to shift funds from e.g. a savings account to a mortgage account or to a credit card account, as well as paying bills online. You are

currently developing a component to centralize all financial transactions between customer accounts. All financial data is stored in a SQL Server database.

You want the transaction process to perform the following steps:

1. Verify that the customer has sufficient funds (to cover the transfer fees as well.)
2. Debit the amount from the source account to main customer account.
3. Credit the amount to the destination account from the main customer account.

For a transaction to be considered completed all these steps must be fulfilled successfully. The component must notify the application in the event of an error and roll back the pending transaction.

You now need to make a decision as to which exception handling method you can use to meet these transactional requirements.

What should you do?

- A. The SqlTransaction object must be placed inside a using statement.
- B. The SqlTransaction object must be placed inside a finally block.
- C. Make use of a catch block to catch all exceptions.
Roll back the current transaction.
Re-throw the exception.
- D. Make use of a catch block to catch all exceptions.
Re-throw the exception.
Use a finally block to roll back the current transaction.

Answer: C

Explanation: Using a Catch block to catch all new exceptions and rolling back the current transaction and then re-throwing the exception will ensure that the application is notified and the transaction rolled back in the event of errors occurring during the transaction.

Incorrect answers:

- A: You should not place the SqlTransaction object inside a using statement because it will not have any effect on transaction rollbacks and application notifications.
- B: You should not place the SqlTransaction object inside a finally block because it will not have any effect on transaction rollbacks and application notifications.
- D: This procedure is wrong and you also should not make use of a finally block to rollback the current transaction because a successful transaction should be committed and code in the finally block is executed if an error occurs or not. The object of the exception-handling method should be to roll back only in the event of errors occurring or when the transaction is not successful.
- B: Decide how a component will handle exceptions. Considerations include catching and throwing a new exception; catching, wrapping, and throwing the wrapped exception; catching and terminating, and so on.

QUESTION 529

You work as the Enterprise application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Your

responsibilities at Certkiller .com include the design and development of applications. You are currently designing a component for Certkiller .com. This component will be used to simplify data access to disparate data sources. These sources are varied and include both Oracle and flat-file databases. the Web application will use the component to retrieve and update the underlying data sources.

You need to design an exception handling mechanism for this component that will meet the following requirements:

1. The Web application must not require a status message that indicates success or failure.
2. The Web application requires error messages when they occur in the component.
3. All error messages must be thorough and detailed.
4. All error messages must indicate the origin of the error, i.e. where and when the error occurred.
5. All error messages should be user friendly.

You need to make a choice as to which exception handling method you could use to meet these requirements.

What should you do? (Each correct answer presents part of the solution. Choose three.)

- A. Catch each exception and throw a new custom exception.
- B. Catch each exception and re-throw the exception.
- C. Set the new exception Data property to a custom error message.
- D. Set the new exception Message property to a custom error message.
- E. Set the new exception Data property to the original exception.
- F. Throw the new exception by wrapping it around the original exception. The InnerException property will return the original exception.

Answer: A, D, F

Explanation: To ensure that the error message is detailed as well as containing the original error message's origins and that the message be user friendly you should first catch each new exception and throw a new custom exception, then you should throw the new exception by wrapping it around the original exception and set the Message property of the new exception to a custom error message. (With wrapping, the InnerException property will ensure that the original exception data will give you the necessary feedback on what went wrong.

Incorrect answers:

- B: Rethrowing an exception will result in more overhead rather than allowing the exception to propagate up the call stack in normal fashion.
- C: The Data property is an IDictionary object and there is no need for additional data that has to be sent from the component, except for the information in the original exception. You should rather wrap the original exception and use the InnerException property to access it.
- E: Setting the new exception Data property to the original exception will not meet the requirements because the Data property is an IDictionary object and not an InnerException property

QUESTION 530

You work as the Enterprise application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Your responsibilities at Certkiller .com include the design and development of applications. You are currently designing a component for Certkiller .com. This component will be used to synthesize information from various Web service providers. The Web application will use this component to populate various list-bound controls on its Web pages.

You need to design an exception handling mechanism for this component that will meet the following requirements:

1. The Web application must receive a status code indicating success or failure.
2. The Web application requires error messages when they occur in the component.
3. All error messages must indicate the origin of the error, i.e. where and when the error occurred.
4. All error messages should be user friendly.

You need to make a choice as to which exception handling method you could use to meet these requirements.

What should you do?

A. Allow the original exception to propagate to the application in case of an error occurring.

Else, return true to indicate success.

B. Always return a status code.

Allow the original exception to propagate to the application in case of an error occurring.

C. Always return a status code.

Catch the original exception and wrap it in a new custom exception in case of an error occurring.

Set the Message property to custom message.

D. Catch the original exception and wrap it in a new custom exception in case of an error occurring.

Set the Message property to custom message.

Else, return true to indicate success.

Answer: C

Explanation: Your component is supposed to send a status code that indicates success or failure. The requirement and the solution do not indicate the sending mechanism for the status code, but one can assume that an output parameter could be involved. The exception handling mechanism will ensure that the error message is both detailed and contain the origins of the error and you can ensure that the message is user-friendly if you (1) always return a status code, (2) catch the original exception and wrap it in a new custom exception. And set the Message property to custom.

Incorrect answers:

A: This exception handling mechanism does not have an always return status code and

you should thus not make use of this option. Even though the returning true would indicate success, a return value could not be sent to the caller if an exception was thrown. Thus this option does not meet the requirements.

B: You should not make use of an exception handling mechanism that propagates the original exception to the application as this will not be a user-friendly message which is one of the requirements that should be met.

D: This option does not mention the Always return a status code which means that it cannot be used in this scenario.

QUESTION 531

You work as the Enterprise application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Your responsibilities at Certkiller .com include the design and development of applications. Certkiller .com operates as a Medical Facility.

You are currently creating a Web-based application for Certkiller .com. This application, upon completion, is destined to be used by the Certkiller .com employees to manage patient information, medication that patients have been prescribed, and follow-up medication that patients have been prescribed. You plan to create a component that retrieves patient data from an Oracle database. This component must provide information regarding the patient's name, address, and contact telephone numbers of next of kin.

To this end you need the component to meet the following requirements:

1. It must provide individual records of patients as quickly as possible.
2. It must prevent the data from being tampered with or deleted.
3. It must be memory efficient.

You now need to decide which data tier object to use in order to meet these requirements.

What should you do?

- A. Use the DataSet object
- B. Use the OracleDataReader object.
- C. Use the OleDbDataReader object.
- D. Use an XmlDocument object.

Answer: B

Explanation: A DataReader class will allow you to quickly read data as a connected read-only, forward-only firehouse cursor. DataReader objects are useful for populating controls or displaying data directly in a connected environment. Choosing the OracleDataReader object would be the solution because the patient data is stored in an Oracle database. It is recommended to use the most specific .NET data provider to provide optimal performance.

Incorrect answers:

A: A DataSet object is a disconnected representation of a relational data that allows for the retrieval, sorting, filtering, and updating of data. When updating occurs it could also

be similar to tampering. Thus this option is not the solution.

C: The OleDbDataReader class implements the same IDataReader interface as the OracleDataReader class, but will not provide optimal performance on an Oracle database. Thus this is not the solution.

D: An XmlDocument class is a node-based representation of hierarchical data. One makes use of this object to access XML data, not relational data.

QUESTION 532

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01 and a Windows Server 2003 Web server named Certkiller -SR24. Certkiller -DB01 hosts a database named CK_Products that stores product data for the company. All Certkiller .com's Web applications are hosted in Internet Information Services (IIS) 6.0 on Certkiller -SR24. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. Internet Information Services (IIS) 5.0 is installed on Certkiller -WS547.

You are developing a Web-based client application for the Certkiller .com Web site. Your Web application contains a Web Form named ProductDetails.aspx that displays product details in a DataGrid control. The data displayed in the DataGrid must be read-only but must allow sorting and filtering. The data structure must also allow paging if the data set is large. You need to ensure that the data structure has a minimal impact on the overall performance of the Web application. What should you do?

- A. Implement a DataAdapter object.
- B. Implement a TableAdapter object.
- C. Implement a DataTable object.
- D. Implement a DataReader object.

Answer: C

Explanation: A DataTable can be stored on the Web server to allow sorting, filtering and paging without requiring a round trip to the database server.

Incorrect Answers:

A, B: DataAdapters and TableAdapters are not used to display data. They are used to synchronize the data structure with the underlying database.

D: A DataReader must retrieve the data from the database server whenever the data must be sorted, filtered or paged. This will have a negative impact on the overall performance of the Web application.

QUESTION 533

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains a SQL Server 2005 database server named

Certkiller -DB01 and a Windows Server 2003 Web server named Certkiller -SR24. Certkiller -DB01 hosts a database named CK_Products that stores product data for the company. All Certkiller .com's Web applications are hosted in Internet Information Services (IIS) 6.0 on Certkiller -SR24. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. IIS 5.0 is installed on Certkiller -WS547. You are developing a Web application for the Certkiller .com e-Commerce Web site. The Web allows registered users to purchase products from the Certkiller .com Web site. Users are allowed to place purchase orders only after registering online and logging in using ASP.NET form authentication. The UserLogon method is used to authenticate the user while the UserInfo method is used to all of the user's details, including username, location and shopping preferences. The user details are stored in user-specific XML files. Should the user-specific XML file not be found when a user successfully logs on, a FileNotFoundException is generated. You want the UserInfo method to display an error message on the Web Form. The error message must state the type of error and the cause of the error, it must be user-friendly, and it must not expose any code. What should you do?

- A. Have the exception propagate automatically.
- B. Catch and re-throw the exception.
- C. Catch, wrap and throw the wrapped exception.
- D. Catch and throw a custom application exception.

Answer: C

Explanation: You need to catch the exception so that the necessary processing to handle the exception can occur. If the exception cannot be recover, you must wrap the exception in a new exception and throw the new exception back to the caller. This allows the user interface to display a user-friendly error message that states the type of error and the cause of the error and does not expose the underlying code.

Incorrect Answers:

- A: Allowing the exception to propagate automatically will result in no processing taking place and no error message will be displayed.
- B: Re-throwing the exception will expose underlying code in a detailed error message that is not user-friendly.
- D: There is no need to generate a custom application exception when a FileNotFoundException is already generated.

QUESTION 534

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01 and a Windows Server 2003 Web server named Certkiller -SR24. Certkiller -DB01 hosts a database named CK_Products that stores product data for the company. All Certkiller .com's Web applications are

hosted in Internet Information Services (IIS) 6.0 on Certkiller -SR24. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. IIS 5.0 is installed on Certkiller -WS547. You are developing a Web application for the Certkiller .com e-Commerce Web site. The Web application allows registered Certkiller .com users to store their credit card details online. Selected users have a credit account at Certkiller .com that allows them to purchase goods on credit and pay for the goods at a later date. Your Web application must allow these users to check their credit balance and to settle outstanding payments online. Employees in the Accounting department at Certkiller .com have access to a restricted area of the Web application where they have access to all user accounts. You need to ensure that only the registered user can perform transaction against his or her credit account. You also need to ensure that only Accounting department employees may create new credit accounts and that Accounting department employees can only access the restricted area of the Web application while at work. You need to create an audit log to track account access.

What should you do? (Each correct answer presents part of the solution. Choose four.)

- A. Audit the transaction type.
- B. Audit the AccountID.
- C. Audit the UserName.
- D. Audit the client timestamp.
- E. Audit the client IP address.
- F. Audit the Web server timestamp.

Answer: B, C, E, F

Explanation: You need to audit the username to know who accessed the account, you need to audit the accountID to know which account was accessed, you need to audit the Web server timestamp to know when the account was accessed, and you need to audit the client IP address to know where the account was accessed from and to ensure that the account was accessed from Certkiller .com.

Incorrect Answers:

- A: You do not need to audit the transaction type, only account access.
- D: You should audit the Web server timestamp rather than the client timestamp. The client timestamp is relative to the location and configuration of the client. If the client is configured with the wrong time, you would have no way of knowing exactly when the account was accessed.

QUESTION 535

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01 and a Windows Server 2003 Web server named Certkiller -SR24. Certkiller -DB01 hosts a database named CK_Products that

stores product data for the company. All Certkiller .com's Web applications are hosted in Internet Information Services (IIS) 6.0 on Certkiller -SR24. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. IIS 5.0 is installed on Certkiller -WS547. You are developing a Web application for the Certkiller .com e-Commerce Web site. The Web application allows Certkiller .com to track the traffic forwarded to the Certkiller .com Web site from an advertisement placed on the Web site of its affiliates. The Marketing department at Certkiller .com will keep statistics regarding traffic sent from the affiliate Web sites. Your application must log the URL of the affiliate Web site that redirects traffic to the Certkiller .com Web site, and must manage an incremental hit counter for every customer that is redirected to the Certkiller .com Web site. What should you do? (Each correct answer presents part of the solution. Choose two.)

- A. Create an ASP.NET session variable to manage the incremental hit counter.
- B. Create an ASP.NET application variable to manage the incremental hit counter.
- C. Use the PreviousPage property value of the IsCrossPostBack property.
- D. Use the PreviousPage property value of the IsPostBack property.

Answer: B, C

Explanation:

The IsCrossPostBack property evaluates to true when the Web page is posted from a different Web page. When true, the IsCrossPostBack property contains a PreviousPage property that holds the URL of the posting Web page. You should also create an ASP.NET application variable to manage the incremental hit counter. An application variable is stored on the Web server and is available to all users and sessions.

Incorrect Answers:

- A: A session variable is specific to a user session and is not available to all users and all sessions.
- D: The IsPostBack property evaluates to true when a Web page posts back to itself. If evaluates to false if the postback comes from a different Web page.
- C: Choose event monitoring mechanisms, such as System Monitor and logs.
- D: Decide monitoring levels based on requirements.

QUESTION 536

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01 and a Windows Server 2003 Web server named Certkiller -SR24. Certkiller -DB01 hosts a database named CK_Sales that stores sales data for the company. All Certkiller .com's Web applications are hosted in Internet Information Services (IIS) 6.0 on Certkiller -SR24. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your

development computer. IIS 5.0 is installed on Certkiller -WS547.

You have developed a Web application that allows Certkiller .com employees in the Sales department to enter daily sales transactions. The Web application allows users to manage data and generates weekly sales reports by executing several Transact-SQL (T-SQL) queries against the CK_Sales database. Sales department users report that T-SQL queries take a long time to produce the weekly reports. You need to diagnose the cause of the poor performance of the weekly reports. What should you do?

- A. Use Windows Performance Monitor on Certkiller -SR24 to monitor the performance of the Web application.
- B. Use the SQL Profiler tool on Certkiller -DB01 to monitor the execution time of the T-SQL queries.
- C. Write stored procedures to replace the T-SQL queries.
- D. Use the Trace Viewer to monitor tracing information for the Web application.

Answer: B

Explanation: The SQL Profiler tool is used to monitor T-SQL queries, stored procedures, deadlocks and timeouts in SQL Server 2005.

Incorrect Answers:

A: The Windows Performance Monitor is used to monitor system performance. It can be used to monitor ASP.NET applications by using an ASP.NET performance counter; however, the performance problem is related to the T-SQL queries. Windows Performance Monitor cannot be used to monitor the execution of T-SQL queries.

C: You need to diagnose the performance problem associated with the T-SQL queries. Replacing them with stored procedures is not part of a diagnosis but is a possible solution.

D: The Trace Viewer is used to view request and response trace information for the Web application. It is not used to monitor performance.

QUESTION 537

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains a Web server named Certkiller -SR24. All Certkiller .com's Web applications are hosted in Internet Information Services (IIS) 6.0 on Certkiller -SR24. Certkiller -SR24 also hosts a database named CK_Sales that stores sales data for the company. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. IIS 5.0 is installed on Certkiller -WS547.

A fellow developer has developed a Web application that allows Certkiller .com sales representatives to enter daily sales transactions to a flat file on their portable Windows XP Professional computers while at customer locations. The sales transactions are exported to the CK_Sales database at the end of the day. The following morning data from the current CK_Sales database is imported to the flat file. This Web application is hosted in a virtual IIS directory named SalesRepData

and uses several data bound controls to display data from the CK_Sales database. The connection string for the data bound controls is stored in the Web application's Web.config file.

You need to ensure that the connection string is not human-readable. To accomplish this task you run the following command from the command prompt:

Aspnet_regiis -pd "connectionStrings" -app "/SalesRepData"

Does your solution satisfy the requirements for this project?

- A. Yes.
- B. No, you should use the -pe switch in place of the -pd switch.
- C. No, you should use the -pa switch in place of the -pd switch.
- D. No, you should use the -pz switch in place of the -pd switch.

Answer: B

Explanation: The -pe switch of the aspnet_regiis.exe utility encrypts the section of the Web.config file that is specified after the -pe switch while the -pd switch decrypts it.

Incorrect Answers:

A: Your solution does not meet the security requiems. The -pd switch of the aspnet_regiis.exe utility decrypts the section of the Web.config file that is specified after the -pd switch. You should use the -pe switch that encrypts the section of the Web.config file that is specified after the -pe switch.

C: The -pa switch of the aspnet_regiis.exe utility grants permissions to the user account or group that is specified after the -pa switch. This does not ensure that the connectionStrings section of the Web.config file is not human-readable.

D: The -pz switch of the aspnet_regiis.exe utility deletes the key container specified after the -pz switch. This does not ensure that the connectionStrings section of the Web.config file is not human-readable.

QUESTION 538

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. IIS 5.0 is installed on Certkiller -WS547.

You are testing a Web application that will be integrated into the existing Certkiller .com e-Commerce Web site. A fellow developer added the following Web.config file to the Web application:

```
<?xml version="1.0" encoding="utf-8" ?>
<configuration>
<system.Web>
<customErrors mode="Off" />
<authentication mode="Windows" />
<authorization>
<allow roles="BetaTesters" />
```



```
<deny users="*" />
</authorization>
<trace enabled="false" requestLimit="10" pageOutput="false"
traceMode="SortByTime" localOnly="true" />
<sessionState mode="InProc"
stateConnectionString="tcpip=127.0.0.1:42424"
sqlConnectionString="data source=127.0.0.1; Initial Catalog=ASPState;
Integrated Security=true" cookieless="false" timeout="20" />
</system.Web>
</configuration>
```

You need to determine the functionality of the Web.config file.

Which of the following functionality is provided by the Web.config file?

- A. No user will be able to access the application.
- B. Detailed error messages will be displayed to all users.
- C. Users in the Administrators group have access to the application.
- D. Users with Windows user accounts will be used to access the application.

Answer: B, D

Explanation: The authentication mode is set to Windows. This means that the users Windows credentials will be evaluated to determine if the user should have access to the application. However, the Authorization element allows access to users in the BetaTesters role and denies access to all other users. The customErrors mode is set to Off. This means that no custom error pages will be used and the default error message will be displayed. The default error messages are detailed messages that are displayed to all users.

Incorrect Answers:

A: The authentication mode is set to Windows. This means that the users Windows credentials will be evaluated to determine if the user should have access to the application. However, the Authorization element allows access to users in the BetaTesters role and denies access to all other users.

C: The authentication mode is set to Windows. This means that the users Windows credentials will be evaluated to determine if the user should have access to the application. However, the Authorization element allows access to users in the BetaTesters role and denies access to all other users.

QUESTION 539

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains a Web server named Certkiller -SR24. All Certkiller .com's Web applications are hosted in Internet Information Services (IIS) 6.0 on Certkiller -SR24. Certkiller -SR24 also hosts a database named CK_Sales that stores sales data for the company. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. Certkiller -WS547 is running ASP.NET Development Server embedded

in Visual Studio .NET 2005. Internet Information Services (IIS) is not installed to Certkiller -WS547.

You are testing a Web application that will be integrated into the existing Certkiller .com e-Commerce Web site. The application is an inventory management system that incorporates a data access component named GetData. The GetData component retrieves data from the CK_Sales database. You need to ensure that the GetData component executes successfully before deploying the application to the production environment.

What should you do?

- A. Perform a unit test of the GetData component in Internet Information Services (IIS).
- B. Perform a unit test of the GetData component in ASP.NET Development Server.
- C. Perform a load test of the GetData component in ASP.NET Development Server.
- D. Perform a load test of the GetData component in Internet Information Services (IIS).

Answer: A

Explanation: Unit testing verifies that a component provides the required functionality and identifies any exceptions that may be generated by the code. This testing must be performed in IIS as all Certkiller .com's Web applications are hosted in IIS on Certkiller -SR24.

Incorrect Answers:

B: You should perform unit testing in IIS as all Certkiller .com's Web applications are hosted in IIS on Certkiller -SR24.

C, D: Load testing is used to test the application when large numbers of users access the application. You need to test functionality of the GetData component. Unit testing verifies that a component provides the required functionality. You should also perform the unit testing in IIS as all Certkiller .com's Web applications are hosted in IIS on Certkiller -SR24.

QUESTION 540

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains a Web server named Certkiller -SR24. All Certkiller .com's Web applications are hosted in Internet Information Services (IIS) 6.0 on Certkiller -SR24. Certkiller -SR24 also hosts a database named CK_Sales that stores sales data for the company. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. IIS 5.0 is installed on Certkiller -WS547.

You are redeveloping a Web application for the Certkiller .com e-Commerce Web site. The current Web application allows registered Certkiller .com users to purchase goods online and pay for them by credit card. The Web application uses custom a component named AuthenticateCustomers is used to validate customers when they place orders. User details of registered users are stored in the CK_Sales database in a table named Customers. You want to expand the functionality of the Web application to allow only selected users to place orders for products that are out of

stock. You decide to add new methods to the AuthenticateCustomers component to accommodate the new functionality. You need to ensure that the AuthenticateCustomers component executes successfully in the production environment. You need to accomplish this task as quickly as possible. What should you do?

- A. Perform unit testing on all methods of the AuthenticateCustomers component.
- B. Perform unit testing on the new methods of the AuthenticateCustomers component.
- C. Perform load testing on the new methods of the AuthenticateCustomers component.
- D. Perform load testing on all methods of the AuthenticateCustomers component.

Answer: B

Explanation: Unit testing verifies that the methods of a component provides the required functionality and identifies any exceptions that may be generated by the code. The existing component has all already deployed successfully to the production environment; therefore you do not need to test the existing methods of the component, only the new methods.

Incorrect Answers:

A: You should only perform unit testing of the new methods. The existing component has all already deployed successfully to the production environment; therefore you do not need to test the existing methods of the component.

C: Load testing is used to test the application when large numbers of users access the application. You need to test functionality of the GetData component. Unit testing used to test functionality.

D: Load testing is used to test the application when large numbers of users access the application. You need to test functionality of the GetData component. Unit testing used to test functionality. You should only perform unit testing of the new methods. The existing component has all already deployed successfully to the production environment; therefore you do not need to test the existing methods of the component.

QUESTION 541

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains a Web server named Certkiller -SR24. All Certkiller .com's Web applications are hosted in Internet Information Services (IIS) 6.0 on Certkiller -SR24. Certkiller -SR24 also hosts a database named CK_Sales that stores sales data for the company. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. Certkiller -WS547 is running ASP.NET Development Server embedded in Visual Studio .NET 2005. Internet Information Services (IIS) is not installed to Certkiller -WS547.

You are developing a navigation application. You add an ImageMap control to a Web page named NYCity.aspx and set its ImageUrl property to the URL of an image that represents the street map of central New York. When a user clicks on an area that represents a building, the Web application displays the street address for

that building on the same page. A custom component named StreetAddress retrieves the data from a local Web service that contains the address of all buildings on the map.

You need to ensure that the StreetAddress component executes successfully before deploying the Web application to the production environment. You successfully performed unit testing on the StreetAddress component and the Web service.

What should you do next?

- A. Perform an integration test of the StreetAddress component and the Web service in Internet Information Services (IIS).
- B. Perform an integration test of the StreetAddress component and the Web service in ASP.NET Development Server.
- C. Perform a load test of the StreetAddress component and the Web service in Internet Information Services (IIS).
- D. Perform a load test of the StreetAddress component and the Web service in ASP.NET Development Server.

Answer: A

Explanation: Integration testing determines how well to components work together and should be performed after unit testing of the individual components. This testing must be performed in IIS as all Certkiller .com's Web applications are hosted in IIS on Certkiller -SR24.

Incorrect Answers:

B: You should perform integration testing in IIS as all Certkiller .com's Web applications are hosted in IIS on Certkiller -SR24.

C, D: Load testing is used to test the application when large numbers of users access the application. You need to test functionality of the components. You have already completed unit testing you should now determine how well the two components work together. Integration testing determines how well two components work together. You should also perform the integration testing in IIS as all Certkiller .com's Web applications are hosted in IIS on Certkiller -SR24

B: Identify component interactions and dependencies.

QUESTION 542

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01 and a Windows Server 2003 Web server named Certkiller -SR24. Certkiller -DB01 hosts a database named CK_Sales that stores sales data for the company. All Certkiller .com's Web applications are hosted in Internet Information Services (IIS) 6.0 on Certkiller -SR24. You use a Microsoft Windows Sever 2003 computer named Certkiller -WS547 as your development computer. Certkiller -WS547 is running ASP.NET Development Server embedded in Visual Studio .NET 2005 and Internet Information Services (IIS).

You have developed a Web application that allows Certkiller .com employees in the

Sales department to enter daily sales transactions into the CK_Sales database and allows the manager of the Sales department to generate weekly sales from the CK_Sales database. A data access component named SalesReport to retrieves data for the sales reports by executing several Transact-SQL (T-SQL) queries against the CK_Sales database. Access permissions to the Web application are based on the user accounts in Windows Active Directory. You set Windows as the authentication mode for the Web application in the Web.config file as shown in the following Exhibit:

```
<authentication mode="Windows" />
<authorization />
```

You successfully perform unit testing of the SalesReport component and integration testing with the Web service on Certkiller -WS547. However, when the Web application is deployed to the staging server, the SalesReport component fails to function.

Which application setting is the most likely cause of the problem?

- A. The Impersonation setting.
- B. The Authentication mode setting.
- C. The SQL Server security setting.
- D. The Authorization setting.

Answer: A

Explanation: You should consider the Impersonation setting as it is responsible for passing the identity of the user to the database when Windows authentication is used. It seems the wrong identity is being passed to the database.

Incorrect Answers:

B: The authentication mode is set to Windows. This setting is correct as access permissions to the Web application are based on the user accounts in Windows Active Directory. You therefore need Windows authentication.

C: The components tested successfully, therefore there should be not problem with the SQL Server security settings.

D: The authorization element is blank. You are using user accounts in Windows Active Directory to determine access permissions to the Web application. You therefore do not need to grant or deny access in the authorization element.

QUESTION 543

You work as an ASP.NET developer at Certkiller .com. Certkiller .com uses the Microsoft Visual Studio .NET 2005 as their application development platform. The Certkiller .com network contains a Web server named Certkiller -SR24. All Certkiller .com's Web applications are hosted in Internet Information Services (IIS) 6.0 on Certkiller -SR24. Certkiller -SR24 also hosts a database named CK_Sales that stores sales data for the company. You use a Microsoft Windows XP Professional client computer named Certkiller -WS547 as your development computer. IIS 5.0 is installed on Certkiller -WS547.

You have developed a Web application that allows Certkiller .com employees in the

Sales department to generate weekly sales reports. The Web application uses a custom component named SalesReport to retrieve data for the sales reports by executing several Transact-SQL (T-SQL) queries against the CK_Sales database. You add code to SalesReport component to open a new connection to the CK_Sales database, retrieve the required data, and close the connection. You must ensure that the connection is closed even if the SalesReport component throws an exception. What should you do? (Each correct answer presents a complete solution. Choose two.)

- A. Enclose the connection code within a using block.
- B. Enclose the connection code within a try...catch...finally block and close the connection in a finally block.
- C. Use the private keyword when declaring the connection object.
- D. Use the public keyword when declaring the connection object.

Answer: A, B

Explanation: You can ensure that the connection is closed by enclosing the code in a using block or a try...catch...finally block. The using block ensures that an object is disposed of if the code throws an exception. If you use the try...catch...finally block, you must include code in the finally block to explicitly close the connection.

Incorrect Answers:

C, D: The private and public keywords are access modifiers that determine what code can access the object. They do not ensure that an object is disposed of if the code throws an exception.

QUESTION 544

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Your responsibilities at Certkiller .com include the deployment of applications. Certkiller .com offers its customers financial and accounting services.

Certkiller .com has a multi-tiered Web application for Certkiller .com which was deployed several months ago. This application is to allow clients to manage own financial portfolios. This financial portfolio management includes the ability to shift funds from e.g. a savings account to a mortgage account or to a credit card account, as well as paying bills online, and even manage their stocks and investments. The portfolio data is stored in a SQL Server 2005 database which is accessed via stored procedures.

Recently the Certkiller .com Customer Care - line received calls from clients lodging complaints. These complaints all indicate application performance has deteriorated significantly since the original deployment. You investigated the problem and discovered from preliminary testing that the database operations are the most likely culprits for the deteriorated application performance. You need to investigate the longest running stored procedures without affecting the performance of the overall application in a negative way.

What should you do?

- A. Analyze the workload on the server using the Database Engine Tuning Advisor.
- B. Trace and analyze usage of the stored procedures using the SQL Server Profiler.
- C. Monitor the stored procedure performance by creating custom performance counters.
- D. Monitor the calls from the application to the database using CLR Profiler.

Answer: B

Explanation: The SQL Server Profiler utility allows one to monitor the SQL Server database performance and to trace the SQL Server events. You are able to select the types of events that you desire to trace, the duration of the trace as well as where to save the data that is collected. In this scenario you are required to monitor the performance of stored procedures used in the application without affecting the application performance adversely. This means that monitoring must only affect the performance of stored procedures and not the other application components. You can achieve this type of monitoring with SQL Server Profiler.

Incorrect answers:

A: This Database Engine Tuning Advisor optimizes the physical database by creating indexes, indexed views, and partitions based on a sample workload. Thus you should not make use of the Database Engine Tuning Advisor to analyze workloads on the server as it will not track the performance of stored procedures

C: Custom performance counters are created to indicate custom events within an application and you should not create custom performance counters because the SQL Server Profiler provides standard stored procedure events.

D: The CLR Profiler is intended to trace the base performance of a .NET application beyond the managed code. It should not be used to monitor calls between an application and a database because it will not determine the longest running stored procedures and their performance.

C: Track page response times.

QUESTION 545

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Certkiller .com operates as an on-line marketing organization that makes use of Web-based applications.

To carry out your duties of support and deployment of applications, you need the ability to quickly locate bugs in the existing Certkiller .com applications that were deployed across Certkiller .com. You must ensure that all errors and warnings are traced. You need to make sure that no unnecessary information is tracked, and thus decided to configure a TraceSwitch object. This TraceSwitch object will be used in many Web applications.

Now you only need to decide on which configuration setting to set the TraceSwitch object.

What should you do?

- A. The TraceSwitch tracing level should be set to Info.
- B. The TraceSwitch tracing level should be set to Error.
- C. The TraceSwitch tracing level should be set to Verbose.
- D. The TraceSwitch tracing level should be set to Warning.

Answer: D

Explanation: The Warning tracing level will display both error messages and warning messages and would thus be the setting required in this scenario.

Incorrect answers:

- A: The Info tracing level will display not only error messages and warning messages, but also informational messages which you do not want to trace.
- B: The Error tracing level only displays error messages and not the warnings.
- C: The Verbose tracing level will also display all unnecessary information that you do not want to trace.

QUESTION 546

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Your responsibilities at Certkiller .com include the deployment of applications. Certkiller .com operates as an online auctioneer. You have just deployed a Web site for Certkiller .com. This Web site will be used by customers to place and monitor their bids online. The application makes use of business components to update and retrieve bid information from a SQL Server database. You need to monitor this application and track any errors that may be caused by customer activity on the Web site. To this end you decide to create a custom TraceSwitch object named CustomerSwitch to toggle the tracing level as required.

Following are the tracing requirements that should be met:

1. All errors should be traced.
2. Application-specific warning messages should NOT be traced.
3. Application-specific informational messages should NOT be traced.

You then test the application and found that no messages are being traced. You need to remedy the situation.

What should you do?

- A. The CustomerSwitch value should be changed to 1.
- B. The CustomerSwitch value should be changed to 1.
Then restart the Web application.
- C. The CustomerSwitch value should be changed to 4.
- D. The CustomerSwitch value should be changed to 4.
Then recompile the Web application.

Answer: A

Explanation: There are several available trace levels to which a custom TraceSwitch

like CustomerSwitch can be set. These are: Off - numerical value of 0; Error - numerical value of 1; Warning - numerical value of 2; Info - numerical value of 3 and verbose - numerical value of 4. Each of these level builds on the other, so that the Warning setting for instance will include both errors and warnings, and the Info level setting will include errors, warnings, and informational messages, etc. in this case you only need to trace errors. Thus you should change the CustomerSwitch setting to 1.

Incorrect answers:

B: Restarting the Web application should not be done because once the Web.config file is saved, the new application settings will apply.

C: Setting the value to 4 would also trace unnecessary information.

D: You should not recompile the Web application because once the Web.config file is saved, the new application settings will apply.

B: Monitor and analyze security aspects.

C: Track bugs that result from customer activity.

D: Choose when to use ASP.NET 2.0 Health Monitoring APIs.

QUESTION 547

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Your responsibilities at Certkiller .com include the deployment of applications. Certkiller .com operates as a vehicle manufacturer. Certkiller .com makes use of an intra-net Web application for users to track work on assembly lines within all departments of the Certkiller .com facilities. This Web application uses ASP .NET 2.0 Membership to manage user accounts for the application. A user is allowed to recover their password using a PasswordRecovery control. Every time a user recovers a password, you want to have the event recorded in the Application event log of the server. To this end you configure the application to use the ASP .NET 2.0 Health Monitoring API. Following are the settings that you configured:

1. Enable health monitoring by modifying the Web.config file by setting the enabled attribute of the Health Monitoring element to true.
2. Create an event mapping for the PasswordRecoveryEvent event.

Now you need to take a decision as to whether your configuration will meet the requirements.

What conclusion can you draw?

- A. The configuration meets the requirements.
- B. The configuration does not meet the requirements. You should create mapping for the WebFailureAuditEvent event.
- C. The configuration does not meet the requirements. You should create mapping for the WebAuthenticationFailureAuditEvent- and the WebAuthenticationSuccessAuditEvent events.
- D. The configuration does not meet the requirements. There is no event class in the Health Monitoring API to monitor password recovery events.

Answer: D

Explanation: There is not an event class in the Health Monitoring API to monitor password recovery events. In fact there are no event classes for password related events such as password recovery or password changes.

Incorrect answers:

A: This is incorrect as the configuration does not allow for events to be recorded in the Application event log of the server using the ASP .NET 2.0 Health Monitoring API.

B: The WebFailureAuditEvent event is a generic base class for all ASP .NET related audit events. This class does not provide a means of detecting a password recovery or password change. Thus you should not use the WebFailureAuditEvent event.

C: The WebAuthenticationSuccessAuditEvent and WebAuthenticationFailureAuditEvent will provide information regarding authentication failures. However, a password recovery or password change is not an authentication event.

QUESTION 548

You work as the application developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers in the domain run Windows Server 2003. Your responsibilities at Certkiller .com include the deployment of applications. Certkiller .com operates as manufacturer and online retailer offering their customers a shopping experience twenty four hours a day seven days a week.

You created a Web Application for Certkiller .com. This application will allow users to view product information and make online purchases. This application is distributed across a Web Farm. You want to be able to determine if critical errors occurs with the application because it will help tremendously in the event of you being required to rectify any application issues before it affects the users. To this end you decided to use application monitoring. It is critical that the application monitoring does not affect performance.

You thus did the following:

1. Configure ASP .NET 2.0 Health Monitoring API in the Web.config file.
2. Configure the minInterval attribute of each rule to a low value.

Now you need to take a decision as to whether this application will meet the requirements.

What conclusions can you draw?

A. The configurations will meet the requirements.

B. The configurations will not meet the requirements. ASP .NET 2.0 Health Monitoring API will not work in an environment where an application is distributed across a Web farm.

C. The configurations will not meet the requirements. ASP .NET 2.0 Health Monitoring cannot be configured in a Web.config file.

D. The configurations will not meet the requirements. The minInterval attribute should be configured to a high value.

Answer: D

Explanation: Making use of ASP .NET 2.0 Health Monitoring can affect the performance of an application. To ensure that this is not the case, you should configure the minInterval attribute for each rule in the rules section to increase the minimum time interval between events that are captured.

Incorrect answers:

A: This is wrong because performance will be affected if the minInterval value is set too low. The time interval between captures events will cause the APIs to monitor the application more often which means deterioration in performance.

B: This is incorrect since it is possible to configure ASP .NET 2.0 Health Monitoring APIs to monitor live ASP .NET applications across a Web farm.

C: You can configure the ASP .NET 2.0 Health Monitoring APIs in a Web.config file.