Exam : 070-310

Title   : XML Web Services and Server Components with Visual Basic.NET

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QUESTION 1:

You create a Windows service named CKService that quires a table named Orders in a Microsoft SQL Server database. You want CKService to check every 30 seconds for new rows in Orders.
You create the following method in myService:
Private Sub ProcessOrders(ByVal source As Object, ByVal eventArguments As Timers.ElapsedEventArgs)
'Code to process orders goes here.
End Sub
You need to add additional code to CKService to invoke the ProcessOrders method.
What should you do?

A. To the OnStart method, add the following code segment:
Dim CKTimer As New Timers.Timer()
AddHandler CKTimer.Elapsed, AddressOfProcessOrders
CKTimer.Interval = 30000
CKTimer.Enabled = True
B. To the OnCustomCommand method, add the following code segment:
Dim CKTimer As New Timers.Timer()
AddHandler CKTimer.Elapsed, AddressOf ProcessOrders
CKTimer.Interval = 30000
CKTimer.Enabled = True
C. To the OnStart method, add the following code segment:
Dim CKTimer As New Timers.Timer()
AddHandler CKTimer.Elapsed, AddressOf ProcessOrders
CKTimer.Interval = 30000
CKTimer.AutoReset = True
D. To the OnCustomCommand method, add the following code segment:
Dim CKTimer As New Timers.Timer()
AddHandler CKTimer.Elapsed, AddressOf ProcessOrders
CKTimer.Interval = 30000
CKTimer.AutoReset = True

Answer: A

Explanation:
Use OnStart to specify the processing that occurs when the service receives a Start command. OnStart is the method in which you specify the behavior of the service. OnStart can take arguments as a way to pass data, but this usage is rare.
After configuration of the timer we must start it by raising the Enabled event.
Reference:
.NET Framework Class Library, ServiceBase.OnStart Method [Visual Basic]
.NET Framework Class Library, Timer Members
.NET Framework Class Library, ServiceBase.OnCustomCommand Method [Visual Basic]
Incorrect Answers

B, D: OnCustomCommand executes when the Service Control Manager (SCM) passes a custom command to the service. The OnCustomCommand is not a good place to place define and configure a timer.
C: The Timer.AutoReset property indicates whether the Timer should raise the Elapsed event each time the specified Interval elapses or only after the first time it elapses. The default value is True, so there is no need to set to true in this scenario. Furthermore, the timer will not start until the Enabled property is set to true.

QUESTION 2:

You develop an application named CKApp. This application needs to run on the same computer as a Windows service named CKService.
You want to ensure that CKService starts from CKApp if CKService is not already running.
Which code segment should you use?

A. Dim CKServiceController As New _
ServiceController("CKService")
If CKServiceController.Status = _
ServiceControllerStatus.Stopped
Then CKServiceController.Start()
End If
B. Dim CKServiceController As New _
ServiceController("CKService")CKServiceController.Start()
C. Dim CKServiceController As New _
ServiceController() Dim CKArgs(1)As String CK Args(0)="CKService"
If CKServiceController.Status = ServiceControllerStatus.Stopped
Then CKServiceController.Start(CKArgs)
End If
D. Dim CKServiceController As New _
ServiceController() Dim CKArgs(1) As String CK Args(0)= "CKService"
CKServiceController.Start(CKArgs)

Answer: A

Explanation: First we create a new instance of CKService. Then we check the current state of it with the Status property. Finally we use the ServiceController start method to start it if it was stopped..
Note: A Service Controller object represents a Windows service and allows you to connect to a running or stopped service, manipulate it, or get information about it.
Reference:
.NET Framework Class Library, ServiceController Class
.NET Framework Class Library, ServiceController Members
.NET Framework Class Library, ServiceControllerStatus Enumeration [Visual Basic]
.NET Framework Class Library, ServiceController Constructor [Visual Basic]
Visual Basic and Visual C# Concepts, Creating ServiceController Component Instances
Incorrect Answers
B: The constructor is incorrect.
C, D: Here the ServiceController constructor is used with two parameters. The first parameter correctly references the existing server CKService. The second parameter, 'CK', specifies the computer that the service

runs on. CK has no special significance (we don't know the name of the computer). Furthermore, we do not have to specify the computer name if the service runs on the local computer.

QUESTION 3:

Your Microsoft SQL Server database contains a table named Certkiller Orders. Certkiller Orders is used to store new purchase orders as they are entered into an order-entry application. To keep up with customer demand, the order fulfillment department wants to know at 15-minute intervals when new orders are entered.
You need to develop an application that reads Certkiller Orders every 15 minutes and sends all new orders to the order fulfillment department. The application will run on computer that is used by several users who continuously log on and log off from the network to perform miscellaneous tasks.
Which type of .NET application should you use?

A. Windows Form
B. Windows service
C. XML Web service
D. .NET Remoting object

Answer: B

Explanation: A Windows service would still be running even though users logs on and off.
Incorrect Answers
A: A Windows Form would be closed when a user logs off.
C: An XML Web service is not guaranteed to keep running if a user logs off.
D: You can use .NET Remoting to enable different applications to communicate with one another. However, a remoting object would be destroyed when a user logs off the system.

QUESTION 4:

You are creating a serviced component named ItemInventory. An online catalog application will use ItemInventory to display the availability of products in inventory.
Additional serviced components written by other developers at Certkiller will continuously update the inventory data as orders are placed.
The ItemInventory class includes the following code segment:
<Transaction(TransactionOption.Required)> _
Public Class ItemInventory
Inherits ServicedComponent
' Method code goes here.
End Class
ItemInventory is configured to require transactions. You want ItemInventory to respond to requests as quickly as possible, even if that means displaying inventory values that are not up to date with the most recent orders.
What should you do?

A. To the ItemInventory class, add the following attribute:

<ObjectPooling(True)>
B. To all methods of the ItemInventory class, add the following attribute:
<AutoComplete(False)>
C. Modify the Transaction attribute of the ItemInventory class to be the following attribute:
<Transaction(TransactionOption.Required, Timeout:=1)>
D. Modify the Transaction attribute of the ItemInventory class to be the following attribute:
<Transaction(TransactionOption.Required, _
IsolationLevel:=
TransactionIsolationLevel.ReadUncommitted)>

Answer: D

Explanation: The ReadUncommitted transaction isolation level makes a dirty read is possible, meaning that no shared locks are issued and no exclusive locks are honored. This will reduce the number of locks, compared to the default transaction isolation level of readcommitted. Reduced number of locks will increase the performance.
Reference: .NET Framework Class Library, IsolationLevel Enumeration
Incorrect Answers
A: Object pooling is a COM+ service that enables you to reduce the overhead of creating each object from scratch. However, object pooling is not much use in transactions.
B: Autocomplete does not apply here.
C: Timeout configuration would not address performance issue.

QUESTION 5:

You create a serviced component named WorkItem that implements an interface named IWorkItem.
You want to ensure that calls to the serviced component through IWorkItem are queued.
What should you do?

A. To WorkItem, add the following attribute:
<InterfaceQueuing(True, Interface:="IWorkItem")>
B. To WorkItem, add the following attribute:
<Transaction(TransactionOption.Disabled,_
Isolation:=TransactionIsolationLevel.Serializable)>
C. To the WorkItem assembly, add the following attribute:
<Assembly: ApplicationQueuing(Enabled:=True,_
QueueListenerEnabled:=True)>
D. In the WorkItem implementation, override the Activate method from the ServicedComponent class.
In the Activate method, add the following code segment:
Dim q As New Queue() q.Enqueue(Me)

Answer: C

Explanation: In addition to enabling queued component support at the application level, you must mark your interfaces as capable of receiving queued calls. You do that by using setting the QueueListenerEnabled attribute to True.

Note: The COM+ Queued Components (QC) service provides an easy way to invoke and execute components asynchronously. Processing can occur without regard to the availability or accessibility of either the sender or receiver.
Reference: .NET Framework Developer's Guide, Queued Components [Visual Basic]
Incorrect Answers
A: The signature for the InterfaceQueuing attribute as shown in Answer A is wrong.
B: Transactions are not helpful for interface queuing configuration.
D: Creating a new queue in the Active method is not correct in this scenario.

QUESTION 6:

You create a Windows service named FxListener that performs financial transactions by using files in a drop directory. When a new XML file appears in the drop directory, FxListener opens the file and performs the financial transaction contained within the XML code.
You want updates to each XML file to be logged in the Windows application log. A String object named CKMessage contains the message to be logged.
Which code segment should you use?

A. EventLog.WriteEntry("FxListener", CKMessage)
B. Dim log As New EventLog("Application")
log.WriteEntry(CKMessage)
C. Dim log As New EventLog("Application")
Trace.WriteLine(log, my Message)
D. Dim log As New EventLog("FxListener")
log.Source = "Application"
log.WriteEntry(CKMessage, EventLogEntryType.SuccessAudit)

Answer: D

Explanation:
Statement 1: Dim log As New EventLog("FxListener")
The EventLog (logname) constructor initializes a new instance of the EventLog class. It associates the instance with a log on the local computer.
Statement 2: log.Source = "Application"
We must set the Source property on your EventLog component before writing entries to the log.
Statement 3: log.WriteEntry(myMessage, EventLogEntryType.SuccessAudit)
The EventLog.WriteEntry (message, EventLogEntryType) method writes an entry of a specified EventLogEntryType to the event log.
Reference:
.NET Framework Class Library, EventLog Constructor (String) [Visual Basic]
.NET Framework Class Library, EventLog.WriteEntry Method (String, EventLogEntryType) [Visual Basic]
.NET Framework Class Library, EventLog.Source Property [Visual Basic]
Incorrect Answers
A: The EventLog.WriteEntry method (source, message) writes an information type entry with the given message text to the event log, using the specified registered event source. However, we specify the Windows service FXListener not a valid event source. The event source must already be registered as an event source for

the appropriate log.
B: We should set the Source property on your EventLog component before writing entries to the log.
C: We are writing log entries, not tracing entries.

QUESTION 7:

You are creating a serviced component named UserManager. UserManager adds user accounts to multiple transactional data sources.
The UserManager class includes the following code segment.

```
SecurityRole ("Admin") > _
Public Class UserManager
Inherits ServicedComponent
Public Sub AddUser (ByVal name As String, _
ByVal password As String)
' Code to add the user to data sources goes here.
End Sub
End Class
```

You must ensure that the AddUser method reliably saves the new user to either all data sources or no data sources. What should you do?

A. To AddUser, add the following attribute:
<AutoComplete ( ) >
B. To UserManager, add the following attribute:
<JustInTimeActivation (False) >
C. To the end of AddUser, add the following line of code:
ContextUtil.EnableCommit ( )
D. To the end of AddUser, add the following line of code:
ContextUtil.MyTransactionVote = True

Answer: A

Explanation: The TransactionOption.Required shares a transaction, if one exists, and creates a new transaction, if necessary. automatically commits the transaction.
Note: The System.EnterpriseServices.AutoCompleteAttribute causes an object participating in a transaction to vote in favor of completing the transaction if the method returns normally. If the method call throws an exception, the transaction is aborted.
Reference:
.NET Framework Developer's Guide, Voting in an Automatic Transaction [Visual Basic]
.NET Framework Class Library, ContextUtil Methods
Incorrect Answers
B: Just-in-time (JIT) activation is a COM+ service that enables you to create an object as a nonactive, context-only object. JIT does not apply here.
C: The ContextUtil.EnableCommit method sets the consistent bit to true and the done bit to false in the COM+ context. It is not useful in this scenario.

D: The ContextUtil.MyTransactionVote property gets or sets the consistent bit in the COM+ context. It is not useful here.

QUESTION 8:

You create a services component named OrderStatus that is in an assembly named Certkiller Orders. OrderStatus is in its own COM+ application named Certkiller App.
OrderStatus is used by multiple client applications to look up the status of orders. Because you anticipate that client applications will frequently access OrderStatus, you need to ensure that the method calls are processed as quickly as possible.
What should you do?

A. Configure OrderStatus to require a transaction.
B. Configure Certkiller App to be a library application.
C. Add the AutoComplete attribute to all methods in OrderStatus.
D. Configure Certkiller Orders to be a shared assembly, and install it in the global assembly cache.

Answer: B

QUESTION 9:

You are using Visual Studio .NET to develop a new application to replace an older COM-based application named Certkiller Legacy. The new application will use some of the old COM components until they can be replaced by Visual Studio .NET code.
Your application uses a COM DLL named OurCOM.dll. The Visual Studio .NET assembly for OurCOM.dll must be named OurDotNetCOM. You must use the name "ProjectX" for the namespace of the COM components. You must ensure that your application uses these naming guidelines.
What should you do?

A. Reference OurCOM.dll from Visual Studio .NET.
Change the assembly name in Solution Explorer.
Change the namespace name by editing the assembly.
B. Reference OurCOM.dll from Visual .NET.
Change the assembly name in Solution Explorer.
Change the namespace name by using the Namespace property of a CodeNamespaceImport object.
C. Run the Type Library Importer (Tlbimp.exe) with the /namespace and /out options to create the assembly.
D. Run the Type Library Importer (Tlbimp.exe) with the /out option to create the assembly.
Change the namespace by using the Namespace property of a CodeNamespaceImport object.

Answer: C

Explanation: The Type Library Importer converts the type definitions found within a COM type library into equivalent definitions in a common language runtime assembly. We should use the /namespace option to specify the namespace in which to produce the assembly. We must use the /out option to specify output file, assembly, and namespace in which to write the metadata definitions.
Reference: .NET Framework Tools, Type Library Importer (Tlbimp.exe)

Incorrect Answers
A: Not a practical solution.
B: An incomplete solution.
D: We should use the /namespace option to specify the namespace in which to produce the assembly.

QUESTION 10:

You create two serviced components named OrderPipeline and OrderAdmin. Each component is registered in a separate COM+ server application.
Both components use pricing data. OrderPipeline reads the pricing data for placing user orders. OrderAdmin modifies the pricing data.
You want to ensure that OrderPipeline accesses the pricing data as quickly as possible, while still being able to immediately retrieve any pricing changes made by OrderAdmin.
What should you do?

A. Store the pricing data in the Shared Property Manager.
B. Store the pricing data in Microsoft SQL Server database.
C. Store the pricing data in a Hashtable object within OrderAdmin.
Expose the Hashtable object through a property on OrderAdmin.
D. Store the pricing data in an XmlDocument object within OrderAdmin.
Expose the XmlDocument object through a property on OrderAdmin.

Answer: C

Explanation: A Hashtable can safely support one writer and multiple readers concurrently. This is the most efficient solution
Reference:
.NET Framework Class Library, Hashtable.IsSynchronized Property
Platform SDK: COM+ (Component Services), The Shared Property Manager
Incorrect Answers
A: A Shared Property Manager would be a possible solution. However it is not required and is not the most efficient solution.
Note: In COM+, shared transient state for objects is managed by using the Shared Property Manager (SPM).
The SPM is a resource dispenser that you can use to share state among multiple objects within a server process.
B: SQL Server could provide a solution. However, it would not be the most efficient solution.
D: A hast table would be more efficient.

QUESTION 11:

You work as a Software developer at Certkiller Inc. You are creating a Visual Studio .NET assembly, which will run as a shared assembly with other applications. The assembly will be installed in the global assembly cache. You will distribute the assembly to many customers outside Certkiller .
You must ensure that each customer receives your assembly without alteration, in a way that reliably specifies the origin of the code.
What should you do?

A. Sign the assembly by using a string name.
Do nothing further.
B. Sign the assembly by using File Signing tool (Signcode.exe).
Do nothing further.
C. First sign the assembly by using a strong name.
Then sign the assembly by using File Signing tool (Signcoe.exe).
D. First sigh the assembly by using File Signing tool (Signcode.exe).
Then sign the assembly by using a strong name.

Answer: C

QUESTION 12:

You create a strongly named serviced component. The component uses a third-party .NET assembly
named Certkiller .Encryptor.dll to perform encryption and decryption. Certkiller .Encryptor.dll is
registered in the global assembly cache. You deploy the services component and Certkiller .Encryptor.dll
to a production computer.
A new version of Certkiller .Encryptor.dll becomes available. You remove the original version and install
the new version on the production computer. The services component throws a
System.TypeLoadException when it attempts to use Certkiller .Encryptor.dll.
You need to correct this problem.
What should you do?

A. Unregister and re-register the services component in the global assembly cache.
B. Use the Strong Name tool (Sn.exe) to create a new key file for the services component.
C. Create a configuration file named Dllhosts.exe config to redirect the services component to the new version
of Certkiller .Encryptor.dll.
D. Create a publisher policy assembly for Certkiller .Encryptor.dll and register the assembly in the global
assembly cache.

Answer: D

Explanation: Vendors of assemblies can state that applications should use a newer version of an assembly
by including a publisher policy file with the upgraded assembly. The publisher policy file specifies
assembly redirection and code base settings, and uses the same format as an application configuration
file. The publisher policy file is compiled into an assembly and placed in the global assembly cache.
There are three steps involved in creating a publisher policy:
1. Create a publisher policy file.
2. Create a publisher policy assembly.
3. Add the publisher policy assembly to the global assembly cache.
Reference: .NET Framework Developer's Guide, Creating a Publisher Policy File

QUESTION 13:

You create version 1.0.0.0 of an assembly named CertK Assembly. You register the assembly cache.
MyAssembly cosist of two .NET Remoting objects named CK1 and CK2 . These objects are configured in

the App.config file of MyAssembly as shown in the following code segment:

```
<system.runtime.remoting>
<application>
<service>
<activated type=" CertK Assembly. CK1 ,
MyAssembly, Version=1.0.0.0, Culture=neutral,
PublicKeyToken=28dckd8349lduj"/>
<wellknown mode="SingleCall"
objectUri=" CK2 .rem"
type=" CertK Assembly. CK2 .rem"
Version=1.0.0.0, Culture=neutral,
PublicKeyToken=28dckd8349lduj"/>
<channels>
<channel ref="http"/>
</channels>
</service>
</application>
</system.runtime.remoting>
```

You create an application named MyApp that resides on a different computer than CertK Assembly. MyApp references version 1.0.0.0 of CertK Assembly. MyApp contains code that activates instances of CK1 and CK2 to use their services.

Due to change in business needs, you must update CertK Assembly. You create version 2.0.0.0 of My Assembly. Which is backward compatible, but you do not update any information in the App.config file of CertK Assembly. You register version 2.0.0.0 of CertK Assembly in the global assembly cache. You then rebuild MyApp.

Which version of the remote objects will MyApp activate?

A. version 1.0.0.0 of CK1; version 1.0.0.0 of CK2;
B. version 1.0.0.0 of CK1; version 2.0.0.0 of CK2;
C. version 2.0.0.0 of CK1; version 1.0.0.0 of CK2;
D. version 2.0.0.0 of CK1; version 2.0.0.0 of CK2;

Answer: A

Explanation:
When a client activates a client-activated (that is, an) object, a network call is immediately sent to the server where the requested object is activated and an object reference to the object is returned to the client. Because it directs the activation of the object, the client also chooses the version of the object to be activated. For example, version 1 of HelloService will be activated on the server if the client was built against version 1 of the object, and version 2 of HelloService will be activated on the server if the client was built against version 2.
It is important to note that you cannot specify the version number for client-activated types when configuring the service. Also, any versioning information provided for server-activated types has no effect on client-activated objects, even if both types are in the same assembly. For example, suppose you have a client-activated type and a server-activated type in the same assembly, and you build client1 against version 1 and client2 against version 2. If no version information is specified for the server-activated object, client1 will receive version 2 of the server-activated object and version 1 of the client activated object. Client2 will receive version 2 objects for both well-known and activated types. If you configure the service to use version 1 of the

assembly for the well-known object, both clients will receive version 1 of the well-known object while client 1 receives version 1 of the activated type and client 2 receives version 2 of the activated type.

The version activated for a client cannot be configured; the version the client was built against is always used.

Incorrect Answers:

B: The version of the server activated object is specified as 1.0.0.0 in the app config file on the server. The server will use this version because it will use the latest version (2.0.0.0) only if nothing is specified on the server app config file. I verified this against MSDN.

C, D: Client-Side activation is used (see note 1). The version specified (1.0.0.0) is used.

QUESTION 14:

You create a serviced component named Tracker that uses attributes to dynamically register itself for COM+ services. Tracker is in an assembly file named Certkiller .dll. Tracker uses transactions and role-based security. The roles and the application identity for Tracker are configured on the development computer.

You are preparing to hand off Tracker to and administrator for deployment to production computers.

You want all the COM+ configuration information for Tracker to be installed on the production computers.

What should you do?

A. Use the Component Services tool to export Tracker to an .msi file.
Provide to the administrator the .msi file with instructions to run the installer.
B. Provide to the administrator the Certkiller .dll file.
Instruct the administrator to copy Certkiller .dll to all production computers and to install it in the global assembly cache.
C. Provide to the administrator the Certkiller .dll file.
Instruct the administrator to use the .NET Services Installation tool (Regsvcs.exe) to install Tracker.
D. Add a new merge module to your solution.
Add Certkiller .dll to the merge module.
Provide to the administrator the .msm file with installation instructions.

Answer: A

Explanation: We use the Components services tool to create an installation package. The installation package will include COM+ configuration information. The installation package can be installed on a separate system.

Procedure to create the .msi package:

Step 1: Open the Component Services Console: Start->Program->Administrative Tools->Component Services
Step 2: Right click the appropriate COM+ service and select export.
Step 3: Finish the Welcome to COM+ Application Export Wizard.

Note: The Component Services administrative tool enables you to configure and administer COM components and COM+ applications. With Component Services, administrators can deploy and administer Component Services applications through a graphical user interface or automate administrative tasks by using a scripting or programming language. Software developers can use Component Services to visually configure routine

component and application behavior, such as security and participation in transactions, and to integrate components into Component Services applications.
Reference: Windows XP Help.
Incorrect Answers
B: The dll file does not include COM+ configuration information.
C: Regsvcs.exe cannot be used to transfer the COM+ dll from one computer to another.
Note: The .NET Services Installation tool performs the following actions:
* Loads and registers an assembly.
* Generates, registers, and installs a type library into a specified COM+ 1.0 application.
* Configures services that you have added programmatically to your class.
D: To install a merge module, it must first be merged by using a merge tool into a .msi file. Note: A merge module is like a snapshot of a particular version of a component. A new merge module should be created for each successive version of a component in order to avoid version conflicts.

QUESTION 15:

You create a class named Billings that stored billing information for Certkiller Inc. Billings connects to a local Microsoft SQL Server database to store the billing information. Billing must run under a local user account to connect to the database.
The billing class includes the following code:
Public Class Billings
Public Sub Submit(By Val name As String, ByVal As DateTime, By Val hours
As Double)
' Method implementation goes here.
End Sub
' Private implementation goes here.
End Class
You want to ensure that client applications on other computers can use Billings by using .NET Remoting.
What should you do?

A. Derive the Billings class from MarshalByRefObject.
B. Implement the ISerializable interface in the Billings class.
C. Implement the IRemoteDispatch interface in the Billings class.
D. To the Billings class, add the following attribute:
<Serializable()>

Answer: A

Explanation: The MarshalByRefObject enables access to objects across application domain boundaries in applications that support remoting.
Reference: .NET Framework Class Library, MarshalByRefObject Class
.NET Framework Class Library, ISerializable Interface
Incorrect Answers
B: The ISerializable interface allows an object to take part in its own serialization and deserialization. It would not enable other computer to using the interface by .NET remoting however.
C: The IRemoteDispatch interface supports the .NET Framework infrastructure and is not intended to be used

directly from your code.
D: The Serializable attribute would not by itself enable other computer to using the interface by .NET remoting.

QUESTION 16:

You are creating a .NET Remoting object named PropertyCache. PropertyCache will hold a Hashtable object or name/value pairs.
A variety of remote client applications will communicate with PropertyCache to set and get property values. You need to ensure that properties set by one client application are also accessible to other client applications.
Which two actions should you take? (Each correct answer presents part of the solution. Choose two)

A. Configure PropertyCache to be a client-activated object.
B. Configure PropertyCache to be a server-activated Singleton object.
C. Configure PropertyCache to be a server-activated SingleCall object.
D. Derive the PropertyCache class from MarshalByRefObject and override InitializeLifetimeService() to return null.
E. Mark the PropertyCache class with the Serializable attribute.
Implement the ISponsor interface in the PropertyCache class.
F. Implement the ISerializable and ILease interfaces in the PropertyCache class.
Implement ILease.CurrentLeaseTime to return Int32.MaxValue.

Answer: B, D

Explanation: Correct answer should be B, D. E is incorrect because it is not necessary to serialise a Singleton object class. You only need to inherit it from MarshalByRefObject. Furthermore, D overrides initializeLifetimeService() to return null to return an object with infinite lifetime. It will solve the object life time issue that Answer E was trying to resolve through implementing ISponsor.

QUESTION 17:

You create a .NET Remoting object named DocumentStore. DocumentStore is a server-activated Singleton object. It uses a TcpChannel to listen on port 9000. The object URI for DocumentStore is DocumentStore.
You need to write a client application to use DocumentStore from a computer named Certkiller Srv.
Which code segment should you use?

A. RemotingConfiguration.Configure(_
"tcp// Certkiller Srv:9000/DocumentStore")
Dim doc As New DocumentStore()
B. Dim t As Type
t = GetType(DocumentStore)
RemotingConfiguration.RegisterWellKnownClientType(_
t, "TcpChannel,9000, Certkiller Srv")
Dim doc As New DocumentStore()
C. Dim t As Type

```
Dim temp As Object
Dim doc As DocumentStore
t = GetType(DocumentStore)
temp = Activator.CreateInstance(t, _
"tcp:// Certkiller Srv:9000/DocumentStore")
doc = CType(temp, DocumentStore)
D. Dim t As Type
Dim temp As Object
Dim doc As DocumentStore
ChannelServices.RegisterChannel(new TcpChannel(9000))
t = GetType(DocumentStore)
temp = Activator.CreateInstance(t, " Certkiller Srv")
doc = CType(temp, DocumentStore)
```

Answer: C(?)

Explanation: Server-activated objects are objects whose lifetimes are directly controlled by the server. The server application domain creates these objects only when the client makes a method call on the object. There are two activation modes (or WellKnownObjectMode values) for server-activated objects, Singleton and SingleCall. To create an instance of a server-activated type, clients either configure their application programmatically (or using a configuration file) and call new, or they pass the remote object's configuration in a call to Activator.GetObject().
Note: Any client that knows the URI of a registered well-known object can obtain a proxy for the object by registering the channel it prefers with ChannelServices, and activating the object by calling new or Activator.GetObject. To activate a well-known object with new, you must first register the well-known object type on the client using the RegisterWellKnownClientType method. Calling the RegisterWellKnownClientType method gives the remoting infrastructure the location of the remote object, which allows the new keyword to create it. If, on the other hand, you use the Activator.GetObject method to activate the well-known object, you must supply it with the object's URL as an argument, so no prior registration on the client end is necessary.
Reference:
.NET Framework Developer's Guide, Server Activation [Visual Basic]
.NET Framework Class Library, Activator.CreateInstance Method [Visual Basic]
.NET Framework Class Library, RemotingConfiguration.RegisterWellKnownClientType Method (Type, String)
Incorrect Answers
A: The RemotingConfiguration.Configure method reads the configuration file and configures the remoting infrastructure. This solution is inadequate.
B: The Problem with answer B is that the second parameter of the RegisterWellKnowClientType is "TCPChannel, 9000, Certkiller Srv" where as it is supposed to be a URL such as "tcp:// Certkiller Srv:9000/DocumentStore".
D: You need to use the Activator.GetObject method and NOT the Activator.GetInstance
Note: The Activator.CreateInstance method creates an instance of the specified type using the constructor that best matches the specified parameters.

QUESTION 18:

You have a .NET Remoting object named Certkiller Order. The Certkiller Order class allows remote client applications to submit orders in batches.
Each Certkiller Order object holds state information that is specific to each remote client application. The Certkiller Order class has overloaded constructors for initializing an object.
You want to develop a server application to host Certkiller Order objects.
What should you do?

A. Create a Windows service, and register Certkiller Order as a client-activated object.
B. Create a Windows service, and register Certkiller Order as a server-activated Singleton object.
C. Host Certkiller Order in Internet Information Services (IIS) and create a Web.config file to register Certkiller Order as a server-activated SingleCall object.
D. Host Certkiller Order in Internet Information Services (IIS) and create a Web.config file to register Certkiller Order as a server-activated object with an infinite lease.

Answer: A

Explanation: Client-activated objects are objects whose lifetimes are controlled by the calling application domain. This is the appropriate solution in this scenario.
Reference:
.NET Framework Developer's Guide, Client Activation
.NET Framework Developer's Guide, Server Activation
Incorrect Answers
B, C: Singleton types never have more than one instance at any one time. If an instance exists, all client requests are serviced by that instance.
D: Server-activated objects with an infinite lease would not be appropriate.

QUESTION 19:

You have a .NET Remoting object named Certkiller Utils. The Certkiller Utils class is a client-activated .NET Remoting object.
You want to write a client application that creates and uses a Certkiller Utils object. You want the client application to hold onto a reference to a Certkiller Utils object for the duration of its execution.
What should you do?

A. Construct the Certkiller Utils object, and hold the object in a member variable.
B. Construct the Certkiller Utils object, and set the LifeTimeService.LeaseTime to 0.
C. In the client application, create an Implementation of the ISponsor interface. Implement the Renewal method to extend the lease.
D. In the client application, create an Implementation of the ILease interface.
Implement the CurrentLeaseTime property to return Int32.MaxValue.

Answer: C

Explanation: We must create a sponsor, on the ISponser interface, that implements the renewal method

to extend the lease. This will ensure that the object lease will be renewed as long the client application is running.

Note: Each Marshal-by-reference object (MBR) has a lifetime that is controlled by a combination of leases, a lease manager, and some number of sponsors. A sponsor is an object that can request a new a lease for a particular object by registering itself with the lease manager. The lease manager periodically examines all leases for expired lease times. If a lease has expired, the lease manager walks its list of sponsors for that object and requests whether any of them want to renew the lease. If no sponsor renews the lease, the lease manager removes the lease and the object is deleted and its memory reclaimed by garbage collection. The CurrentLeaseTime can be changed, either from an ILease.Renew call or when the lease manager calls ISponsor.Renewal on a sponsor.

Reference: .NET Framework Developer's Guide, Lifetime Leases

.NET Framework Class Library, ILease.CurrentLeaseTime Property [Visual Basic]

Incorrect Answers

A: This would not renew the release of the object. The default lease time is 5 minutes.

B: A lease time of zero sets the lease to an infinite lifetime.

D: The ILease.CurrentLeaseTime is a read-only property of the ILease interface. We cannot configure this property.

QUESTION 20:

You are creating an XML Web service named CKFlightService that provides flight information to its users. To retrieve flight information, a user first must be authenticated by FlightService. Once authenticated, a key that identifies that user is returned to the caller. This key then will be presented in the SOAP header on all subsequent flight information requests to validate that user.

You need to construct CKFlightService so that it can receive the key in a SOAP header. First, you add a class to CKFlightService by writing the following code segment:

```
Public Class UserKeyHeader
Inherits SoapHeader
Public key As String
End Class
```

Next, you add a Web method to CKFlightService by writing the following code segment:

```
Public keyHeader As UserKeyHeader
<WebMethod(), SoapHeader()>_
Public Function RetrieveFlightInformation() As DataSet
'Code to check SOAP header goes here.
'Code to retrieve flight information goes here.
End Function
```

You attempt to build CKFlightService, and discover that it does not compile. You need CKFlightService to compile.

What should you do?

A. Change the declaration of the keyHeader variable from public to private.

B. Set the memberName parameter of the SoapHeader attribute to "keyHeader".

C. Set the Direction property of the SoapHeader attribute to SoapHeaderDirection.In.

D. Set the Direction property of the SoapHeader attribute to SoapHeaderDirection.Out.

Answer: B

Explanation: In order for the XML Web service method to receive the contents of the SOAP header, a
member is added to the XML Web service class of a type derived from SoapHeader. The
SoapHeaderAttribute.MemberName contains the member of the XML Web service class representing
the SOAP header contents.
Reference: .NET Framework Class Library, SoapHeaderAttribute.MemberName Property
Incorrect Answers
A: Changing the declaration of keyHeader variable does not achieve much.
C, D: TheSoapHeaderAttribute.Direction property gets or sets whether the SOAP header is intended for the
XML Web service or the XML Web service client or both. This attribute is not the reason of the compile error.

QUESTION 21:

You are creating an XML Web service named Legal Certkiller Service. This service exposes two Web
methods named SendMessage and ReceiveMessage.
SendMessage is used to send highly confidential messages to its customers. ReceiveMessage is used to
receive highly confidential messages from its customers and to process these messages for future use.
You need to ensure that these messages cannot be intercepted and viewed by anyone other than
Legal Certkiller Service and the customers who access Legal Certkiller Service.
Which security mechanism should you use?

A. SSL
B. Authorization
C. Authentication
D. Impersonation

Answer: A

Explanation: Secure Sockets Layer (SSL) meets the requirements of this scenario. SSL encrypts data,
which protects the data from being viewed from outside parties.
Incorrect Answers
B: Authorization is used to assign permissions and rights to users. It is not used to secure transmitted data.
C: Authentication is used to identify users. It is not enough to secure the data transmitted.
D: Impersonation is the ability of a to execute in a security context other than from that of the original user-It
would not help protecting the transmitted data however.

QUESTION 22:

You create a .NET Remoting object named CKPatientinfo that exposes medical patient information.
Because of the confidential nature of the information, you must ensure that the data remains secure.
You want client applications to connect to CKPatientinfo over a secure communication channel. You
want to accomplish this task by writing the minimum amount of code.
What should you do?

A. Create your own host application and use a TcpChannel and BinaryFormatter.

B. Create your own host application and use an HttpChannel and a SoapFormatter.
C. Install CKPatientinfo in an Internet Information Services (IIS) virtual directory.
Configure CKPatientinfo to use a TcpChannel and a BinaryFormatter.
Configure IIS to use SSL.
D. Install CKPatientinfo in an Internet Information Services (IIS) virtual directory.
Configure CKPatientinfo to use an HttpChannel and a SoapFormatter.
Configure IIS to use SSL.

Answer: D

Explanation: To minimize the coding we use IIS to deploy the .NET Remoting Object. We then use SSL
to encrypt the HTTP traffic.
Reference: SSL in WinHTTP
Incorrect Answers
A, B: Creating your own host application would require more coding.
C: SSL encrypts HTTP traffic, not TCP traffic.

QUESTION 23:

You are a software developer at Certkiller .com. You create a .NET Remoting object named
Certkiller ChatServer. Certkiller ChatServer is the central server for a group of chat client applications.
Client applications send string chat messages to Certkiller ChatServer. Certkiller ChatServer then
broadcasts each message to all registered chat client applications. Certkiller ChatServer uses an HTTP
remoting channel to communicate with the client applications.
The Certkiller ChatServer class includes the following code segment.
' The event class code follows.
<Serializable()> _
Public Class SubmissionEventArgs
Inherits EventArgs
Public Property User() As String
' Property code goes here.
End Property
Public Property Message() As String
' Property code goes here.
End Property
' Remaining implementation goes here.
End Class
' The delegate code follows.
Public Delegate Sub SubmisionEventHandler(_
ByVal submissionArgs As SubmissionEventArgs)
' The event code follows and
' appears within the Certkiller ChatServer class.
Public Event SubmissionEventHandler(_
ByVal sender As Object, _
ByVal submissionArgs As SubmissionEventArgs)
You need to write a client application that includes a class named Certkiller ChatClient to communicate

with Certkiller ChatServer. You want Certkiller ChatClient to sned and display chat messages.
What should you do?

A. Implement the IDeserializationCallBack interface on Certkiller ChatClient.
Implement an event handler for the Submission event.
B. Derive Certkiller ChatClient from System.Object.
Implement the ISerializable interface.
Implement an event handler for the Submission event.
C. Implement the ISerializable interface in Certkiller ChatClient.
Implement an event handler for the Submission event.
Host Certkiller ChatClient in Internet Information Services (IIS) by using a Web.config file.
D. Derive Certkiller ChatClient from MarshalByRetObject.
Implement an event handler for the Submission event.
Configure Certkiller ChatClient to listen on an HttpChannel.

Answer: D

Explanation:
All we want to do is to implement the event handler for the submission event and configure the Certkiller Client to listen to a Http channel.
We also need to assure that this client is an MBR.
Incorrect answers :

A. IDeserializationCallBack is no good in this scenario.
B. The client in this very scenario must be derived from MBR.
C. ISerializable is no good in this scenario, besides the client is not hosted.

QUESTION 24:

You create a .NET Remoting object named AdminService, which is hosted in Internet Information Services (IIS). The object uses an HttpChannel and a BinaryFormatter.
AdminService is in an assembly named AdminService.dll. The URL for AdminService is http://LocalHost/AdminService/AS.rem.
You write a test console application named Tester.exe to test the AdminService interface. Tester.exe includes the following code segment:

```
Module Tester
Sub Main()
Dim service As New AdminService()
End Sub
End Module
```

You write a configuration file for Tester.exe. The configuration file is named Tester.exe.config and includes the following code segment:

```
<configuration>
<system.runtime.remoting>
<application>
<client>
```

```
<wellknown
url="http:// Certkiller Srv/AdminService/AS.rem"
type="AdminService, AdminService"
/>
</client>
</application>
</system.runtime.remoting>
</configuration>
```

You run Tester.exe. The application immediately throws a System.NullReferenceException. The exception includes the following message: "Object reference not set to an instance of an object." You need to resolve this exception.

What should you do?

A. To the application element of the Tester.exe.config file, add the following code segment:
```
<channels>
<channel ref="http">
<clientProviders>
<formatter ref="binary"/>
</clientProviders>
</channel>
</channels>
```
B. Replace the use of the AdminService constructor in Tester.exe with the following code segment:
```
Dim o as Object
o = Activator.CreateInstance(GetType(AdminService))
service = CType(o, AdminService)
```
C. At the beginning of the Main method in Tester.exe, add the following line of code:
```
RemotingConfiguration.Configure("Tester.exe.config")
```
D. Rename the configuration file from Tester.exe.config to Tester.config.

Answer: C

Explanation: To use the remoting settings in the Tester.exe.config file, we must call RemotingConfiguration.Configure on the application configuration file name.
Note: Developers publishing or consuming remotable objects are responsible for configuration of the .NET Remoting system so that applications using .NET Remoting work correctly. You can do this programmatically, or using the application configuration file or the machine configuration file.
Reference: .NET Framework Developer's Guide, Remote Object Configuration
Incorrect Answers
A, B: There is no need to change the application configuration file.
D: The current file name is appropriate.

QUESTION 25:

You have a .NET Remoting object named CKScheduler. The CKScheduler class is in an assembly file named TaskScheduler.dll. The CKScheduler class is hosted by an application named SchedulerServer.exe. This application is configured by using a file named SchedulerServer.exe config.

This file configures the CKScheduler class to be a client-activated object by using a TcpChannel and a BinaryFormatter.
You want to deploy the CKScheduler object to a computer named Certkiller 1 so that client applications can begin to use it.
You copy CKTaskScheduler.dll, SchedulerServer.exe, and SchedulerServer.exe.config to a directory on Certkiller 1.
What should you do next?

A. Install CKTaskScheduler.dll in the global assembly cache.
B. Use the Assembly Registration tool (Regasm.exe) on Certkiller 1 to register SchedulerServer.exe.
C. Use the Assembly Registration tool (Regasm.exe) on Certkiller 1 to register CKTaskScheduler.dll.
D. Configure Certkiller 1 to execute SchedulerServer.exe each time Certkiller 1 is restarted.
Then manually execute SchedulerServer.exe on Certkiller 1.

Answer: D

QUESTION 26:

You are a software developer at Certkiller .com. You create a .NET Remoting object named
Certkiller RemoteObject in an XML Web service named Certkiller WebService. All method calls made on
Certkiller RemoteObject are routed to a single instance of this object. The state of Certkiller RemoteObject
must be maintained between method calls.
You need to register Certkiller RemoteObject as a well-known object provided by Certkiller WebService.
You want to accomplish this goal by adding code to the Web.config file of Certkiller WebService.
Which code segment should you use?

A. <wellknown mode="Singleton" type=" Certkiller RemoteObject,
Certkiller WebService"
objectUri=" Certkiller WebService.rem" />
B. <wellknown mode="Singleton"
type=" Certkiller WebService. Certkiller RemoteObject, Certkiller WebService"
objectUri=" Certkiller RemoteObject.rem" />
C. <wellknown mode="SingleCall" type=" Certkiller RemoteObject,
Certkiller WebService"
objectUri=" Certkiller WebService.rem" />
D. <wellknown mode="SingleCall"
type" Certkiller WebService. Certkiller RemoteObject, Certkiller WebService"
objectUri=" Certkiller RemoteObject.rem" />

Answer: A

QUESTION 27:

You are a software developer at Certkiller .com. You create an XML Web service named
AutoPartsService that processes automobile part orders. This service exposes a Web method named
Place Certkiller Order, which is shown in the following code segment:

<WebMethod(TransactionOption.RequiresNew)> _
Public Function Place Certkiller Order(ByVal orderData As _
DataSet) As DataSet
Dim brakes As New Server1.BrakesService()
Dim parts As New Server2.PartsService()
' Call OrderBrakes to orderbrakes.
brakes.OrderBrakes(orderData.Tables("Brakes"))
' Call OrderParts to Order all other autp parts.
parts.OrderParts(orderData.Tables("Parts"))
End Function
BrakesService and PartsService are XML Web services. The TransactionOption property of
OrderBrakes and OrderParts is set to TransactionOption.Required.
You develop a Windows Forms application named MyPartOrderApp that consumes AutoPartsService.
You run MyPartOrderApp and place an order for three sets of brakes and four wheels. While
Place Certkiller Order is placing the order for the whets, you close MyPartsOrderApp.
What is the most likely result?

A. OrderParts stops processing the order, and all orders are cancelled.
B. OrderParts continues processing the order, and all orders are placed.
C. OrderParts stops processing the order, the brakes are ordered, but the wheels are not ordered.
D. OrderParts stops processing the order, the brakes are not ordered, but the wheels are ordered.

Answer: C

QUESTION 28:

You are a software developer at Certkiller .com. You are developing a maintenance application to retrieve
data from two tables in a Microsoft SQL Server database. The tables are named Products and
Categories.
You want to populate two DataSet objects named productsDataSet and categoriesDataSet, which will be
used in the application.
You instantiate a SqlConnection object named myConnection and a SqlDataAdapter object named
myDataAdapter. You write and run the following code segment. (Line numbers are included for
reference only.)
01 'Code to initialize myDataAdapter goes here.
02 myDataAdapter.SelectCommand.CommandText = "SELECT" _
03 & "CategoryName, Description FROM Categories"
04 myConnection.Open()
05 myDataAdapter.Fill(categoriesDataSet, "Categories")
06 myConnection.Close()
07 myConnection.Close()
08 "SELECT ProductID, ProductName FROM Products"
09 myConnection.Open()
10 myDataAdapter.Fill(productsDataSet, "Products")
11 myconnection.Close()
The code gives you the desired results. You need to revise the code to ensure that it processes the data as

quickly as possible.
What should you do?

A. After Lines 06 and 11, add the following line of code:
myConnection.Dispose(9
B. After only line 11, add the following line of code:
myConnection.Dispose()
C. Delete only lines 06 and 09.
D. Delte lines 04, 06, 09, and 11.

Answer: C

Explanation: We still need to open the connection.

QUESTION 29:

You have a .NET Remoting object named Promotions. The Promotions class allows remote client applications to add new product promotions to an online catalog application. The Promotions class is an assembly file named Certkiller .dll.
You have an Internet Information Services (IIS) virtual directory named PromotionsObject. The Certkiller .dll file is in the PromotionsObject\bin directory. You want to host the Promotions class in IIS.
What should you do?

A. Create a Web.config file that includes the following code segment:
<appSettings>
<add key="activation" value="wellknown"/>
</appSettings>
<httpHandlers>
<add verb="*" path="Promotions.rem"
type=" Certkiller , Promotions"/>
</httpHandlers>
B. Create a Web.config file that includes the following code segment:
<appSettings>
<add key="activation" value="wellknown"/>
<add key="mode" value="SingleCall"/>
</appSettings>
<httpHandlers>
<add verb="*" path="Promotions.rem"
type=" Certkiller , Promotions"/>
<httpHandlers>
C. Create a Web.config file that includes the following code segment:
<configuration>
<system.runtime.remoting>
<application>
<service>
<wellknown>

```
mode="SingleCall" objectUri="Promotions.rem"
type="Promotions, Certkiller "/>
</service>
<channels>
<channel ref="http"/>
</channels>
</application>
</system.runtime.remoting>
</configuration>
```
D. Create a Web.config file that includes the following code segment:
```
<configuration>
<system.runtime.remoting>
<application>
<service>
<wellknown
mode="SingleCall" objectUri="Promotions.rem"
type="Promotions, Certkiller "/>
</service>
<channels>
<channel ref="tcp" port="8080">
<serverProviders>
<formatter ref="soap"/>
</serverProviders>
</channel>
</channels>
</application>
</system.runtime.remoting>
<configuration>
```

Answer: C

Explanation: The HTTP channel does not require a custom-written listener because IIS provides the listening functionality. Advantages of using IIS as the HTTP listener include: ease of configuration, scalability, and process recycling.
Reference: Visual Studio Samples: Fitch and Mather 7.0, .NET Remoting
Incorrect Answers
A, B: These are inadequate since we want to host the application on the IIS server. We must, for example, configure channels.
D: TCP channel would require development of an extra listener to process the request that enters the TCP channel.

QUESTION 30:

You create a class named BankAccount that represents a customer's bank account. BankAccount includes the following code segment:
Public Class BankAccount

Public ReadOnly
Property AccoundId() As String
Get
Return acctId
End Get
End Property
Public ReadOnly Property Balance() As Decimal
Get
Return bal
End Get
End Property
Sub New(ByVal AccoundId As String, ByVal balance As Decimal)
acctId=AccoundId bal = balance
End Sub
Private acctId As String
Private Bal As Decimal
End Class
You are now creating a .NET remoting object named Teller. The Teller Class returns lists of
BankAccount objects.
You anticipate that large numbers of client applications will use the Teller object to retrieve
BankAccount objects. You must ensure that network traffic is minimized.
What should you do?

A. Add the Serializable attribute to the BankAccount class.
B. Add the NonSerialized attribute to the BankAccount class.
C. Derive the BankAccount class from MarshalByRefObject.
D. Implement the ISerializable interface in the BankAccount class.

Answer: D

Explanation: The basic concept of object serialization is the ability to read and write objects to streams.
This would, in this scenario, ensure that network traffic is minimized. The most effective method to
implement serialization is to implement ISerializable interface and serialize only the required fields.
Reference: .NET Framework Developer's Guide, Serialization guidelines
.NET Framework Class Library, ISerializable Interface
Incorrect Answers
A: It is possible to serialize the entire class with the Serializable attribute. However, this would not minimize
network traffic.
B: We want to serialize to minimize network traffic through use of streams.
C: The MarshalByRefObject enables access to objects across application domain boundaries in applications
that support remoting. This is not called for in this scenario.

QUESTION 31:

You creating Windows-based application named CertK WinApp. To the application, you add a Windows
Form named MyForm and a reference to a SingleCall .Net Remoting object named TheirObject.

You need to ensure that MyForm creates an instance of TheirObject to make the necessary remote object calls.
Which code segment should you use?

A. RemotingConfiguration.RegisterActivatedClientType(_
GetType(TheirObject) ,
http:// Certkiller Server/TheirAppPath/TheirObject.rem)
Dim theirObject As New TheirObject()
B. RemotingConfiguration.RegisterWellKnownClientType(_
GetType(TheirObject) ,
http:// Certkiller Server/TheirAppPath/TheirObject.rem")
Dim theirObject As New TheirObject()
C. RemotingConfiguration.RegisterActivatedServiceType(_
GetType(TheirObject) ,
Dim theirObject As New TheirObject()
D. RemotingConfiguration.RegisterWellKnownServiceType(_
GetType(TheirObject) ,
http:// Certkiller Server/TheirAppPath/TheirObject.rem", _
WellKnownObjectMode.Singleton)
Dim theirObject As New TheirObject()

Answer: B

Explanation: The RemotingConfiguration Class provides various static methods for configuring the remoting infrastructure. The RegisterWellKnownClientType method registers an object Type on the client end as a well-known type (single call or singleton).
Reference: .NET Framework Class Library, RemotingConfiguration Members
Incorrect Answers
A: The RegisterActivatedClientType method registers an object Type on the client end as a type that can be activated on the server.
C: The RegisterActivatedServiceType method registers an object Type on the service end as one that can be activated on request from a client.
D: The RegisterWellKnownServiceType method registers an object type on the service end as a well-known type (single call or singleton).

QUESTION 32:

You create an XML Web service named WeatherService. This service contains a Web method named RetrieveWeather. RetrieveWeather takes as input a city named and returns the current weather conditions for that city.
You need to provide callers of this service with the URL they need to issue an HTTP-GET against WeatherService.
Which URL should you use?

A. http:// Certkiller Srv/AppPath/WeatherService.asmx/cityname=somecity
B. http:// Certkiller Srv/AppPath/WeatherService.asmx/RetrieveWeather?cityname=somecity

C. http:// Certkiller Srv/AppPath/WeatherService/RetreieveWeather.asmx?cityname=somecity
D. http:// Certkiller Srv/AppPath/WeatherService/RetrieveWeather?cityname=somecity

Answer: B

QUESTION 33:

You create an XML Web service project named LocalizationService. LocalizationService consists of two
XML Web services named ContentService and UserService. Each service contains a Web method named
Save.
The Web method signatures are shown in the following code segments:
1. <WebMethod ()> Public Function Save(ByVal contentInfo As DataSet)As
DataSet
2. <WebMethod()> Public Function Save(ByVal userInfo As DataSet) As DataSet
You are developing an ASP.NET application that will consume LocalizationService. You add a Web
reference to the services. You discover that UserService is missing from the resulting proxy class that is
generated by Visual Studio .NET. You need to correct the problem in LocalizationService.
What should you do?

A. Set the Name property of the WebService attribute on ContentService and UserService to a unique name.
B. Set the NameSpace property of the WebService attribute on ContentService and UserService to a unique
URI.
C. Set the Description property of the WebMethod attribute on ContentService and UserService to a unique
description.
D. Set the MessageName property of the WebMethod attribute on ContentService and UserService to a unique
message name.

Answer: D

Explanation: Changing different MessageName property will solve this problem. The MessageName
property of the WebMethod attribute enables the XML Web service to uniquely identify overloaded
methods using an alias. Unless otherwise specified, the default value is the method name. When
specifying the MessageName, the resulting SOAP messages will reflect this name instead of the actual
method name. For more information, see WebMethodAttribute.MessageName Property.

QUESTION 34:

You are creating a serviced component named TravelItinerary. TravelItinerary included the following
code segment:
<Transaction(TransactionOption.Required)>
Public Class TravelItinerary
Inherits ServicedComponent
<AutoComplete()>_
Public Function SaveIntinerary(ByVal travelData_As DataSet) As DataSet
Dim airline As New AirlineServer.AirlineService()
Dim hotel As New HotelServer.HotelService()

airline.ReserveFlight(travelData)
'Code to record reservation in database goes here.
hotel.ReserveHotel(travelData)
'Code to record reservation in database goes here.
Return travelData
End Function
End Class
The TransactionOption property of both ReserveFlight and ReserveHotel is set to
TransactionOption.Required.
You create an application to test TravelItinerary. When the test application is run, an exception is
thrown in HotelService.
How are transactions in TravelItinerary and in each Web service affected by this exception?

A. All transactions are rolled back.
B. Transactions in only HotelService are rolled back.
Transactions in only TravelItinerary and AirlineService remain committed.
C. Transactions in only HotelService and TravelItinerary are rolled back.
Transactions in only AirlineService remain committed.
D. Transactions in only AirlineService and TravelItinerary are rolled back.
Transactions in only HotelService remain committed.

Answer: B

Explanation: Each XML Web service method participates in their own transaction, only the HotelService
transaction is rolled backed.
Note: If an XML Web service method, with a TransactionOption property of Required or RequiresNew invokes
another XML Web service method with a TransactionOption property of Required or RequiresNew, each XML
Web service method participates in their own transaction, because an XML Web service method can only act as
the root object in a transaction.
Reference: .NET Framework Class Library, WebMethodAttribute.TransactionOption Property
Incorrect Answers
A,C;D: Only the HotelService transaction is rolled backed.

QUESTION 35:

You are creating an XML Web service named HousingService that exposed two Web methods name
SearchHouse and BuyHouses. Prior to deploying the service, you want to customize the default template
that is displayed when a customer makes a request through the browser.
You create a Web Form named HousingServiceDescription.aspx that is a customized version of the
default template. You place the Web Form in the bin directory of the HousingService project.
The Web Form needs to override the default template when a request is made. You need to ensure that
customers who request HousingService though a browser view HousingServiceDescription.aspx.
What should you do?

A. Create a SOAP extension to redirect the user to HousingServiceDescription.aspx.
B. Set the Namespace property of the WebService attribute to the location of HousingServiceDescription.aspx.

C. In the Web.config file, enable tracing and the set TraceMode node to bin\HousingServiceDescription.aspx.
D. In the Web.config file, set the HRef property of the wsdlHelpGenerator node to bin\HousingServiceDescription.aspx.

Answer: D

Explanation: The wsdlHelpGenerator element specifies the XML Web service Help page (an .aspx file) that is displayed to a browser when the browser navigates directly to an ASMX XML Web services page
Reference: .NET Framework General Reference, <wsdlHelpGenerator> Element
Incorrect Answers
A: Soap extensions are used to inspect or modify a message at specific stages in message processing on either the client or the server. It is not useful here.
B: We are not interested in defining a name space.
C: We are not interested in enabling tracing.

QUESTION 36:

You are creating an XML Web service that will consist of a class named Stock. Stock will expose the following public fields:
Symbol, CompanyName, and CurrentPrice.
When serialized by the XMLSerializer, stock will take the following form:
<Stock symbol=">
<Company />
<CurrentPrice />
</Stock>
You need to construct the Stock class.
Which code segment should you use?

A. Public Class Stock
<XmlElementAttribute("symbol")>_
Public Symbol As String
<XmlElementAttribute()>_
Public Company Name As String
Public CurrentPrice As Double
End Class
B. Public Class Stock
Public Symbol As String
<XmlElementAttribute("Company")>_
Public CompanyName As String
Public CurrentPrice As Double
End Class
C. Public Class Stock
<XmlAttributeAttribute("symbol")>_
Public Symbol As String
<XmlElementAttribute("Company")>_
Public CompanyName As String

Public CurrentPrice As Double
End Class
D. Public Class Stock
<XmlAttributeAttribute()>_
Public Symbol As String
<XmlElementAttribute()>_
Public CompanyName As String
<XmlElementAttribute()>_
Public CurrentPrice As Double
End Class

Answer: C

Explanation: XmlAttributeAttribute("symbol") specifies that symbol will be serialized as an XML attribute.
Then we defined a XML element with the XmlElementAttribute("company")
Note: XML serialization is the process of converting an object's public properties and fields to a serial format, XML for example, for storage or transport.
Reference: .NET Framework Developer's Guide, Attributes that Control XML Serialization
Incorrect Answers
A: We should use the XmlAttributeAttribute for symbol.
B: We should use the XmlAttributeAttribute for symbol.
D: Company, not CompanyName, should be defined as an XML element.

QUESTION 37:

You are creating a .NET Remoting object named BankOps. BankOps exposes methods for creating, finding, and modifying objects in a class named BankCustomer. BankCustomer has a large number of read/write properties.
You expect a large number of remote client applications to frequently connect to BankOps. You expect these remote client applications to use many of the BankCustomer properties. You want to ensure that network traffic is minimized.
What should you do?

A. Add the Serializable attribute to the BankCustomer class.
B. Implement the IDisposable interface in the BankCustomer class.
C. Derive the BankCustomer class from ContextBoundObject.
D. Derive the BankCustomer class from MarshalByRefObject.
E. Override the inherited InitializeLifetimeService method to return null.

Answer: A

Explanation: Making the Class Serializable would make the properties available.
The easiest way to make a class serializable is to mark it with the Serializable attribute.
Note: The basic idea of serialization is that an object should be able to write its current state, usually indicated by the value of its member variables, to persistent storage. Later, the object can be re-created by reading, or

deserializing, the object's state from the storage.
Reference:
.NET Framework Class Library, MarshalByRefObject Class
Incorrect Answers
B: The IDisposable interface defines a method to release allocated unmanaged resources.
C: A context is a set of properties or usage rules that define an environment where a collection of objects resides.
The rules are enforced when the objects are entering or leaving a context. Objects that reside in a context and are bound to the context rules are called context-bound objects.
D: A MarshalByRefObjec enables access to objects across application domain boundaries in applications that support remoting.
The InitializeLifetimeService method obtains a lifetime service object to control the lifetime policy for this instance.

QUESTION 38:

You are creating an XML Web service that will be accessed by callers who cannot use SSL encryption because if firewall restrictions. To protect sensitive data, you want to encrypt a portion of the data returned from the service by using objects in the Cryptography namespace.
The service will use a standard encryption routine to encrypt the data before it is sent to the caller. The caller will decrypt the data by using instructions provided by you.
You need to write code to encrypt the sensitive data that is in a local variable named CertK Data. First, you create an instance of a Cryptography Service Provider.
What should you do next?

A. Create an Encryptor object that passes in a key and an initialization vector (IV) as parameters.
Call the GetHashCode method of the Encryptor object to generate a new hash code.
Convert the generated hash code to a stream and use the CryptoStream object to write the value of the hash code to an encrypted stream.
Convert the output stream to a string.
B. Create a UnicodeEncoding object and use it to encode the value of CertK Data into a byte array.
Use the ComputeHash method of the Cryptography Service Provider to create a hash from the encoded byte array.
Convert the output of ComputeHash from a byte array to a string.
C. Create a UnicodeEncoding object and use it to encode the value of CertK Data into a byte array.
Use the GetHashCode method of the Cryptography Service Provider to create a hash from the encoded byte array.
Convert the output of GetHashCode from a byte array to a string.
D. Create an Encryptor object that passes in a key and an initialization vector (IV) as parameters.
Create a CryptoStream object that passes in an output stream and the Encryptor object as parameters.
Convert CertK Data to a stream and use the CryptoStream object to write the value of CertK Data to an encrypted stream.
Convert the output stream to a string.

Answer: D

Explanation: The common language runtime uses a stream-oriented design for cryptography. The core of this design is CryptoStream.
The SymmetricAlgorithm.CreateEncryptor Method creates a symmetric encryptor object with the current Key and initialization vector (IV). We then use this encryptor object and pass it to stream. The stream will then be encrypted. The value of myDate can be written to the encrypted stream by the send, and the receiver can retrieve it and decrypt it to a string.
Reference:
.NET Framework Developer's Guide, Encrypting Data [Visual Basic]
.NET Framework Class Library, CryptoStream Class [Visual Basic]
.NET Framework Class Library, SymmetricAlgorithm.CreateEncryptor Method [Visual Basic]
Incorrect Answers
A: The Encryptor object will be required when setting up the CryptoStream. We cannot use a hash code of the Encryptor object.
B, C: UniEncoding is used to convert characters between the Unicode and ASCII standards. UniEncoding is not used for encryption.

QUESTION 39:

You are creating an XML Web service named ListBoxService. This service provides content, such as states, countries, and geographical regions, for use in drop-down list boxes.
ListBoxService contains a Web method named RetrieveRegionsListBox. This method runs a DataSet object that contains every geographical region in the world.
RetrieveRegionsListBox calls a Microsoft SQL Server database to load the DataSet object with region data. You want to minimize the amount of time the method takes to return to the caller.
What should you do?

A. Use a stored procedure to return the data.
B. Store each DataSet object by using the Session object.
C. Set the BufferResponse property of the WebMethod attribute to false.
D. Set the CacheDuration property of the WebMethod attribute to an interval greater than zero.

Answer: D

Explanation:
The BufferResponse property denotes the number of seconds the response should be held in the cache.
The default is 0, which means the response is not cached. Caching the response would improve performance.
Reference:
.NET Framework Class Library, WebMethodAttribute.CacheDuration Property [Visual Basic]
.NET Framework Class Library, WebMethodAttribute.BufferResponse Property [Visual Basic]
Incorrect Answers
A: A stored procedure is located at the SQL Server computer. It improves performance, especially if the code is run repeatedly. However, this is not the case in this scenario.
B: Storing each DataSet object by using session object would increase the overhead.
C: The WebMethodAttribute.BufferResponse property gets or sets whether the response for this request is buffered. Setting the value to false would not buffer the request.

QUESTION 40:

You are creating an XML Web service that tracks employee information. The service contains a Web method named Retrieve Certkiller Employees. The service also contains a base class named Employee and two classes named Manager and Engineer, which are derived from Employee.
Retrieve Certkiller Employees takes a roleID as input that specifies the type of employee to retrieve, either Manager or Engineer. Retrieve Certkiller Employees returns an array type Employee that contains all employees that are in the specified role.
You want to ensure that Manager and Engineer object types can be returned from
Retrieve Certkiller Employees.
What should you do?

A. Set the TypeName property of the XmlType attribute to Employee for both Manager and Engineer.
B. Apply two XmlInclude attributes to Retrieve Certkiller Employees, one of type Manager and one of type Engineer.
C. Apply an XmlRoot attribute to the Employee class
Apply an XmlAttribute attribute to the Manager and Engineer classes.
D. Apply an XmlRoot attribute to the Employee class
Apply an XmlElement attribute to the Manager and Engineer classes.

Answer: B

Explanation:
The XmlIncludeInclue alows the XmlSerializer to recognize a type when it serializes or deserializes an object. We specify the two types as XmlInclude attributes to our serialzer Retrieve Certkiller Employees.
Reference:
.NET Framework Class Library, XmlIncludeAttribute Class
.NET Framework Class Library, XmlRootAttribute Class
Incorrect Answers
A: The XmlAttributes.XmlType property gets or sets an object that specifies how the XmlSerializer serializes a class to which the XmlTypeAttribute has been applied.
C: The XMLRoot attribute is not useful here.
Note: The XmlRootAttribute identifies a class, structure, enumeration, or interface as the root (or top-level) element of an XML-document instance.*
The XmlAttributes.XmlAttribute property gets or sets an object that specifies how the XmlSerializer serializes a public field or public read/write property as an XML attribute.
D: The XMLRoot attribute is not useful here.
Note: The XmlAttribute Indicates that a public field or property represents an XML element when the XmlSerializer serializes or deserializes the containing object.

QUESTION 41:

You create an XML web service that retrieves data from Microsoft SQL Server database. You instantiate a SqlConnection object named CertK Connection and set the Max Pool Size property of the connectionString to 50.

All 50 connections are now in use. However, a request for connection number 51 is received.
What is the most likely result?

A. An exception is immediately thrown.
B. The current connection pool is expanded by 50 additional connections.
C. A new connection pool is created that has the same maximum number of connections.
D. The request is queued until a connection becomes available or until the timeout limit is reached.

Answer: D

Explanation: The Max Pool Size property denotes the maximum number of connections allowed in the pool. If the maximum pool size has been reached and no usable connection is available, the request is queued. The object pooler satisfies these requests by reallocating connections as they are released back into the pool. If the time-out period elapses before a connection object can be obtained, an error occurs. Reference: .NET Framework Developer's Guide, Connection Pooling for the SQL Server .NET Data Provider
Incorrect Answers
A: An exception is only thrown after the request has been queued and after the timeout limit is reached.
B: The maximum number of concurrent connections has been reached. No further connections would be allowed at the moment.
C: No new connection pool is created.

QUESTION 42:

You are a software developer at Certkiller .com. You are creating an XML Web service named Certkiller Service that processes stock transactions. Certkiller Service exposes a Web method named BuyStock that takes as input a stock symbol and the number of shares to buy.
You know that callers who consume this service will require that SOAP messages be formatted as document-literal SOAP messages or RPC-encoded SOAP messages.
You need to create a solution that will return both types of SOAP messages. You want to accomplish this task by writing the minimum amount of code.
Which code segment should you use?

A. <WebMethod()>
Public Function BuyStock(ByVal symbol As String, _
ByVal shares As Integer) As Strin
B. <SoapDocumentMethod(), WebMethod()> _
Public Function BuyStock(ByVal symbol As String, _
ByVal shares As Integer) As String
C. <SoapRpcMethod(), WebMethod()> _
Public Function BuyStock(ByVal symbol As String, _
ByVal shares As Integer) As String
D. <SoapRpcMethod(), WebMethod()> _
Public Function BuyStockRpc(ByVal symbol As String, _
ByVal shares As Integer) As String
<SoapDocumentMethod(), WebMethod()> _
Public Function BuyStockDoc(ByVal symbol As Strng, _

ByVal shares As Integer) As String

Answer:

QUESTION 43:

You are creating an XML Web service named CKStockService. The service contains a Web method named RetrieveStockInfo.
RetrieveStockInfo takes as input a stock symbol and returns a DataSet object that contains information about that stock. You want to capture all incoming SOAP messages in RetrieveStockInfo and write the messages to a file for future processing.
What should you do?

A. Enable sessions in RetrieveStockInfo.
B. Create a SOAP extension for RetrieveStockInfo.
C. Apply a SoapHeader attribute to RetrieveStockInfo.
D. Apply a SoapRpcMethod attribute to RetrieveStockInfo.

Answer: B

Explanation: The ASP.NET SOAP extension architecture revolves around an extension that can inspect or modify a message at specific stages in message processing on either the client or the server. A SOAP extension would allow the capture and processing of SOAP messages.
Reference: .NET Framework Class Library, SoapExtension Class
Incorrect Answers
A: Would not help.
C: SoapHeader is applied to an XML Web service method or an XML Web service client to specify a SOAP header the Web service method or XML Web service client can process.
D: Applying the SoapRpcMethodAttribute to a method specifies that SOAP messages sent to and from the method use RPC formatting. This would not help in capturing the SOAP messages however.

QUESTION 44:

You create an XML Web service named CertK 1 that exposed your company's inventory data. This data is used by other companies to place orders. CertK 1 must conform to existing formatting standards for inventory data.
You deploy CertK 1. You discover that some client applications are rejecting your XML formatting because the XML is inconsistent with the expected standard. You want to debug this problem by tracing the XML responses.
What should you do?

A. In the Web.config file, enable tracing by setting the enabled attribute of the trace element to "true".
B. Inside each Web method, use the Debug class to write the contents of the inherited Context.Response property to a log file.
C. Create a SOAP extension to log the SoapMessageStage.AfterSerialize output to a log file.
D. On each Web method, use the SoapHeader attribute to map all SOAP headers to a member variable for the

CertK 1 class.
Then use the Trace.WriteLine method to log the headers to a log file.

Answer: C

Explanation: The AfterSerialize stage occurs after a SoapMessage is serialized, but before the SOAP message is sent over the wire. Logging the output of this stage is useful in this scenario.
Reference: .NET Framework Class Library, SoapMessageStage Enumeration [Visual Basic]

QUESTION 45:

You are creating an XML Web service that processes highly confidential messages. The service exposed a Web method named RetrieveMessage that takes as input a code name and returns an encrypted message. You create a SOAP extension and override the extension's ProcessMessage method so that you can encrypt the message before it is sent back to the caller.
You need to encrypt only the data within the RetrieveMessageResult node of the SOAP response. You create a function named EncryptMessage that encrypts the RetrieveMessageResult node. You need to ensure that this method gets called before sending the message back to the caller.
During which SoapMessageStage should you call EncryptMessage?

A. BeforeSerialize
B. AfterSerialize
C. BeforeDeserialize
D. AfterDeserialize

Answer: B

Explanation: An encryption SOAP extension might encrypt the XML portion of the SOAP message, after ASP.NET serializes the client's arguments, and then decrypt the SOAP message on the Web server before ASP.NET deserializes the SOAP message. The SOAP extension is encrypting in the AfterSerialize stage and decrypting in the BeforeDeserialize stage.
Note: The AfterSerialize stage occurs just after a SoapMessage is serialized, but before the SOAP message is sent over the wire.
Reference:
.NET Framework Developer's Guide, Altering the SOAP Message Using SOAP Extensions
.NET Framework Class Library, SoapMessageStage Enumeration
Incorrect Answers
A: The BeforeSerialize stage occurs just prior to a SoapMessage being serialized.
C: The BeforeDeserialize stage occurs just before a SoapMessage is deserialized from the SOAP message sent across the network into an object.
D: The AfterDeserialize stage occurs just after a SoapMessage is deserialized from a SOAP message into an object.

QUESTION 46:

You are a software developer at Certkiller .com. You create a serviced component named Certkiller Trader

that processes stock traders. Certkiller Trader uses multiple transactional data sources to verify and execute a stock trade.

The Certkiller Trader class includes the following code segment:

Public Class Certkiller Trader
Inherits ServicedComponent
Public Sub PurchaseStock(ByVal c as Customer, _
ByVal o as Order)
' Method implementation goes here.
End Sub
End Class

You want to ensure that the PurchaseStock method either successfully completes the trade or reliably aborts the trade.

Which two actions should you take? (Each correct answer presents part of the solution. Choose two)

A. Implement the ITransaction interface in the Certkiller Trader class.
B. To the PurchaseStock method, add the following attribute:
<AutoComplete()>
C. To the Certkiller Trader class, add the following attribute:
<Transaction(TransactionOption.Required)>
D. To the Certkiller Trader class, add the following attribute:
<JustInTimeActication(False)>
E. To the PurchaseStock method, add the following code segment:
If (ContextUtil.IsInTransaction) Then
ContectUtil.SetComplete()
End If

Answer: A, C

QUESTION 47:

You develop an ASP.NET application that consumes a third-party XML Web service named CreditService. CreditService contains a Web method named ChargeCard. ChargeCard takes as input a credit card number, a billing address, and a monetary amount and returns a Boolean variable that indicated whether or not the card was charged.

Calls to ChargeCard take one minute to complete. You do not want users to have to wait while ChargeCard executes. You wan users to be taken automatically to the next Web page of application. Which code segment should you use to call CreditService?

A. CreditService.ChargeCard(ccNumb,_
billAddress, amount)
Server.Transfer("process.aspx")
B. CreditService.ChargeCard(ccNumb,_
billAddress, amount)
Response.Redirect("process.aspx")
C. CreditService.BeginChargeCard(ccNumb, billAddress,_
amount, New AsyncCallback(AddressOf_

CCResponse), Nothing)
Server.Transfer("process.aspx")
Private Sub CCResponse(aRes As IAsyncResult)
CreditService.EndChargeCard(aRes)
End Sub
D. Dim AsyncResult As IasyncResult
AsyncResult = CreditService.BeginChargeCard(ccNumb,_
billAddress, amount, Nothing, Nothing)
AsyncResult.AsyncWaitHandle.WaitOne()
CreditService.EndChargeCard(AsyncResult)
Server.Transfer("process.aspx")

Answer: C

Explanation: AsyncCallback provides a way for client applications to complete an asynchronous
operation. This callback delegate is supplied to the client when the asynchronous operation is initiated.
The event handler referenced by AsyncCallback contains program logic to finish processing the
asynchronous task for the client.
Reference:
.NET Framework General Reference, Asynchronous Programming Design Pattern [Visual Basic]
.NET Framework Class Library, AsyncCallback Delegate [Visual Basic]
Incorrect Answers
A, B: Asynchronous operation is not set up.
D: We must use the AsyncCallback delegate.

QUESTION 48:

You are developing an application named Certkiller App by using Visual C# .NET and Visual Basic .NET.
The application will use functions form a DLL written in unmanaged code.
One function requires the calling application to allocate unmanaged memory, fill it with data, and pass
the address of the memory to the function. On returning from the function, the calling application must
deallocate the unmanaged memory.
You need to decide how your application will handle unmanaged memory.
What should you do?

A. Use a byte array.
B. Use the methods of the Marshal class.
C. Use the methods of the MemoryStream class.
D. Derive a new class from the Stream class, and override the allocation methods.

Answer: B

Explanation: The Marshal class provides a collection of methods pertaining to allocating unmanaged
memory, copying unmanaged memory blocks, and converting managed to unmanaged types.
Reference: .NET Framework Class Library, Marshal Class [Visual Basic]
Incorrect Answers

A, D: Bytes and streams can not be used for allocating and deallocating memory.
C: The MemoryStream class creates a stream whose backing store is memory.

QUESTION 49:

You are creating an XML Web service named Tracker to track orders for your company. Tracker includes a Web method named OrderStatus for tracking the status of individual orders. You anticipate that many client applications will use the service.
You want administrators of Tracker to be able to monitor the requests per second for OrderStatus.
Which code segment should you use?

A. Dim counter As New PerformanceCounter("Tracker",_
" Certkiller OrderStatus req/sec", False)
B. PerformanceCounterCategory.Create("Tracker",_
"category", " Certkiller OrderStatus req/sec", "req/sec")
C. Dim counterData() As CounterCreationData =_
{New CounterCreationData(" Certkiller OrderStatus req/sec",
"help", PerformanceCounterType.RateOfCountsPerSecond32)}
Dim collection As New_
CounterCreationDataCollection(counterData)
PerformanceCounterCategory.Create("Tracker",_
"Tracker performance counters", collection)
D. Dim counterData() As CounterCreationData =_
{New CounterCreationData("Int32", "second",_
PerformanceCounterType.AverageTimer32)}
Dim collection As New_
CounterCreationDataCollection(counterData)
PerformanceCounterCategory.Create("OrderStatus",_
"requests per second", collection)}

Answer: C

Explanation: A CounterCreationData object defines the counter type, name, and help string for a custom counter. A counter with the RateOfCountsPerSecond32 PerformanceCounterType is a difference counter that shows the average number of operations completed during each second of the sample interval.
Reference: .NET Framework Class Library, CounterCreationData Class [Visual Basic]
.NET Framework Class Library, PerformanceCounterType Enumeration [Visual Basic]
Incorrect Answers
A: The use of the PerformanceCounter constructor is incorrect. The first parameter should be categoryName and the second parameter should be counterName.
B: Just creating a new PerformanceCounterCategory would not enable us to use any new counters.
D: We want to measure the requests per second not the average time it takes to complete the process. We should not use the PerformanceCounterType of AverageTimer32.
Note: An AverageTimer32 counter is an average counter that measures the time it takes, on average, to complete a process or operation.

QUESTION 50:

You are creating an XML Web service named CertK Service. This service has a function named WriteMessage that writes messages to a flat file in the C:\CKServiceLog directory.
You want to implement security for WriteMessage so that WriteMessage and all the code it calls can write messages only to the CKServiceLog directory.
Which code segment should you use?

A. Dim filePermission As New
FileIOPermission_(FileIOPermissionAccess.Write, "C:\CKServiceLog")
filePermission.Demand()
B. Dim filePermission As New FileIOPermission_(FileIOPermissionAccess.Write,
"C:\CKServiceLog") filePermission.Deny()
C. Dim filePermission As New FileIOPermission_(FileIOPermissionAccess.Write,
"C:\CKServiceLog") filePermission.PermitOnly()
D. Dim filePermission As New
FileIOPermission_(FileIOPermissionAccess.Write, "C:\CKServiceLog")
filePermission.Assert()

Answer: C

Explanation: The CodeAccessPermission.PermitOnly method prevents callers higher in the call stack from using the code that calls this method to access all resources except for the resource specified by the current instance.
Reference:
.NET Framework Developer's Guide, PermitOnly
.NET Framework Class Library, CodeAccessPermission.Demand Method
.NET Framework Class Library, CodeAccessPermission.Assert Method
Incorrect Answers
A: We want to grant permission, not check the permission.
Note: The CodeAccessPermission.Demand method forces a SecurityException at run time if all callers higher in the call stack have not been granted the permission specified by the current instance.
B: We must allow permission, not deny it.
D: The CodeAccessPermission.Assert method asserts that calling code can access the resource identified by the current permission through the code that calls this method, even if callers higher in the stack have not been granted permission to access the resource.

QUESTION 51:

Certkiller Inc. provides a credit card processing application for its customers. The current application supports only computers that run on a Microsoft Windows operating system.
You are asked to rewrite the current application as a .NET application. This .NET application does not need to be backward compatible with the current application.
You must ensure that this new application meets the following requirements:
1. Must support asynchronous processing.
2. Must be able to pass data through firewalls.

3. Must pass only SOAP-Compliant formatted data validated by using an XSD schema.
4. Must not be limited to client computers running on a Microsoft operating system.
You want to accomplish this task by using the minimum amount of development effort.
Which type of .NET application should you use?

A. Windows service
B. XML Web service
C. Serviced component
D. .NET Remoting object

Answer: B

Explanation: An XML Web service would:
* support asynchronous processing.
* XML traffic would be allowed to passed through firewalls
* can use SOAP-compliant formatted data validated by an XSD schema.
* could be implemented on heterogeneous systems.
Reference: Designing Distributed Applications with Visual Studio .NET, Programming the Web with XML Web Services
Incorrect Answers
A: A Windows service can only run on a Windows computer.
C: Serviced components cannot be run on heterogenous systems.
Note: A serviced component is a class that is authored in a CLS-compliant language and that derives directly or indirectly from the System.EnterpriseServices.ServicedComponent class. Classes configured in this way can be hosted by a COM+ application and can use COM+ services.
D: .NET Remoting objects can be run on different operating systems. However, a XML Web service meets the requirement in a better way.

QUESTION 52:

You are creating an XML Web service that provides a daily quotation from literary works to its customers. This quotation is requested in many different languages, thousands of times every day, and by thousands of Web sites operating many different platform.
A Web method named GetCKQuotes takes a languageID as input. GetCKQuotes uses this language ID to retrieve a translated version of the daily quotation from a Microsoft SQL Server database and to return that quotation to the customer.
You want to minimize the time it takes to return the translated version.
What should you do?

A. Store each translated quotation by using the Cache object.
B. Store each translated quotation by using the Session object.
C. Set the BufferResponse property of the WebMethod attribute to false.
D. Set the CacheDuration property of the WebMethod attribute to an interval greater than zero.

Answer: A

Explanation: We should store each translated quotation in the Cache, more specifically we use the translation quotation to construct a Cache object.
Reference:
.NET Framework Developer's Guide, Adding Items to the Cache [Visual Basic]
.NET Framework Class Library, WebMethodAttribute.BufferResponse Property
.NET Framework Class Library, WebMethodAttribute.CacheDuration Property [Visual Basic]
Incorrect Answers
B: The Session object is used to store information needed for a particular user-session. The objects would have to be recreated for every single session.
C: The BufferResponse property gets or sets whether the response for this request is buffered. If set to false, no buffering would be used. This is the opposite to the requirements.
Note: Setting BufferResponse to true, serializes the response of the XML Web service method into a memory buffer until either the response is completely serialized or the buffer is full. The default value is True.
D: WebMethodAttribute.CacheDuration property gets or sets the number of seconds the response should be held in the cache.

QUESTION 53:

You are a software developer at Certkiller .com. You are creatinga strongly named assembly. This assembly requires a unique name so it can be identified for security purposes.
Run the following command-line tools:
1. sn -k myKey.snk
2. gacutil.exe /i myDll.dll
Gacutil.exe terminates, and you receive the following error message: "Failure adding assembly to the cache: Attempt to install an assembly without a strong name." You need to correct this problem.
What should you do?

A. Run Al.exe with the /delay+ option.
B. Run sn -i to load the key file into the Cryptographic Service Provider.
C. Insert an AssemblyKeyFile attribute into the assembly to reference myKey.snk.
D. Insert an AssemblyKeyName attribute into the assembly to reference the assembly name.

Answer: C

QUESTION 54:

You are creating an XML Web service named CKHealthInfo. CKHealthInfo exposed patient health records for your client customers. To the beginning of each CKHealthInfo method, you add the following code segment:
Dim uiPerm As New UIPermission(_
UIPermissionWindow.AllWindows,_
UIPermissionClipboard.AllClipboard)
Dim filePerm As New FileIOPermission(_
PermissionState.None)
filePerm.AllFiles = FileIOPermissionAccess.AllAccess

As one part of making HealthInfo as secure as possible, you must ensure that the HealthInfo Web methods do not perform any file I/O or access the user interface.
Which code segment should you use?

A. uiPerm.Deny() filePerm.Deny()
B. uiPerm.Deny() uiPerm.RevertAssert() filePerm.Deny()
C. uiPerm.Deny() uiPerm.RevertDeny() filePerm.Deny()
D. Dim permSet As New PermissionSet(_PermissionState.None)
permSet.AddPermission(uiPerm) permSet.AddPermission(filePerm)
permSet.Deny()

Answer: D

Explanation: We should add permission for uiPerm. We allow access to Windows windows and user input events and permit use of the Clipboard: permSet.AddPermission(uiPerm)
Then we deny filepermission: permSet.AddPermission(filePerm)
Note: AllWindows allows users to use all windows and user input events without restriction.
AllClipBoard allows clipboard to be used without restriction.
Reference: .NET Framework Class Library, UIPermissionWindow Enumeration [Visual Basic]
.NET Framework Class Library, UIPermissionClipboard Enumeration [Visual Basic]
Incorrect Answers
A, B; C: We should not deny access to Windows and user input or to the clipboard. The code uiPerm.Deny() should not be used.

QUESTION 55:

You create a class named Certkiller User that provides user information from a variety of data sources.
Different instances of User connect to different data sources to load the data. User is a read-only representation of user information and does not support writing changes back to a data source.
The User class includes the following code segment:
<Serializable()>
Public Class Certkiller User Public Sub New(String connectionString)
Me.connectionString = connectionString
' Additional construction code goes here.
End Sub
Friend ReadOnly Property ConnectionString() As String
Get
Return connectionString
End Get
End Property
Private connectionString As String
'Other methods and properties go here.
End Class
Once a Certkiller User object has been populated, it no longer needs the connectionString member variable.
You have a .NET Remoting object named Project that returns User objects. You want to prevent remote

client applications from being able to view the contents of the connectionString member variable.
What should you do?

A. Make the ConnectionString property private.
B. Remove the connectionString parameter from the constructor.
C. Add the NonSerialized attribute to the connectionString property.
D. Add the NonSerialized attribute to the connectionString member variable.

Answer: D

Explanation: By making the connectionString member variable NonSerialized it will not be included in serialized data stream and client application from view the contents of it.
Note: A class often contains fields that should not be serialized. We can prevent member variables from being serialized by marking them with the NonSerialized attribute.
Reference: .NET Framework Developer's Guide, Selective Serialization
Incorrect Answers
A: The ConnectionString property would still be included in the serialized data stream.
B: The connectionString parameter must be included to establish a connection.
C: The NonSerialized attribute cannot be added to the connectionString property.

QUESTION 56:

You develop an application that uses a Windows Form, a Microsoft SQL Server database, and several database components. You want to restrict users from writing their own applications to access your application's database components.
You need to configure your database component assemblies to accomplish this goal.
What should you do?

A. Apply the StrongNameIdentityPermission attribute, and specify SecurityAction.LinkDemand.
Set the PublicKey property to the public key of the key file you use to sign your application's assemblies.
B. Apply the StrongNameIdentityPermission attribute, and specify SecurityAction.RequestMinimum.
Set the PublicKey property to the public key of the key file you use to sign your application's assemblies.
C. Apply the PublisherIdentityPermission attribute, and specify SecurityAction.Deny.
D. Apply the PublisherIdentityPermission attribute, and specify SecurityAction.RequestMinimum.

Answer: B

Explanation: The RequestMinimum security action is used to request for the minimum permissions required for code to run. We use the PublicKey property and the public key of our software certificate to protect the assembly.
Reference:
.NET Framework Class Library, SecurityAction Enumeration
Incorrect Answers
A: A link demand causes a security check during just-in-time compilation and only checks the immediate caller of your code.

C, D: The PublisherIdentityPermission represents the identity of a software publisher. However, we have not specified the specified the software publisher. A certificate must be used.

QUESTION 57:

You are developing an ASP.NET application that consumes an XML Web service named AccountInformation. AccountInformation exposes a Web method named GetAccountBalance that expects encrypted user credentials to be passed in the SOAP header.
AccountInformation also exposes a public class named AuthenticateUser. AuthenticateUser has two properties named Username and Password that are both defined as string.
In the application, you create two local variable named encryptedUsername and encryptedPassword that you will use to pass user credentials to GetAccountBalance. You need to write code that will execute the GetAccountBalance Web method.
Which code segment should you use?

A. Dim CKAccountInformation As New AccountInformation()
Dim CKAuthenticateUser As New AuthenticateUser()
CKAuthenticateUser.Username = encryptedUsername
CKAuthenticateUser.Password = encryptedPassword
CKAccountInformation.AuthenticateUserValue = _CKAuthenticateUser
Dim accountBalance As String accountBalance = CKAccountInformation.
GetAccountBalance()
B. Dim CKAccountInformation As New AccountInformation()
Dim CKAuthenticateUser As New AuthenticateUser()
CKAuthenticateUser.Username = encryptedUsername
CKAuthenticateUser.Password = encryptedPassword
Dim accountBalance As String accountBalance =
CKAccountInformation.GetAccountBalance()
C. Dim CKAccountInformation As New AccountInformation()
Dim CKAuthenticateUser As New AuthenticateUser()
Dim Username As New SoapHeaderAttribute("Username") Username.MemberName =
encryptedUserPassword
Dim accountBalance As String accountBalance =
CKAccountInformation.GetAccountBalance()
D. Dim CKAccountInformation As New AccountInformation()
Dim CKAuthenticateUser As New AuthenticateUser()
CKAuthenticateUser.Username = encryptedUsername
CKAuthenticateUser.Password = encryptedPassword
Dim CKSoapHeaderCollection As New SoapHeaderCollection()
CKSoapHeaderCollection.Add(CKAuthenticateUser)
Dim accountBalance As String accountBalance =
CKAccountInformation.GetAccountBalance()

Answer: A

QUESTION 58:

You are creating an XML Web service that generates a SOAP message. Parameter information in the SOAP message must be encrypted.
You write the appropriate code to modify the SOAP message. You also write a method named Encrypt. This method takes a string an argument, encrypts the string, and returns a new string that contains the encrypted string.
Before encryption , the Body element of the SOAP message will be written in the following format.
<soap:Body>
<returnToSender xlmns = http:// Certkiller .com/>
<aString>some date</aString>
</returnToSender>
</soap:Body>
After encryption, the Body element must be written in the following format.
<soap:Body>
<returnToSender xmlns = "http:// Certkiller .com/">
154 37 146 194 17 92 32 139 28 42 184 202 164 18
</returnToSender>
</soap:Body>
You write code to isolate the <returnToSender> XML node in an XmlNode object named theNode.
You now need to write code to encrypt the parameter information.
Which code segment should you use?

A. Dim encrypted as String = Encrypt(theNode.InnerText)
theNode.OuterXml = encrypted
B. Dim encrypted as String = Encrypt(theNode.InnerXml)
theNode.OuterXml = encrypted
C. Dim encrypted as String = Encrypt(theNode.InnerXml)
theNode.InnerXml = encrypted
D. Dim encrypted as String = Encrypt(theNode.OuterXml)
theNode.OuterXml = encrypted
E. Dim encrypted as String = Encrypt(theNode.InnerText)
theNode.InnerText = encrypted

Answer: C

Explanation: First we retrieve the markup representing the child of the node with the InnerXml property. Then we encrypt this string. Finally we set the InnerXml property to this encrypted string.
Note: The XmlAttribute.InnerText property gets or sets the concatenated values of the node and all its children. For attribute nodes, this property has the same functionality as the Value property: it gets or sets the value of the node.
The XmlDocument.InnerXml property gets or sets the markup representing the children of the current node. Setting this property replaces the children of the node with the parsed contents of the given string.
The XmlNode.OuterXml property gets the markup representing this node and all its children.
Reference:
.NET Framework Class Library, XmlDocument.InnerXml Property [Visual Basic]

.NET Framework Class Library, XmlAttribute.InnerText Property [Visual Basic]
.NET Framework Class Library, XmlNode.OuterXml Property [Visual Basic]
Incorrect Answers
A, B: The XmlNode.OuterXml property is read only and cannot be used in the statement:
theNode.OuterXml = encrypted
D: theNode.OuterXml would produce the whole node, however we only want to encrypt the string "some date".
E: Just encrypting the InnerText property would result in a body element
where the <aString> markup still would be present:
<soap:Body>
<returnToSender xmlns = "http:// Certkiller .org/">
<aString>154 37 146 194 17 92 32 139 28 42 184 202 164 18</aString>
</returnToSender>
</soap:Body>

QUESTION 59:

You are developing a Windows-based application that requires the use of a calculation named
CalculateValue. This function includes the following signature:
CalculateValue (x As Integer) As Integer
CalculateValue is located in an unmanaged DLL named UsefulFunctions.dll, and us not part of a COM
interface. You need to be able to use CalculateValue in your application. Your project directory contains
a copy of UsefulFunctions.dll.
While you are working in Debug mode, you attempt to run your application. However, a
System.DllNotFoundException is thrown.
You verify that you are using the correct function name. You also verify that the code in the DLL exposes
CalculateValue. You have not modified the project assembly, and you have not modified machine-level
security. You need to test your application immediately.
What should you do?

A. Move UsefulFunctions.dll to your project's bin directory.
B. Move UsefulFunctions.dll to your project's Debug directory.
C. Immediately before the declaration of CalculateValue, add the following code segment:
<SuppressUnmanagedCodeSecurityAttribute()>_
D. Immediately before the call to CalculateValue, add the following code segment:
Dim perm As New _
SecurityPermission(_
SecurityPermissionFlag.UnmanagedCode)
perm.Assert()

Answer: D

Explanation:
The UnmanagedCode SecurityPermissionFlag denotes the ability to call unmanaged code. The proposed
solution gives permission to run unmanaged code.
Note: The DllNotFoundException is thrown when a DLL specified in a DLL import cannot be found.
Reference:

.NET Framework Class Library, DllNotFoundException Class [Visual Basic]
.NET Framework Class Library, SuppressUnmanagedCodeSecurityAttribute Class [Visual Basic]
.NET Framework Class Library, SecurityPermissionFlag Enumeration [Visual Basic]
Incorrect Answers
A: The dll is located in the Project folder. The debugger should be able to locate the dll file in this folder.
B: No special directory is used for debugging.
C: The SuppressUnmanagedCodeSecurityAttribute allows managed code to call into unmanaged code without
a stack walk. It can be applied to methods that want to call into native code without incurring the performance
loss of a run-time security check when doing so. It only affects performance and would not solve the problem of
this scenario.

QUESTION 60:

You are using Visual Studio .NET to develop an application. You have a common business logic
component that was created in COM that you want to use until you can replace it with Visual Studio
.NET code.
You create the Visual Studio .NET solution for the new application. You want to use the COM
component in your Visual Studio .NET solution.
What should you do?

A. Register the COM component by using Regsvr32.exe.
B. Run the Type Library Exporter (Tlbexp.exe) and pass the COM component as the filename parameter.
C. Use Visual Studio .NET to add a reference to the COM component.
D. Run the Assembly Registration tool (Regasm.exe) and pass the COM component as the filename parameter.

Answer: C

Explanation: We simply need to add a reference to the COM component.
Reference:
.NET Framework Developer's Guide, Registering Assemblies with COM
.NET Framework Tools, .NET Framework Tools
Incorrect Answers
A: Regsrv32 is not required in Visual Studio .NET. Regsrv32 was used for Visual Basic 6.0, and for Visual
C++ 6.0 components.
B: Tlbexp.exe generates a type library from a common language runtime assembly. Tlbexp.exe generates a type
library but does not register it.
D: We only use Regasm.exe when we need to access .NET Framework classes in COM Clients. However, in
this scenario we want to access the COM Component into our Visual Studio .NET solution.
Note: To register or unregister a .NET class with COM, you must run a command-line tool called the Assembly
Registration Tool (Regasm.exe). Regasm.exe adds information about the class to the system registry so COM
clients can use the .NET class transparently.

QUESTION 61:

You are using Visual Studio .NET to develop an application named NewApp to replace a COM-based
application CKOrderProcessing. You are assigned to write a .NET class that will be used by client

applications as a COM object. Your class code is being moved and modified while development continues on the new application.

You want to minimize any possible disruption to the COM interface as a result of code changes.
Which code segment should you use?

A. <ClassInterface()>
Public Class MyClassToExpose
Public Function Calc()as Integer
'Implementation code goes here.
End Function
End Class
B. <Guid("9ED54F84-A89D-4fcd-A854-44251E92F09")>
Public Interface IMyClassToExpose
Public Function Calc() as Integer
End Interface
<ClassInterface(ClassInterfaceType.None)>_
Public Class MyClassToExpose Implements IMyClassToExpose
Public Function Calc() as Integer
'Implementation code goes here.
End Function
End Class
C. <Guid("9ED54F84-A89D-4fcd-A854-44251E92F09"), _ComVisible(true)>_Public
Class MyClassToExpose
Public Function Calc() as Integer
'Implementation code goes here.
End Function
End class
D. <ClassInterface(ClassInterfaceType.AutoDispatch)>
Public Class MyClassToExpose
Public Function Calc() as Integer
' Implementation code goes here.
End Function
End class

Answer: D

Explanation: By using AutoDispatch, we indicate that the class only supports late binding for COM clients. A dispinterface for the class is automatically exposed to COM clients on request. The type library produced by TlbExp does not contain type information for the dispinterface in order to prevent clients from caching the DispId s of the interface. The dispinterface does not exhibit the versioning problems.
Reference: .NET Framework Class Library, ClassInterfaceType Enumeration
Incorrect Answers
A, C: The interface would be disrupted if the implementation of it would be changed.
B: The keyword 'Public' is not valid in an interface method declaration as used for Function Calc.

QUESTION 62:

You are using Visual Studio .NET to develop an application that uses a non-COM DLL named
CertK Functions.dll. This DLL is written in unmanaged code.
The DLL contains a function that parses a string into an array of string words and an array of numbers.
A call to the function includes the following pseudocode:
input = "A string with 6 words and 2 numbers"
words = Nothing
Numbers = Nothing
Parse(input, words, numbers)
After execution, words contains all string words found in input and numbers contains all integers found
in input. You need to enable your application to call this function.
Which code segment should you use?

A. Declare Function Parse Lib " CertK Functions.dll" _
(ByVal input As String, ByVal words() As String, ByVal Numbers() As
Integer) As Integer
B. Declare Function Parse Lib " CertK Functions.dll" _
(ByVal input As String, ByRef Words() As String, ByRef numbers() As
Integer) As Integer
C. Declare Function Parse Lib " CertK Functions.dll" _
(ByRef input As String, ByVal words() As String, ByVal numbers() As
Integer) As Integer
D. Declare Function Parse Lib " CertK Functions.dll" _
(ByRef input As String, ByRef words() As String, ByRef numbers() As
Integer) As Integer

Answer: B

Explanation: Only the value of the input parameter is used by the function so we must use ByVal. The
words and the Numbers parameters on the other hand must be changed by the function. We must pass
these parameters with ByRef.
Note: Functions cannot change a ByVal variables or any of their members. Functions can ByRef variables
and their members.
Reference: Visual Basic Language Concepts, Argument Passing Mechanism
Incorrect Answers
A, C: The Words are and Numbers parameters are changed by the function, they must be passed with ByRef.
D: The input parameter is not changed by function, and therefore ByVal is preferred.

QUESTION 63:

You create a serviced component named OrderProcessor. OrderProcessor implements the IOrderInit
interface. The component and the interface contain the following code segments:
<GuidAttribute("0B6ABB29-43D6-40a6-B5F2-83A457D062AC"), _
InterfaceType(ComInterfaceType.InterfaceIsDual)> _
Public Interface IOrderInit

' IOrderInit methods go here
End Interface
Public Class OrderProcessor
Inherits ServicedComponent
Implements IOrderInit
' OrderProcessor methods go here.
End Class
You discover that every time you rebuild OrderProcessor, existing unmanaged client code fails. The
HRESULT for the exception is 0x80040154.
The exception includes the following message: "Class not registered." You need to resolve this problem.
What should you do?

A. Add a Guid attribute to the OrderProcessor class.
B. Add a ComImport attribute to the IOrderInit interface.
C. To the OrderProcessor class, add the following attribute:
ClassInterface(ClassInterfaceType.AutoDual)
D. To the end of every method, add the following line of code:
Marshal.ReleaseComObject(Me)

Answer: C

Explanation: The class interface, which is not explicitly defined in managed code, is an interface that
exposes all public methods, properties, fields, and events that are explicitly exposed on the .NET object.
This interface can be a dual or dispatch-only interface. Class interfaces are only generated when the
ClassInterfaceAttrribute is set to ClassInterfaceType.AutoDual.
Reference: .NET Framework Class Library, ClassInterfaceAttribute Class
Incorrect Answers
A: The Guid attribute is used to specify a globally unique identifier (GUID) for a class or an interface. This
information is primarily useful for interoperability with COM.
B: When placed on a class, the ComImport attribute marks the class as an externally implemented Com class.
Such a class declaration enables the use of a C# name to refer to a COM class.
D: The Marshal.ReleaseComObject method decrements the reference count of the supplied runtime callable
wrapper

QUESTION 64:

You are developing a Windows-based application that requires the use of a calculation function named
CalculateValue. This function includes the following signature:
Calculate Value(x As Integer) As Integer
CalculateValue is located in an unmanaged DLL named Certkiller Functions.dll, and is not part of a COM
interface. You need to be able to use CalculateValue in your application.
Which action or actions should you take? (Choose all that apply)

A. Use Regsvr32.exe to register Certkiller Functions.dll.
B. Use Visual Studio .NET to add a reference to Certkiller Functions.dll.
C. To your application, add the following code segment:

Imports Certkiller Functions
D. To your application, add the following code segment:
Declare Function CalculateValue_Lib " Certkiller Functions.dll" (x As Integer)

Answer: D

Explanation:
We must identify the function we want to use in the unmanaged dll. The only necessary step is add the code in
D. Reference: .NET Framework Developer's Guide, Consuming Unmanaged DLL Functions
.NET Framework Developer's Guide, A Closer Look at Platform Invoke
Incorrect Answers
A: Regsrv32 is not required in Visual Studio .NET. Regsrv32 was used for Visual Basic 6.0, and for Visual C++ 6.0 components.
B:: Calculate Value is in an unmanaged DLL which is not part of a COM interface. So, you don't have to add any reference to Certkiller Functions. dll.
Note: In Visual Studio .NET IDE you make references to .NET Components, COM components and to other projects, not to Windows native DLLs.
C: We are not using the NameSpace of the unmanaged dll.

QUESTION 65:

You are a software developer at Certkiller .com. You are creating data access components for an XML Web service that retrives data from a Microsoft SQL Server database. The components use the SqlClient data provider.
You estimate that an average of 10 users will use the service concurrently. Therefore, you want to main at least 15 database connections at all times.
What should you do?

A. Set the Packet Size property of the connectionStrin to 15.
B. Set the Max Pool Size property of the connectionString to 15.
C. Set the Min Pool Size property of the connectionString to 15.
D. Set the Connection Lifetime property of the connectionString to 15.

Answer: B

QUESTION 66:

You are a software developer at Certkiller .com. You have a DataSet object named Certkiller DataSet that is populated with data from a Microsoft SQL Server database. This object contains insertions, deletions, and updates to the data.
You want to apply the data changes in Certkiller DataSet to the database. You decide to use the SqlClient data provider.
You need to create a data object that you will use to update the database.
Which code segment should you use?

A. Dim myDataReader As SqlDataReader

B. Dim mySqlDataAdapter As New SqlDataAdapter()
C. Dim myDataObject As New DataObject()
D. Dim myParameter As New SqlParameter()

Answer: B

QUESTION 67:

You are a software developer at Certkiller .com. You are creating a DataSet object that will be populated with information from a table named Products in a Microsoft SQL Server database. The object must include the ProductID, ProductName, and UnitsinStock columns in a DataTable object also named Products.
You instantiate a SqlConnection object named myConnection. You need to write code to populate the DataSet object.
Which code segment should you use?

A. Dim Certkiller ProductsDataSet As New DataSet()
Dim myDataAdapter As New SqlDataAdapter _
("SELECT ProductId, ProductName, UnitsInStock FROM" _
& " Products", myConnection)
myDataAdapter.Fill(Certkiller ProductsDataSet, "Products")
B. Dim Certkiller ProductsDataSet As New DataSet()
Dim myCommand As New SqlCommand
Dim myDataAdapter As New SqlDataAdapter (myCommand)
myCommand.CommandText = "SELECT ProductId, _
ProductsName, " & InitsInStock FROM Products"
MyDataAdaper.Fill(CertKillerProductDataSet, "Products") ;
C. myConnection.Open()
Dim Certkiller ProductsDataSet As New DataSet()
Dim myDataAdapter As New SqlDataAdapter _
("SELECT ProductId, ProductName, UnitsInStock FROM" _
& " Products", myConnection)
myDataAdapter.Fill(Certkiller ProductsDataSet)
D. myConnection.Open()
Dim Certkiller ProductsDataSet As New DataSet()
Dim myDataAdapter As New SqlDataAdapter _
("SELECT ProductId, ProductName, UnitsInStock FROM" _
& " Products", myConnection)
Dim Products As New DataTable();
myDataAdapter.Fill(Certkiller ProductsDataSet)

Answer: A

QUESTION 68:

Your Microsoft SQL Server database has a stored procedure that sums the total number of orders

received each day. The stored procedure returns a result that is a single data value of type integer.
You need to write code that will execute the stored procedure and return the result as an integer value.
You instantiate a SqlCommand object named CertK Command and initialize all appropriate parameters.
Which CertK Command method should you use?

A. ExecuteReader
B. ExecuteNonQuery
C. ExecuteScalar
D. ExecuteXMLReader

Answer: C

QUESTION 69:

Your Microsoft SQL Server database contains a table named Regions. Regions contains all the sales
regions of a sales-tracking application.
You create a DataSet object named regions DataSet by using a SqlDataAdapter object named
CKDataAdapter. This object uses a single SQL SELECT statement to populate the regionsDataSet. You
bind regionsDataSet to a DataGrid object named regionsDataGrid to display the contents of Regions.
You now want to use the same regionsDataSet, CKDataAdapter, and regionsDataGrid to insert, update,
and delete data in Regions.
You want to accomplish this task by writing the minimum amount of code.
What should you do?

A. Instantiate a SqlCommandBuilder object that has CKDataAdapter as a constructor argument.
Add an Update button to the form and add code to the Click event to update regionsDataSet by using
CKDataAdapter.
B. Instantiate a SqlCommandBuilder object that has CKDataAdapter as a constructor argument.
Create one stored procedure for each of the insert, update, and delete functions and associate the stored
procedures with the InsertCommand, UpdateCommand, and DeleteCommand properties of CKDataAdapter.
Add an Update button to the form and add code to the Click event to update regionsDataSet by using
CKDataAdapter.
C. Create one stored procedure for each of the insert, update, and delete functions and associate the stored
procedures with the InsertCommand, UpdateCommand, and DeleteCommand properties of CKDataAdapter.
Add an Update button to the form and add code to the Click event to update regionsDataSet by using
CKDataAdapter.
D. Create one SQL string for each of the insert, update, and delete functions and associate the SQL strings with
the InsertCommand, UpdateCommand, and DeleteCommand properties of CKDataAdapter.
Add an Update button to the form and add code to the Click event to update regionsDataSet by using
CKDataAdapter.

Answer: A

QUESTION 70:

You Microsoft SQL Server database named Certkiller BackOrders that contains a table that consists of

more than 1 million rows. You need to develop an application that reads each row in the table and writes the data to a flat file. The application will run only once each day. You want the application to process the data as quickly as possible.
Which class should you use to retrieve the data?

A. DataSet
B. DataTable
C. DataReader
D. DataAdapter

Answer: C

Explanation: The ADO.NET DataReader is used to retrieve a read-only, forward-only stream of data from a database. Using the DataReader can increase application performance and reduce system overhead because only one row at a time is ever in memory. DataReader would meet the requirements of this scenario.
Reference: .NET Framework Developer's Guide, Retrieving Data Using the DataReader [Visual Basic]
Incorrect Answers
A: Datasets is used when you want to work with a set of tables and rows while disconnected from the data source. It would not be optimal when accessing the amount of data in this scenario. Furthermore, only read-forward access is required.
B: A Data table represents one table of in-memory data.
D: The DataAdapter serves as a bridge between a DataSet and a data source for retrieving and saving data.

QUESTION 71:

Your Microsoft SQL Server database contains a table named Certkiller Customers. Certkiller Customers contains three columns named FamilyName, PersonalName, and Address.
You instantiate a SqlCommand object named myCommand that you will use to populate a DataReader object named customersDataReader. You need to initialize myCommand to load customersDataReader to include FamilyName and PersonalName for all rows in Certkiller Customers.
Which code segment should you use?

A. myCommand.CommandText = "SELECT FamilyName," & "PersonalName FROM Certkiller Customers"
B. myCommand.CommandType = "SELECT FamilyName," & "PersonalName FROM Certkiller Customers")
C. myCommand.Parameters.Add("SELECT FamilyName," & "PersonalName FROM Certkiller Customers")
D. myCommand.ExecuteNonQuery()

Answer: A

Explanation: The CommandText property gets or sets the Transact-SQL statement or stored procedure to execute at the data source. We should use it to set the SQL command we want to be executed.
Reference: .NET Framework Class Library, SqlCommand Members

Incorrect Answers
B: The CommandType property gets or sets a value indicating how the CommandText property is to be interpreted.
C: The parameters should include the SQL code.
D: We must the SQL Statements before we execute them.

QUESTION 72:

You develop an application that uses a Microsoft SQL Server database and a SqlClient data provider.
Your application includes the following four code segments which are each called once:
Dim CKConnection1 As New SqlConnection()
CKConnection1.ConnectionString = "Data Source="_
& "ProdServer;Initial Catalog=Biling;"_
& "Integrated Security=true"
CKConnection1.Open()
Dim CKConnection2 As New SqlConnection()
CKConnection2.ConnectionString = "DataSource="_
& "ProdServer;Initial Catalog=Biling;"_
& "Integrated Security=true"
CKConnection2.Open()
Dim CKConnection3 As New SqlConnection()
CKConnection3.ConnectionString = "Data Source="_
& "SearchServer;Initial Catalog=Search;"_
& "Integrated Security=true"
CKConnection3.Open()
Dim CKConnection4 As New SqlConnection()
CKConnection4.ConnectionString =
"ProdServer;Initial
Catalog=OrderEntry;"_& "Integrated Security=true"
You verify that your application is the only application that is using SQL Server. Your application runs all code segments by using the same identity.
You run the application. Connection pooling is enabled, and the entire application runs within the connection timeout parameter.
How many connection pools are created?

A. One
B. Two
C. Three
D. Four

Answer: C

Explanation: CKConnection1 and CKConnection2 use exactly the same connection string, while CKConnection3 and CKConnection4 use separate connections strings. The three separate connection strings will create three connections pools-
Note: When a connection is opened, a connection pool is created based on an exact matching algorithm that

associates the pool with the connection string in the connection. Each connection pool is associated with a distinct connection string. When a new connection is opened, if the connection string is not an exact match to an existing pool, a new pool is created.
Reference: .NET Framework Developer's Guide, Connection Pooling for the SQL Server .NET Data Provider
Incorrect Answers
A, B; D: One connection pool will be created for each unique connection strings. Three unique connections strings are used, not 1, 2 or 4.

QUESTION 73:

You are developing an application that retrieves a list of geographical regions from a table in a Microsoft SQL Server database. The list of regions is displayed in a drop-down list box on a Windows Form.
You want to populate the list box with data from a DataSet object. You want to fill the DataSet object by using a SqlDataAdapter object.
You create a SqlConnection object named CKConnection and a SQL query string named regionSQL.
You need to write the code to create the SqlDataAdapter object.
Which code segment should you use?

A. Dim myDataAdapter As New SqlDataAdapter()
myDataAdapter.SelectCommand.Connection = CKConnection
myDataAdapter.SelectCommand.CommandText = regionSQL
B. Dim myDataAdapter As New SqlDataAdapter(regionSQL, CKConnection)
C. Dim SqlCmd As New SqlCommand(regionSQL)
Dim myDataAdapter As New SqlDataAdapter()
myDataAdapter.SelectCommand.Connection = CKConnection
myDataAdapter.SelectCommand = SqlCmd
D. Dim SqlCmd As New SqlCommand()
Dim myDataAdapter As New SqlDataAdapter()
SqlCmd.CommandText = regionSQL
myDataAdapter.SelectCommand.Connection = CKConnection
myDataAdapter.SelectCommand = SqlCmd

Answer: B

Explanation: The SqlDataAdapter (String, SqlConnection) constructor inintializes a new instance of the SqlDataAdapter class with a SelectCommand and a SqlConnection object.
Note: A SQLDataAdapter represents a set of data commands and a database connection that are used to fill the DataSet and update a SQL Server database. SqlDataAdapter is used in conjunction with SqlConnection and SqlCommand to increase performance when connecting to a Microsoft SQL Server database.
Reference: .NET Framework Class Library, SqlDataAdapter Members
.NET Framework Class Library, SqlDataAdapter Constructor (String, SqlConnection) [Visual Basic]
Incorrect Answers
A: This is also a plausible solution. B) is more straightforward.
C, D: First we set the Adapter SelectCommand.Connection to CKConnection. But then we reset this property by setting the Adapter.SelectCommand to SqlCmd.

QUESTION 74:

You are developing a order-processing application that retrieves data from a Microsoft SQL Server database contains a table named CertK Customers and a table named Orders.
Customer has a primary key of customerID. Each row in orders has a CustomerID that indicates which customer placed the order.
Your application uses a DataSet object named ordersDataSet to capture customer and orderinformation before it applied to the database. The ordersDataSet object has two Data Table objects named Customers and Orders.
You want to ensure that a row cannot exist in the Orders Data Table object without a matching row existing in the customers Data Table object.
Which two actions should you take? (Each correct answer presents part of the solution. Choose two.)

A. Create a foreign key constraint named ConstraintOrders that has Orders.CustomersID as the parent column and Customers. CustomerID as the child column.
B. Create a foreign key constraint named ConstraintCustomers that has Customers.CustomerID as the parent column and Orders.CustomerID as the child column.
C. Create a unique constraint named UniqueCustomers by using the Customers.CustomerID
D. Add ConstraintOrders to the Orders Data Table.
E. Add ConstraintOrders to the Customer Data Table.
F. Add ConstraintCustomers to the Orders Data Table.
G. Add ConstraintCustomers to the Customers Data Table.
H. Add UniqueCustomers to the Customers Data Table.

Answer: B, F

Explanation:
B: The parent column is located in the table on the "one-side", while the child column is located on the "many-side". Here the Customers table is the parent domain and Orders is the child domain: each Customer can have several orders, but for each specific order there must exists exactly one corresponding row in the Customers table. We should use the ConstraintsCustomers constraints.
F: The constraint must be added to the Orders table.
Incorrect Answers
A: This is incorrect. The parent column must be CustomerID in the Customers table.
B, D: The ConstraintCustomers constraint must be used, not ConstraintOrders.
C, F: A unique constraint only applies to one single table.
E: The constraint must be added to the Orders table.

QUESTION 75:

Your Microsoft SQL Server database contains a table named Certkiller Orders. Due to recent increase in product sale. Certkiller Orders now contains more than 500,000 rows.
You need to develop an application to produce a report of all orders in the table. You need to ensure that the application processes the data as quickly as possible.
Which code segment should you use?

A. Dim myOleDbConnection As New OleDbConnection _
("Data Source=(local);"_
& "Initial Catalog=CertKiller;" _
& "Integrated Security=true")
Dim myOleDbCommand As New OleDbCommand_
("SELECT * FROM Certkiller Orders" , myOleDbConnection)
Dim ordersData Reader As OleDbDataReader
MyOleDbconnection.Open()
OrdersDataReader = myOleDbcommand.ExecuteReader
B. Dim myOleDbConnection As New OleDbConnection _
("provider=sqloleDb;Data Source=(local);"_
& "Initial Catalog=CertKiller;" _
& "Integrated Security=true")
Dim myOleDbCommand As New OleDbCommand_
("SELECT * FROM Certkiller Orders" , myOleDbConnection)
Dim ordersData Reader As OleDbDataReader
myOleDbconnection.Open()
ordersDataReader = myOleDbCommand.ExecuteReader
C. Dim myConnection As New SqlConnection _
("Data Source=(local) ;Initial Catalog=CertKiller;" _
& "Integrated Security=true")
Dim myCommand as new SqlCommand_
("SELECT * FROM Certkiller Orders" , myConnection)
Dim ordersData Reader As SqlDataReader
Myconnection.Open()
OrdersDataReader = mycommand.ExecuteReader
D. Dim myConnection As New SqlConnection _
("Data Source=(local) ;Initial Catalog=CertKiller;" _
& "Integrated Security=true")
Dim myCommand as new SqlCommand("SELECT * FROM Certkiller Orders")
Dim ordersData Reader As SqlDataReader
Myconnection.Open()
ordersDataReader = myCommand.ExecuteReader

Answer: C

Explanation: A SqlConnection gives better performance than an OleDBConnection when working with a
SQL Server data source. Furthermore, the SqlCommand object should contain both a text query and a
SqlConnection.
The critical command:
Dim myCommand as new SqlCommand ("SELECT * FROM Certkiller Orders" ,
MyConnection)
Reference: .NET Framework Class Library, SqlCommand Constructor [Visual Basic]
Incorrect Answers
A, B: If we assume that the SQL Server is Version 7.0 or later, a SqlConnection would be more effective than

an OleDBConnection.
D: The SqlCommand should include the SqlConnection as well.

QUESTION 76:

You use a function to maintain a table named Categories in a Microsoft SQL Server database. The function creates a DataTable object named Categories in a DataSet object named categoriesDataSet. These two objects capture all insertions, updates and deletions to the Categories table.
The function instantiates a SqlDataAdapter object named CKDataAdapter. This object is configured to select, insert, update and delete rows in the Categories DataTable object.
You need to update the database to include the changes in the Categories DataTable object and capture all data errors in a batch after all rows have been processed.
Which code segment should you use?

A. Try
CKDataAdapter.Update (CategoriesDataSet, "Categories")
Catch mySqlException as SqlException
Dim myDataRow( ) As DataRow = _
CategoriesDataSet.Tables (0).GetErrors ( )
End Try
' Code to process errors goes here.
B. CKDataAdapter.ContinueUpdateOnError = True
Try
CKDataAdapter.Update (CategoriesDataSet, "Categories")
Catch mySqlException as SqlException
Dim myDataRow( ) As DataRow = _
CategoriesDataSet.Tables (0) .GetErrors ( )
End Try
' Code to process errors goes here.
C. CKDataAdapter.Update (CategoriesDataSet, "Categories")
If categoriesDataSet.Tables(0).HasErrors Then
Dim myDataRow ( ) As DataRow = _
CategoriesDataSet.Tables(0).GetErrors ( )
' Code to process errors goes here.
End If
D. CKDataAdapter.ContinueUpdateOnError = True
CKDataAdapter.Update (CategoriesDataSet, "Categories")
If categoriesDataSet.Tables (0).HasErrors Then
Dim myDataRow ( ) As DataRow = _
CategoriesDataSet.Tables(0).GetErrors ( )
' Code to process errors goes here.
End If

Answer: D

Explanation:

Line 1: CKDataAdapter.ContinueUpdateOnError = True
The DataAdapter.ContinueUpdateOnError property gets or sets a value that specifies whether to generate an exception, or the row in error when an error is encountered during a row update. The value true is used to continue the update without generating an exception.. The default is false. In this scenario the value of this property must be true. We don't want exceptions.
Line 2: CKDataAdapter.Update (CategoriesDataSet, "Categories")
We update the database. All updated rows in the Dataset are updated in the database as well.
Line 3: If categoriesDataSet.Tables (0).HasErrors Then
We check if there exist any errors in the dataset with the HasErrors method.
Line 4, 5, 6: We collect the rows with errors with the GetErrors method.
Reference: .NET Framework Class Library, DataAdapter.ContinueUpdateOnError Property [Visual Basic]
Incorrect Answers
A, B: We don't want the errors that occur while processing rows to not generate exceptions. Instead we want to collect the rows where errors occurred. The Try....Catch construct is useless here.
C: By default an error to update, insert or delete a row causes an exception. We must set the DataAdapter property ContinueUpdateOnError to True.

QUESTION 77:

Your Microsoft SQL Server database has a stored procedure named Get Certkiller Customer.
get Certkiller Customer accepts one parameter named @CustomerID and returns the appropriate company name.
You initiate a SqlCommand object named myCommand. You need to initialize myCommand to return the company name for @CustomerID with a value of "ALFKI".
Which code segment should you use?

A. myCommand.CommandText = " Certkiller Customer, ALFKI"
myCommand.Parameters.Add ("@CustomerID")
B. myCommand.CommandText = " Certkiller Customer"
myCommand.Parameters.Add (" Certkiller Customer", "ALFKI")
C. myCommand.CommandText = "@CustomerID"
myCommand.Parameters.Add (" Certkiller Customer", "ALFKI")
D. myCommand.CommandText = " Certkiller Customer"
myCommand.Parameters.Add ("@CustomerID", "ALFKI")

Answer: D

Explanation:
The SqlCommand.CommandText Property gets or sets the SQL statement or stored procedure to execute at the data source. Here we should set it to the name of the stored procedure: Certkiller Customer.
The Parameter should contain ParameterName (here @CustomerID) and the Value (here the string ALFKI).
Note: A SqlCommand object represents a Transact-SQL statement or stored procedure to execute against a SQL Server database.
Reference:
.NET Framework Class Library, SqlCommand.CommandText Property [Visual Basic]
.NET Framework Class Library, SqlParameter Members

Incorrect Answers
A, C: The CommandText should be set to the named of the stored procedure. We should not specify any parameters in the CommandText.
B: The name of the parameter, not the name of the stored procedure, should be included in the parameter.

QUESTION 78:

Your Microsoft SQL Server 6.5 database contains a table named Certkiller Purchases that consists of more than 1 million rows.
You are developing an application to populate a DataReader object with data from Certkiller Purchases.
You want to ensure that the application processes the data as quickly as possible.
You create a SQL SELECT statement in a local variable named ckSQLSelect. You need to initiate a SqlConnection object and a SqlCommand object you will use to populate the DataReader object.
Which code segment should you use?

A. Dim myConnection As New OleDbConnection _
(myOleDbConnectionString)
Dim ckCommand As New OleDbCommand _
(ckSQLSelect)
B. Dim myConnection As New OleDbConnection _
(myOleDbConnectionString)
Dim ckCommand As New OleDbCommand _
(ckSQLSelect, myConnection)
C. Dim myConnection As New SqlConnection _
(mySqlConnectionString)
Dim ckCommand As New SqlCommand _
ckSQLSelect)
D. Dim myConnection As New SqlConnection _
(mySqlConnectionString)
Dim ckCommand As New SqlCommand _
(ckSQLSelect, myConnection)

Answer: B

Explanation: For Microsoft SQL Server version 6.5 and earlier, you must use the OLE DB Provider for SQL Server. Furthermore, we specify both the CommandText and the OleDBConnection properties of the OleDBCommand.
Reference:
.NET Framework Developer's Guide, .NET Data Providers [Visual Basic]
.NET Framework Class Library, OleDbCommand Members
Incorrect Answers
A: We create the OleDbCommand we must specify the OleDBConnection, not just the CommandText.
C, D: Only SQL Server 7.0, SQL Server 2000 or later can use SqlConnection.

QUESTION 79:

Certkiller .com receives product information from manufactures in the form of XML documents. The product information is stored in a Microsoft SQL Server database.

The format of each XML document varies. Each one is located in a MemoryStream object named newProds.

You create a merge procedure that reads data and schema information in a DataSet object and merges the information into your database. You now need to write code to transfer the XML document and its schema into a DataSet object.

Which code segment should you use?

A. Dim products As New DataSet("prodInfo")
Dim reader As New XmlTextReader(newProds)
Dim validReader As New XmlValidatingReader(reader)
While validReader.Read()
products.WriteXml(validReader.Value)
End While
B. Dim products As New DataSet("prodInfo")
products.ReadXml(newProds)
C. Dim products As New DataSet("prodInfo")
Dim document As New XmlDataDocument(products)
document.DataSet.ReadXmlSchema(newProds)
D. Dim products As New DataSet("prodInfo")
Dim myXmlData As String = -
Encoding.UTF8.GetString(newProds.ToArray())
Dim adapter As New SqlDataAdapter _
("LoadSchemaType=XML",myXmlData)
adapater.Fill(products)

Answer: B

QUESTION 80:

You are a software developer at Certkiller .com. You are developing an application to maintain customer information in a Microsoft SQL Server database. You populate a DatSet object named customerDataSet. You bind this object to a DataGrid object.

Your application invokes a Web method named CustomerUpdates in an XML Web service. This method accepts customerDataSet as a parameter and processes the updates made in the DataGrid object.

You want to ensure that network traffic to the Web service is minimized.

Which code segment should you use?

A. If myDataSet.HasChanges() Then
Dim customerChanges As DataSet
myDataSet.AcceptChanges()
customerChanges = myDataSet.GetChanges()
CustomerUpdates(customerChanges)
End If
B. If myDataSet.HasChanges() Then

Dim customerChanges As DataSet
customChanges = myDataSet.GetChanges)=
CustomerUpdates(customerChanges)
End If
C. Dim customerChanges As DataSet
myDataSet.AcceptChanges()
customerChanges = myDataSet.GetChanges()
CustomerUpdates(customerChanges)
D. Dim customerChanges As DataSet
customerChanges = myDataSet.GetChanges()
CustomerUpdates(customerChanges)

Answer: A

QUESTION 81:

You have a DataSet object named ordersDataSet. This object contains two DataTable objects named
Orders and OrderDetails. Both Orders and OrderDetails contain a column named OrderID.
You create a DataRelation object named orderRelation between Orders and OrderDetails on OrderID.
Order is the parent table. OrderDetails is the child table.
You add orderRelation to the ordersDataSet relation collection by using the following line of code:
ordersDataSet.Relations.Add(orderRelation;
You verify that prior to adding orderRelation, there were no constraints on either table. You then run
the line of code.
How many constraints does each table have now?
A. One or Orders; none on OrderDetails.
B. None on Orders; one on OrderDetails.
C. None on Orders; none on OrderDetails.
D. One on Orders; one on OrderDetails.

Answer: D

QUESTION 82:

You have a SqlDataReader object named productsDataReader. The productsDataReader object contains
three columns in the following order:
1. ProductID as Integer
2. ProductName as nvarchar(40)
3. UnitsInStock as Integer
You want to use productsDataReader to create an inventory management report. You define the
following three variables:
1. CKProductID as Integer
2. CKProductName as String
3. CKUnits as Integer
You need to ensure that the report runs as quickly as possible.
Which code segment should you use?

A. CKProductID = productsDataReader.Item(1)
CKProductName = productsDataReader.Item(2)
CKUnits = productsDataReader.Item(3)
B. CKProductID = productsDataReader.Item(0)
CKProductName = productsDataReader.Item(1)
CKUnits = productsDataReader.Item(2)
C. CKProductID = productsDataReader.Item("ProductID")
CKProductName = productsDataReader.Item("ProductName")
CKUnits = productsDataReader.Item("UnitsInStock")
D. CKProductID = productsDataReader.GetName("ProductID")
CKProductName = productsDataReader.GetName("ProductName")
CKUnits = productsDataReader.GetName("UnitsInStock")

Answer: B

Explanation: We should use ordinal-based lookups since they are more efficient than named lookups.
Column ordinals are zero-based: CKProductId has ordinal number 0, CKProductName has ordinal
number 1, and CKUnits has ordinal number 2.
Reference: .NET Framework Class Library, SqlDataReader.GetOrdinal Method [Visual Basic]
Incorrect Answers
A: Column ordinals are zero-based, not one-based.
C: Ordinal-based lookups are more efficient than named lookups.
D: The DataReader.GetOrdinal method gets the column ordinal, given the name of the column. We are not
interested in the Ordinal numbers. They should only be used to speed up the process.

QUESTION 83:

You have a DataSet object named customersDataSet that contains a DataTable object named
CertK Customers. CertK Customers retrieves information from a Microsoft SQL Server database.
Customers contains a column named Region.
You want to create a DataView object named customersDataView that contains only customers in which
the value in the Region column is France.
Which code segment should you use?

A. Dim customersDataView As
New_DataView(customersDataSet.Tables("CertKCustomers"))
customersDataView.FindRows("Region = France")
B. Dim customersDataView As
New_DataView(customersDataSet.Tables(" CertK Customers"))
customersDataView.FindRows("Region ='France'")
C. Dim customersDataView As
New_DataView(customersDataSet.Tables(" CertK Customers"))
customersDataView.RowFilter = ("Region = France")
D. Dim customersDataView As
New_DataView(customersDataSet.Tables(" CertK Customers"))

customersDataView.RowFilter = ("Region = 'France'")

Answer: D

Explanation: We use the RowFilter property to set the filter of the DataView. We also take care to use quotes for the value France.
Note 1: The DataView. RowFilter gets or sets the expression used to filter which rows are viewed in the DataView.
Note 2: The DataView.FindRows method returns an array of DataRowView objects whose columns match the specified sort key value.
Reference: .NET Framework Class Library, DataView.RowFilter Property [C#]
Incorrect Answers
A: The DataRows method does not update the DataView it just produces a result. Furthermore, the search string is incorrect.
B: The DataRows method does not update the DataView it just produces a result.
C: The search string is incorrect. The value must be in quotes.

QUESTION 84:

You have a DataSet object that contains a single DataTable object named Certkiller Employees.
Certkiller Employees has a column named EmployeeID. EmployeeID contains no duplicate data.
You are creating a function that accepts a parameter of EmployeeID and searches Employees to return the DataRow object for the specified EmployeeID.
You want to use the Find method of the rows collection in Certkiller Employees to return the requested DataRow object from the function. You need to ensure that you can use the Find method to accomplish this goal.
What should you do?

A. Ensure that EmployeeID is the first column in Certkiller Employees.
B. Ensure that EmployeeID is unique for each row in Certkiller Employees.
C. Ensure that Certkiller Employees has a primary key on EmployeeID.
D. Ensure that Certkiller Employees is sorted in ascending order on EmployeeID.

Answer: C

Explanation: To use the Find method, the DataTable object to which the DataRowCollection object belongs to must have at least one column designated as a primary key column.
Incorrect Answers
A: The first column has no particular significance.
B: The unique constraint is not enough. Employees must have a primary key column.
D: Sorting will not help.

QUESTION 85:

You have DataSet object named LoanCustomersDataSet that contains customers serviced by the loan department of Certkiller . You receive a second DataSet that contains customers serviced by the asset

management department of Certkiller . Both objects have the same structure.
You want to merge assetCustomersDataSet into LoanCustomersDataSet and preserve the original values
in loanCustomersDataSet.
Which code segment should you use?

A. loanCustomersDataSet.Merge (assetCustomersDataSet)
B. loanCustomersDataSet.Merge (assetCustomersDataSet, True)
C. assetCustomersDataSet.Merge (loanCustomersDataSet)
D. assetCustomersDataSet.Merge (loanCustomersDataSet, True)

Answer: B

Explanation: The DataSet.Merge method merges this DataSet with a specified DataSet. The data will be
merged into the dataset on which the Merge method is applied. We want to merge into our Dateset,
namely the loanCustomerDataSet. Furthermore, we want to preserve the original values in
loanCustomerDataSet.
The Boolean parameter is the preserveChanges. PreserveChanges indicates a value indicating whether changes
made to the current DataSet should be maintained. It should be true, if changes should be maintained, like in
this scenario. .
Reference: .NET Framework Class Library, DataSet.Merge Method (DataSet, Boolean) [Visual Basic]
Incorrect Answers
A The PreserveChanges parameter must be set to true.
C, D: We must merge into loanCustomerDataSet, not into the Dataset that we have received.

QUESTION 86:

You are debugging a visual studio .Net application named Certkiller App. The application produces an
Xml documents object and then consumes the same object. This object moves data in the application. The
object has no schema, but it contains a declaration line that you must inspect.
You decide to transform the XML code and its declaration into a string for easy inspection.
What should you do?

A. Assign the ToString method of the Xml Document object to a string variable.
B. Assign the OuterXml property of the Xml document object to a string variable
C. Assign the OuterXml property of the Xml document element property of the Xml document object to a string
variable.
D. Use the WriteContentTo method of the XmlDocument object to write the document into a MemoryStream
object. Use the GetXml method of the DataSet object to get a string version of the document.

Answer: B

Explanation: The XmlNode.OuterXml property gets the markup representing this node and all its
children.
Reference: .NET Framework Class Library, XmlNode.OuterXml Property [Visual Basic]
Incorrect Answers
A: The ToString method returns a String that represents only the current Object.

C: There is no XmlDocument element property.
D: This proposed solution is complicated. Furthermore the GetXml method of the DateSet object cannot be used on a stream.

QUESTION 87:

You create a DataSet object named Certkiller ProductsDataset that contains product information from a Microsoft SQL Server database. This object has a primary key on a column named ProductID.
You want to create a new DataSet object that has the same structure as Certkiller ProductsDataset, including the primary key. You want the new DataSet object to be empty of data.
Which code segment should you use?

A. Dim NewDataSet As DataSet = Certkiller ProductsDataset.Clone
B. Dim NewDataSet As DataSet = Certkiller ProductsDataset.Copy
C. Dim NewDataSet as New DataSet ( )
newDataSet.Tables.Add (" Certkiller ProductsDataset")
D. Dim newDataSet as New Dataset ( )
newDataSet.Tables.Add (Certkiller ProductsDataset.Tables (0))

Answer: A

Explanation: DataSet.Clone method copies the structure of the DataSet, including all DataTable schemas, relations, and constraints. It does not copy any data.
Reference: .NET Framework Class Library, DataSet.Clone Method [Visual Basic]
Incorrect Answers
B: DataSet.Copy method Copies both the structure and data for this DataSet.
C: A Dataset it cannot be added as a table.
D: We want the new dataset be same as the old. Here we just copy a single table.

QUESTION 88:

You have a SqlDataReader object named ordersDataReader. This object contains a column named OrderQuantity as an integer value. This object also contains one row for each orderreceived during the previous week.
You need to write code that will process each row in ordersDataReader and pass OrderQuantity to a function named CKFunction.
Which code segment should you use?

A. While ordersDataReader.Read Call
CKFunction(ordersDataReader("OrderQuantity")) End While
B. While ordersDataReader.NextResult Call
CKFunction(ordersDataReader("OrderQuantity")) End While
C. Dim orderCount as Integer While orderCount < ordersDataReader.FieldCount
Call CKFunction(ordersDataReader("OrderQuantity")) orderCount += 1
ordersDataReader.Read End While
D. Dim orderCount as Integer While orderCount < ordersDataReader.FieldCount

Call CKFunction(ordersDataReader("OrderQuantity")) orderCount += 1
ordersDataReader.NextResult End While

Answer: A

Explanation: The SqlDataReader.Read method advances the SqlDataReader to the next record.
The return value is true if there are more rows; otherwise, false. We can therefore
use it as the condition in the while loop.
Reference: .NET Framework Class Library, SqlDataReader.Read Method [Visual Basic]
Incorrect Answers
B: SqlDataReader.NextResult method advances the data reader to the next result, when reading the results of
batch Transact-SQL statements. There is not a batch of Transact SQL statements in this scenario however.
C, D: The SqlDataReader.FieldCount property gets the number of columns in the current row. It would be
incorrect to use this value in the condition expression for the while loop.

QUESTION 89:

You are creating an XML Web service named DistributionService. This service must be able to access
and manipulate data in a table named Certkiller Inventory in a Microsoft SQL Server database.
Some functions within Distribution Service need the inventory data to be exposed as XML data. Other
functions within DistributionService need the inventory data to be exposed as a DataSet object.
You need to create the object that will provide this data access.
Which object should you use?

A. XmlDocument
B. XmlDocumentFragment
C. XPathDocument
D. XmlDataDocument

Answer: D

Explanation: XmlDataDocuments allows structured data to be stored, retrieved, and manipulated
through a relational DataSet. XMLDataDocuments enables you to load either relational data or XML
data and manipulate that data
Reference: .NET Framework Class Library, XmlDataDocument Class [Visual Basic]
Incorrect Answers
A: XmlDocument does not support relational data.
B: An XmlDocumentFragment object represents a lightweight object that is useful for tree insert operations.
C: XPathDocument provides a fast and performant read-only cache for XML document processing.

QUESTION 90:

You have a DataSet object named myDataSet. This object contains two DataTable objects named
Customers and Orders. Customers has a column named CustomerID, which is unique to each customer.
Orders also has a column named CustomerID. You want to use the GetChildRows method of the
DataRow object to get all orders for the current customers.

What should you do?

A. Add a foreign key constraint on CustomerID of Orders between Customers and Orders.
B. Add a data relation to myDataSet on OrderID between Customers and Orders.
C. Create a unique constraint on CustomerID of Customers.
D. Create a primary key on CustomerID of Customers.

Answer: B

Explanation: The GetChildRows Method use a DataRelation to retrieve the child rows of this DataRow using the specified DataRelation. In this scenario we would be required to add a data relation between the two tables.
Note: A Datarelation represents a parent/child relationship between two DataTable objects.
Reference:
.NET Framework Class Library, DataRow.GetChildRows Method (DataRelation) [Visual Basic]
.NET Framework Class Library, DataRelation Class [Visual Basic]
Visual Database Tools, Foreign Key Constraints
Incorrect Answers
A: A foreign key constraint works in conjunction with primary key or unique constraints to enforce referential integrity among specified tables. However, the GetChildRows method uses a DataRelation, not a foreign key constraint.
C: A unique constraint on CustomerID of Customers would only make sure that the CustomerID column will have unique values.
D: A primary key constraint would ensure that CustomerID column will have unique values.

QUESTION 91:

You have a strongly typed DataSet object named customersDataSet. This object contains a single DataTable object named CertK Customers. CertK Customers has an integer data column named CustomerID.
You want to access the CustomerID value by using the type-safe code conventions provided by customersDataSet. You want to assign the value to a string variable named customerID.
Which code segment should you use?

A. customerID = customersDataSet. CertK Customers(0).CustomerID.ToString()
B. customerID =
customersDataSet. CertK Customers.Columns("CustomerID").ToString()
C. CustomerID =
customersDataSet.Tables(" CertK Customers").Columns("CustomerID").ToString()
D. customerID = customersDataSet.Tables(" CertK Customers").Rows(0)
("CustomersID").ToString()

Answer: A

Explanation: We are ensured type safety if access the columns only by index, and not by name.
Note: Type-safe code is code that accesses types only in well-defined, allowable ways.

Reference:
Incorrect Answers
B, C, D: We must access the columns only by name.

QUESTION 92:

You have a strongly types DataSet object named Certkiller DataSet. This object contains three DataTable objects named Customers, Orders and OrderDetails.
Customers and Orders have a data column named CustomerID. Orders and OrderDetails have a data column named OrderID.
Orders have a foreign key constraint between Customers and Orders on CustomerID. OrderDetails has a foreign key constraint between Orders and OrderDetails on OrderID.
You want to populate Customers, Orders and OrderDetails with data from Microsoft SQL Server database.
In which order should you fill the Data table objects?

A. Customers
OrderDetails
Orders
B. OrderDetails
Orders
Customers
C. Customers
Orders
OrderDetails
D. Orders
OrderDetails
Customers

Answer: C

Explanation: We most populate the tables that are references by the foreign-key constraints first, namely the Customers and the Orders table. We should populate the OrderDetails table last.
Incorrect Answers
A B: There would be no corresponds rows in the Orders table if we populate the OrderDetails table before the Orders table.
D: There would be no corresponds rows in the Customers table if we populate the OrderDetails table before the Customers table.

QUESTION 93:

You are creating an XML Web service that retrieves customer-order data. Customer orders are retrieved by specifying a customer ID or family name.
You write two overloaded Web methods to retrieve this data. The Web method signatures are shown in the following code segments:
1. <WebMethod()>

Public Function Load(ByVal customerID As_Integer) As DataSet
' Code to retrieve and return order data goes here.
End Function
1. <WebMethod()>
Public Function Load(ByVal familyName As_String) As DataSet
' Code to retrieve and return data goes here.
End Function
You need to ensure that the Web service engine can map requests to the appropriate method.
What should you do?

A. Set the Description property of each WebMethod attribute to a unique description.
B. Set the MessageName property of each WebMethod attribute to a unique message name.
C. Add the Overloads keyword to both signatures between the Public keyword and the Function keyword.
D. Add the Overloads keyword to only the second signature between the Public keyword and the Function keyword.

Answer: B

Explanation:
Old answer was B, but the Overloads keyword does not apply here. Changing different MessageName property will solve this problem. The MessageName property of the WebMethod attribute enables the XML Web service to uniquely identify overloaded methods using an alias. Unless otherwise specified, the default value is the method name. When specifying the MessageName, the resulting SOAP messages will reflect this name instead of the actual method name. For more information, see WebMethodAttribute.MessageName Property.

QUESTION 94:

You are developing an application to monitor store inventory. When inventory falls below a specified level, the application automatically generates a purchase request. Suppliers have requested that you transmit purchase requests to them in an XML document. Suppliers will accept the XML document in any valid form, except they do not want the data set definition to be included in the XML file.
You create a method named GeneratePurchaseRequest. You write the code to populate a DataSet object named myDataSet with the purchase request data. You define a variable named fileName that contains the name and path of the output file.
You need to create an XML file from the data in myDataSet by adding code to GeneratePurchaseRequest. You want to accomplish this task by writing the minimum amount of code.
Which code segment should you use?

A. myDataSet.WriteXML(fileName, XmlWriteMode.IgnoreSchema)
B. myDataSet.WriteXML(fileName, XmlWriteMode.WriteSchema)
C. myDataSet.WriteXMLSchema(filename)
D. TextWriter myWriter = new StreamWriter(fileName)
myDataSet.WriteXMLSchema(myWriter)

Answer: A

Explanation: The DataSet.WriteXml method (String, XmlWriteMode) method writes data and optionally the schema to the specified file. The IgnoreSchema XmlWriteMode writes the current contents of the DataSet as XML data, without an XSD schema as was required by the suppliers.
Reference:
.NET Framework Class Library, DataSet.WriteXml Method (String, XmlWriteMode) [Visual Basic]
.NET Framework Class Library, XmlWriteMode Enumeration [Visual Basic]
Incorrect Answers
B: XmlWriteMode.WriteSchema writes the current contents of the DataSet as XML data with the relational structure as inline XSD schema. However, the suppliers do not want the data set definitions.
C: The DataSet.WriteXmlSchema (String) method writes the DataSet structure as an XML schema to a file. The schema includes table, relation, and constraint definitions, but not the actual data.
D: The DataSet.WriteXmlSchema (Stream) method writes the DataSet structure as an XML schema to the specified System.IO.Stream object.

QUESTION 95:

You are creating a serviced component named EmployeeLocations. This component will return a current list of employees in a given city. The list of employee locations changes nightly. EmployeeLocations must load an XML file named Emploc.xml nightly. EmployeeLocations contains one method named EmployeeslnCity. EmployeeslnCity takes a string city code and returns an array of Employee objects. EmployeeLocations will use the XML data to return lists of employees for a city throughout each day. EmployeeLocations must respond to EmployeeslnCity method calls as quickly as possible.
What should you do?

A. Each night, load Emploc.xml into a MemoryStream object.
For each request, use an XmlTextReader to locate the requested city and then the employees within that city.
B. Each night, load Emploc.xml into an XPathDocument object.
For each request, use the XPathNavigator.
Select method to create an XPathNodeIterator object.
Use the XPathNodeIterator object to return the list of employees.
C. Each night, load Emploxml into an XmlDocument object.
For each request, use the XmlDocument.GetElementsByTagName method to create an XmlNodeList object, which will contain the appropriate employee list.
D. Each night, load Emploc.xml into an XmlDataDocument object.
For each request, use the XmlDataDocument.GetElementsByTagName method to create an XmlNodeList object, which will contain the appropriate employee list.

Answer: B

QUESTION 96:

You are creating an XML Web service named CustomerService. This service receives an XML file of customer information in the following format:
<CustomerData> <Customers> <CustomerID>1234</CustomerID>
<CompanyName>Adventure Works</CompanyName> </Customers> <Customers>

<CustomerID>2345</CustomerID> <CompanyName> Certkiller Ltd</CompanyName>
</Customers> </CustomerData>
You want to parse the XML file to build a flat file that will be used by another application. The flat file
should be in the following format:
CustomerID=1234 CompanyName=Adventure Works CustomerID=2345
CompanyName=Coho Winery
You write the following code:
Dim myXML.Doc As New XmlDocument() myXML.DOC.LOAD("C:\TableSchemaXML.xml")
Dim myRootNode As XmlNode = myXML.Doc.FirstChild
Dim customerOutput As String
Dim curNode As XmlNode
Dim i As Integer
You need to write the code that will parse the document and build the customerOutput string that will be
used to write each row in the file.
Which code segment should you use?

A. Dim myNodeList As XmlNodeList =
_myRootNode.SelectNodes("/CustomerData/Customers")
For Each curNode In myNodeList
If curNode.HasChildNodes Then
customerOutput = ""
For i = 0 To curNode.ChildNodes.Count - 1
customerOutput = curNode.ChildNodes(i).Name &_ "=" +
curNode.ChildNodes(i).InnerText ' Code to write the output files goes
here.
Next i
End If
Next
B. Dim myNodeList As XmlNodeList =
_myRootNode.SelectNodes("/CustomerData/Customers")
For Each curNode In myNodeList
If curNode.HasChildNodes Then
customerOutput = ""
For i = 0 To curNode.ChildNodes.Count - 1
customerOutput = curNode.ChildNodes(i).Name &_ "=" +
curNode.ChildNodes(i).Value
'Code to write the output file goes here.
Next i
End If
Next
C. Dim myNodeList As XmlNodeList = myRootNode.SelectNodes("/Customers") For
Each curNode In myNodeList
If curNode.HasChildNodes Then
customerOutput = ""
For i = 0 To curNode.ChildNodes.Count -1
customerOutput = curNode.ChildNodes(i).Name &_ "=" +

curNode.ChildNodes(i).InnerText
'Code to Write the output file goes here.
Next i
End If
Next
D. Dim myNodeList As XmlNodeList =
_myRootNode.SelectNodes("/Customers")For Each curNode In myNodeList
If curNode.HasChildNodes Then
customerOutput = ""
For i = 0 To curNode.ChildNodes.Count -1
customerOutput =_ curNode.ChildNodes(i).Attributes(0).value + "="
&_curNode.ChildNodes(i).Attributes(1).Value
'Code to write the output file goes here.
Next i
End If
Next

Answer: A

Explanation: The SelectNodes property selects a list of nodes matching the XPath expression. We should use the XPath expression /CustomerData/Customers to match the format in the XML file.
The InnerText property gets or sets the concatenated values of the node and all its children.
Reference:
.NET Framework Class Library, XmlElement Members
.NET Framework Class Library, XmlNode.SelectNodes Method [Visual Basic]
Incorrect Answers
B: The Value property gets or sets the value of the current node only.
C: The XPath expression used, /Customers, does not match the XML file.
D: The XPath expression used, /Customers, does not match the XML file. Furthermore we should use the InnerText property, not the Value property.

QUESTION 97:

Certkiller buys and sells used refrigerators. External vendors frequently send you XML documents that list one type of used appliances for sale. The documents that you receive contain either only washers or only refrigerators as in the following example.
<!- A document with refrigerators -->
<saleList>
<refrigerators>
<refrigerator type="freezer on bottom" , price="210"/>
<refrigerators>
</saleList>
<!- A document with washers -->
<saleList>
<washers>
<washer type="front load" , price="145"/>

<washer type="top load" , price="130"/>
</washers>
</saleList>
All incoming XML documents are loaded into a MemorySystem object named usedList.
You need to automate a process that will discover XML documents contain refrigerator elements. As soon as you ascertain that a document contains refrigerators, you can stop processing the document.
You decide to use Visual studio .NET to develop an application that will contain a Boolean variable named hasRefrigerator. A value of True for this variable means that a document contains refrigerator elements. A value of false means that it does not. You want to ensure that the discovery process occurs as quickly as possible.
What should you do?

A. Create an XmlDocument object and load it from usedList.
Use the SelectSingleNode method to search the XmlDocument object for the saleList/refrigerators node.
If this node is found, set hasRefrigerator to True.
Otherwise, set hasRefrigerator to False.
B. Create an XmlXPathDocument object and load it from usedList.
Use an XPathNavigator object to search the XmlXPathDocument for the saleList/refrigerators node.
If this node is found, set hasRefrigerator to True.
Otherwise, set hasRefrigerator to False.
C. Create an XmlTextReader object on usedList.
Loop through usedList by using the MoveToContent method of the XmlTextReader object and comparing for the saleList/refrigerators node.
If this node is found, set hasRefrigerator to True.
Otherwise, set hasRefrigerator to False.
D. Create a DataSet object and use its ReadXml method to load usedList into the object.
If the Count property of the Rows collection of the "refrigerators" entry in the object is not equal to zero, set hasRefrigerator to True.
Otherwise, set hasRefrigerator to False.

Answer: A

Explanation: The SelectSingleNode method selects the first XmlNode that matches the XPath expression.
If no nodes match the query, it returns Null. This suggested procedure would meet the requirements of this scenario. Furthermore, this would be the fastest solution.
Note: An XMLDocument object represents an XML document and enables the navigation and editing of this document.
Reference: .NET Framework Class Library, XmlNode.SelectSingleNode Method [Visual Basic]
Incorrect Answers
B: There is no such thing as a XmlXPathDocument.
C: XmlReader provides forward-only, read-only access to a stream of XML data. The MoveToContent method can be used on a XmlReader stream to provide a possible solution in this scenario. However, it would be fastest solution.
Note: The MoveToContent method checks whether the current node is a content (non-white space text, CDATA, Element, EndElement, EntityReference, or EndEntity) node. If the node is not a content node, the

reader skips ahead to the next content node or end of file.
D: This proposed solution is not straightforward, and is therefore slow.

QUESTION 98:

You are planning to create a DataSet object named CKDataSet to be used in a bond-trading application.
Several developers will need to write code to manipulate CKDataSet, and you want to ensure that
myDataSet is easy for them to use. You decide to create CKDataSet as a strongly typed data set.
Which two actions should you take? (Each correct answer presents part of the solution. Choose two)

A. Create an XSD schema that defines CKDataSet.
B. Create an XDR schema that defines CKDataSet.
C. Create a class for CKDataSet that is based on the schema and that inherits from the DataSet class.
D. Create a class for CKDataSet that is based on the schema and that inherits from the XmlSchema class.
E. Create a key pair for CKDataSet by using the Strong Name tool (Sn.exe).

Answer: A, C

Explanation:
A: The XML Schema definition language (XSD) enables you to define the structure and data types for XML
documents. Given an XML Schema that complies with the XML Schema definition language (XSD) standard,
you can generate a strongly typed DataSet,
C: The class should inherit from the DataSet class.
Reference:
.NET Framework Developer's Guide, Generating a Strongly Typed DataSet [Visual Basic]
.NET Framework General Reference, XML Schema Reference (XSD)
Incorrect Answers
B: XML-Data Reduced (XDR) schemas are used to validate XML documents.
D: The class should inherit from the DataSet class.
E: The Strong Name tool (Sn.exe) helps sign assemblies with strong names. However, we are creating a
DataSet not an assembly.

QUESTION 99:

Your company frequently receives product information from external vendors in the form of XML data.
You receive XML document files, an .xdr schema file, and an .xsd schema file.
You need to write code that will create a typed DataSet object on the basis of product information. Your
code will be used in several Visual studio .NET applications to speed up data processing.
You need to create this code as quickly as possible.
What should you do?

A. Create the code manually.
B. Use XmlSerializer.Serialize to generate the code.
C. Use the XmlSerializer.Deserialize to generate the code.
D. Use the Xml Schema Definition tool (Xsd.exe) to generate the code.

Answer: D

Explanation: The XML Schema Definition tool generates XML schema or common language runtime classes from XDR, XML, and XSD files, or from classes in a runtime assembly. The code would be produced quickly.
Reference: .NET Framework Tools, XML Schema Definition Tool (Xsd.exe)
.NET Framework Class Library, XmlSerializer Class [Visual Basic]
Incorrect Answers
A: Manually creating code would be tedious.
B: The XmlSerializer.Serialize is used to produce XML documents from objects. It is the wrong way around.
C: At run time XML documents can be deserialized into run time objects with the XmlSerializer.Deserialize method. However, we would have to manually produce this code.

QUESTION 100:

You are developing an application that queries a Microsoft SQL Server database. The application will package the results of the query as XML data. The XML data will be retrieved directly from the database and transmitted electronically to a business partner.
The query must retrieve all rows and all columns from a database table named Certkiller Customers.
Which query should you use?

A. SELECT * FROM Certkiller Customers FOR XML AUTO
B. SELECT * FROM XML FROM Certkiller Customers
C. SELECT * FROM Certkiller Customers as XMLDATA
D. SELECT * FROM OPENXML('< Certkiller Customers'.'/Root/Customer', 1) with (CustomerID varchar(10))

Answer: A

Explanation: You can execute SQL queries against existing SQL Server relational databases to return results as XML documents rather than as standard rowsets. To retrieve results directly, use the FOR XML clause of the SELECT statement like in this scenario.
Reference: SQL Server 2000 Books Online, Retrieving XML Documents Using FOR XML
Incorrect Answers
B, C: Incorrect syntax.
D: We should produce XML, not read from a XML data source.

QUESTION 101:

You are developing an application that queries a table named Products in a Microsoft SQL Server database. The query will be stored in a string variable named CKQuery. The query includes the following SQL code.
SELECT * FROM Products For XML AUTO
You must iterate the query results and populate an HTML table with product information.
You must ensure that your application processes the results as quickly as possible.
What should you do?

A. Use a SqlDataAdapter object and set its SelectCommand property to CKQuery.
Use the Fill method of the SqlDataAdapter object to read the data into a DataSet object.
Loop through the associated rows to read the data.
B. Use a SqlDataAdapter object and set its SelectCommand property to CKQuery.
Use the Fill method of the SqlDataAdapter object to read the data into a DataSet object.
Use the ReadXml method of the DataSet object to read the data.
C. Set the SqlCommand object's Command Text to CKQuery.
Use the ExecuteReader method of the SqlCommand object to create a SqlDataReader object.
Use the Read method of the SqlDataReader object to read the data.
D. Set the SqlCommand object's Command Text to CKQuery.
Use the ExecuteXmlReader method of the SqlCommand object to create a XmlReader object.
Use the XmlReader object to read the data.

Answer: D

Explanation: You can execute SQL queries against existing relational databases to return results as XML
documents rather than as standard rowsets. To retrieve results directly, use the FOR XML clause of the
SELECT statement like in this scenario.
XmlReader provides non-cached, forward-only, read-only access.to an XML data source, such as the XML
produces by the T-SQL statement of this scenario.
Reference:
SQL Server 2000 Books Online, Retrieving XML Documents Using FOR XML
.NET Framework Developer's Guide, Reading XML with the XmlReader
Incorrect Answers
A: We must take since the data is in XML format. Furthermore, a Dataset is not required.
B: DataSet.ReadXml method reads XML data into the DataSet. However, it is not necessary to use a dataset.
Reading the data into a Dateset brings an unnecessary overhead.
C: The SQLDateReader provides a means of reading a forward-only stream of rows from a SQL Server
database. However, it operates on relational data not on XML data.

QUESTION 102:

You have a .NET Remoting object named ProductLoaderCK. The ProductLoaderCK class is a
server-activated Singleton object.
The ProductLoaderCK class loads product data into a Microsoft SQL Server database. The Load method
of the ProductLoaderCK class is a time-consuming method to call.
You are developing a client application that uses the ProductLoaderCK class. You want to ensure that
the client application can continue to respond to user input while the Load method of the
ProductLoaderCK class is called.
What should you do?

A. Use an AsyncDelegate instance to call the Load method.
B. Modify the ProductLoaderCK class to be derived from IAsyncResult.
C. Configure the ProductLoaderCK class to be a client-activated .NET Remoting object.
D. Configure the client application to have its own remoting channel that matches the server's channel and
formatter.

Answer: A

Explanation: Asynchronous execution will enable the caller to continue to execute. One of the innovations provided by the asynchronous pattern is that the caller decides whether a particular call should be asynchronous. It is not necessary for a called object to do additional programming for supporting asynchronous behavior
by its client; asynchronous delegates provide for this in the pattern.
Reference: .NET Framework Developer's Guide, Asynchronous Design Pattern Overview
Incorrect Answers
B: Incomplete solution.
C: Remoting objects do not meet the requirements of this scenario.
D: Channels are just a way to communicate.

QUESTION 103:

You are a software developer at Certkiller .com. You are troubleshooting a Visual Studio .NET application that was developed by a former colleague. You find the following code segment within a large assembly:

```
Dim theElement As XmlElement
Dim anotherElement As XmlElement
Dim doc As New XmlDocument()
Dim theDecl As XmlDeclaration
theDecl = doc.CreateXmlDeclaration("1.0", Nothing, Nothing)
doc.AppendChild(theDecl)
theElement = doc.CreateElement("Library")
doc.AppendChild(theElement)
theElement = doc.CreateElement("Book")
theElement.SetAttribute("type", "Mystery")
anotherElement = doc.CreateElement("Title")
anotherElement.InnerText = "Book Title"
anotherElement.AppendChild(theElement)
doc.DocumentElement.AppendChild(theElement)
```

Which XML output is produced by this code segment?

A. <?xml version="1.0"?>
<Library />
B. <?xml version="1.0"?>
<Library>
<Book type="Mystery" />
</Library>
C. <?xml version="1.0"?>
<library>
<Book type="Mystery">
<Title>Book Title</Title>
</Book>

</Library>
D. <?xml version="1.0"?>
<Library>
<Title>Book Title<Book type="Mystery" /></Title>
</Library>

Answer: A

QUESTION 104:

You are developing an application that receives product information from external vendors in the form of XML documents. The information will be stored in a Microsoft SQL Server database Certkiller Srv. The application must validate all incoming XML data. It uses an XmlValidatingReader object to read each XML document. If any invalid sections of XML are encountered, the inconsistencies are listed in a single document.
You must ensure that the validation process runs as quickly as possible.
What should you do?

A. Set the ValidationType property of the XmlValidatingReader object to Schema.
B. Set the CanResolveEntity property of the XmlValidatingReader object to True.
C. Create and register a ValidationEventHandler method.
D. Use a try/catch block to catch validation exceptions.

Answer: C

Explanation: There are two exception events that can occur during schema validation: warnings and errors. To handle errors and warnings, the Schema Object Model (SOM) supports the use of a ValidationEventHandler delegate, which is a callback that you design. This callback is called when an error or warning occurs during validation.
Reference: .NET Framework Developer's Guide, Validation and the Schema Object Model [Visual Basic]
Incorrect Answers
A: The ValidationType Schema validates according to XSD schemas. However, there is no schema in this scenario. Furthermore, we must provide a mechanism that handles the errors.
B: The XmlReader.CanResolveEntity Property is read-only.
Note: CanResolveEntity Property gets a value indicating whether this reader can parse and resolve entities.
D: It would be very awkward to use try/catch blocks. It would be less effective as well.

QUESTION 105:

You are troubleshooting a Visual Studio .NET application that was developed by a former colleague. The application contains a NextToken function. This function reads product names from a file. You find the following code segment code within a large assembly:
Dim xwriter As New XmlTextWriter("productNames.xml",_
System.Text.Encoding.UTF8)
xwriter.WriteStartDocument(True)
xwriter.WriteStartElement("data", "www. Certkiller .com")

```
Dim val As String = NextToken()
While val <> ""
xwriter.WriteElementString("item",_
"www. Certkiller .com", val)
val = NextToken()
xwriter.WriteEndElement()
xwriter.WriteEndDocument()
xwriter.Close()
```

You find that productsNames.xml contains only two entries: prod0 and prod1.
Which XML output is produced by this code segment?

A. <?xml version="1.0"?> <data xmlns="www. Certkiller .com">
</data>
B. <?xml version="1.0" encoding="utf-9" standalone="yes"=> <data> <item
xmlns="www. Certkiller .com">prod0</item> <item
xmlns="www. Certkiller .com">prod1</item> </data>
C. <?xml version="1.0"?> <data> <item>prod0</item> <item>prod1</item>
</data>
D. <?xml version="1.0" encoding="utf-8" standalone="yes"?> <data
xmlns="www. Certkiller .com"> <item>prod0</item> <item>prod1</item> </data>

Answer: D

Explanation: The XmlTextWriter.WriteStartElement writes the specified start tag. A data element is
specified.
The XmlWriter.WriteElementString Method write XMLElements such as <item>prod0</item>.
Reference: .NET Framework Class Library, XmlWriter.WriteElementString Method (String, String, String)
[Visual Basic]
.NET Framework Class Library, XmlTextWriter.WriteStartElement Method [Visual Basic]
Incorrect Answers
A: Two items with proper start and end tags is produced. There is no </item> end tags here.
B: The xmllns"www. Certkiller .com" attribute is only used in the startelement, not in each XML element.
C: The specified data element in the WriteStartElement statement is not present.

QUESTION 106:

You write a serviced component named Certkiller OrderProcessing that processes customer orders. You
cache the product list and customer list within Certkiller OrderProcessing to improve response time.
OrderProcessing has a method named ValidateCache that validated the contents of the cache.
ValidateCache includes the following method signature:
Public Sub ValidateCache(ByVal name as String)
You want to call ValidateCache during development and testing. You do not want to call ValidateCache
when you release your component for deployment. You want to accomplish this task by writing the
minimum amount of code.
Which code segment should you use?

A. Public Sub ValidateCache(ByVal name as String)
Debug.Assert(False)
' Method body goes here.
End Sub
B. #If DEBUG Then
Public Sub ValidateCache(ByVal name as String)
' Method body goes here.
End Sub
#End If
C. <DebuggerHidden()>_
Public Sub ValidateCache(ByVal name as String)
' Method body goes here.
End Sub
D. <Conditional("DEBUG")>_
Public Sub ValidateCache(ByVal name as String)
' Method body goes here.
End Sub

Answer: A

QUESTION 107:

You are creating a data access component for an XML Web service. You need to populate and process a
DataSet object with data from a table named Customers in a Microsoft SQL Server database named
Certkiller A.
You write the following code segment:
Dim myConnection As New:
SqlConnection(myConnectionString)
Dim myDataAdapter As New SqlDataAdapter_
("SELECT * FROM Customers", myConnection)
Dim myDataSet As New DataSet()
Dim CustomerName as String
You want to capture all SQL Server errors and general exceptions that occur. You want to process SQL
Server errors separate from general exceptions.
Which code segment should you use?

A. Try myDataAdapter.Fill(myDataSet, "Customers") customerName =
myDataSet.Tables(0)._Rows(0).Item("CustomerName")
Catch mySqlException As SqlException
Throw New SqlException("Sql exception occurred")
Catch myException As Exception
' Code to process general exceptions goes here.
End Try
B. Try myDataAdapter.Fill(myDataSet, "Customers")
customerName =myDataSet.Tables(0)._Rows(0).Item("CustomerName")
Catch mySqlException As SqlException

For Each mySqlException In mySqlException.Errors
' Code to process SQL Server errors goes here.
Next
Catch myException As Exception ' Code to process general exceptions goes
here.
End Try
C. Try myDataAdapter.Fill(myDataSet, "Customers")
customerName = myDataSet.Tables(0)._Rows(0).Item("CustomerName") Catch
mySqlException As SqlException
Dim mySqlError As SqlError
For Each mySqlError In mySqlException.Errors
'Code to process SQL Server errors goes here.
Next
Catch myException As Exception
' Code to process general exceptions goes here.
End Try
D. Try myDataAdapter.Fill(myDataSet, "Customers") customerName =
myDataSet.Tables(0)._Rows(0).Item("CustomerName")
Catch myException As Exception
Throw New Exception("General exception occurred")
Catch mySqlException As SqlException
Dim mySqlError As SqlError
For Each mySqlError In mySqlExaption.Erros
'Code to process SQL Server errors goes here.
Next
End Try

Answer: C

Explanation: First we most catch the most specific errors, the SQL Errors. We then use a general
catching of exceptions.
Note: An SQLException is an exception that is thrown when SQL Server returns a warning or error.
Reference: .NET Framework Class Library, SqlException Class [Visual Basic]
Incorrect Answers
A: The scenario requires that each SQLServer error must be processed, not just that an SQLException occurred.
B: The following statement is incorrect:
For Each mySqlException In mySqlException.Errors
The mySQLException variable should be of SQLSerror type, not SQLException type. We are processing
SQLErrors, not SQLExceptions.
D: We must catch the SQL errors first.

QUESTION 108:

You create an XML Web service that uses an existing COM component. You implement the service so
that it does not return COM exceptions to its callers. Instead, the service translates the COM exceptions
into more specific exception types based on the HRESULT, as shown in the following code segment:

```
<WebMethod> Try
' Code to call the COM component goes here.
Catch ce As COMException
Select Case ce.ErrorCode
Case &H80070005
Throw New SecurityException("Access denied", ce)
' Additional case statements go here.
End Select
End Try
```
You want to record the original COM exception that was thrown.
What should you do?

A. At the beginning of the catch block, add the following code segment:
Console.WriteLine("{0} COMException caught.", ce)
B. At the beginning of the catch block, add the following code segment:
Context.Trace.Write(ce, "COMException caught.")
C. Within each case statement add the following code segment:
ce.ToString()
D. Within each case statement, add the following code statement:
Console.WriteLine("{0} COMException caught.", ce.StackTrace)

Answer: B

Explanation: The original exception is caught in the following statement:
Catch ce As COMException
We should immediately save this information with the following statement:
Context.Trace.Write(ce, "COMException caught.")
Reference: .NET Framework Class Library, Trace.Write Method (String, String) [Visual Basic]
Incorrect Answers
A: Console.WriteLine only displays the message on the console. The message will not be recorded.
C: We should only record the statement in the beginning of the catch block. Furthermore, ce.ToString() will not record the exception.
D: We should only record the statement in the beginning of the catch block. Furthermore, Console.WriteLine only displays the message on the console. The message will not be recorded.

QUESTION 109:

You create an XML Web service named PhoneNumberService that returns the telephone numbers of people in a specified geographical region. If an error occurs when the service is processing requests, a custom application exception named PhoneNumberException is thrown.
You create an ASP.NET application named CKPhoneBook that contains a Web reference to PhoneNumberService. You need to wrap any calls made to PhoneNumberService in a try/catch block to catch any PhoneNumberException that may be thrown.
Which two code segments are possible ways to achieve this goal? (Each correct answer presents a complete solution. Choose two)

A. Try
' Code to call PhoneNumberService method goes here.
Catch ex As SoapException
' Handle the exception
End Try
B. Try
' Code to call PhoneNumberService method goes here.
Catch ex As SoapHeaderException
' Handle the exception.
End Try
C. Try
' Code to call PhoneNumberService method goes here.
Catch ex As Exception
' Handle the exception
End Try
D. Try
' Code to call PhoneNumberService method goes here.
Catch ex As ApplicationException
' Handle the exception.
End Try

Answer: A, C.

Explanation:
A: XML Web service methods can generate a SoapException by simply throwing an exception within the XML Web service method. If the client accessed the method over SOAP, the exception is caught on the server and wrapped inside a new SoapException. This also applies even if the custom exception class 'PhoneNumberException' is inherited from ApplicationException class.
C: The Exception class is the base class for all exceptions. Any exception would be intercepted.
Reference:
.NET Framework Class Library, SoapException Class [Visual Basic]
.NET Framework Class Library, Exception Class [Visual Basic]
.NET Framework Class Library, ApplicationException Class [Visual Basic]
Incorrect Answers
B: The SoapHeaderException exception that is thrown when an XML Web service method is called over SOAP and an exception occur during processing of the SOAP header.
D: An applicationException is thrown by a user program, not by the common language runtime. In this scenario we use a Web Service, however.

QUESTION 110:

You are creating a serviced component that will perform several distributed transactions across different databases. The serviced component will be called from managed and unmanaged client applications.
You create a new class library project. You write code in the class modules to implement the logic.
You want to detect and correct any registration errors before any client applications use the component.
What should you do next?

A. Assign a string name to the assembly.
Compile the assembly.
Run the .NET Services Installation tool (Regsvcs.exe) to add the component to Component Services.
B. Run the Type Library Exporter (Tlbexp.exe) to export the definition for the assembly.
C. Assign a string name for the assembly.
Compile the assembly.
Run the Global Assembly Cache tool (Gacutil.exe) to add the component to the global assembly cache.
D. Use the Assembly Registration tool (Regasm.exe) to create entries in the registry that describe the assembly.

Answer: A

Explanation: The .NET Services Installation tool performs loads and registers an assembly, generates, registers, and installs a type library into a specified COM+ 1.0 application, and configures services that you have added programmatically to your class.
Reference: .NET Framework Tools, .NET Services Installation Tool (Regsvcs.exe)
Incorrect Answers
B: The Type Library Exporter generates a type library that describes the types defined in a common language runtime assembly.
C: The Global Assembly Cache tool allows you to view and manipulate the contents of the global assembly cache and download cache.
D: The Assembly Registration tool reads the metadata within an assembly and adds the necessary entries to the registry, which allows COM clients to create .NET Framework classes transparently.

QUESTION 111:

You are creating an ASP.NET application named CKWebApp. To CKWebApp, you add a Web reference to an XML Web service named UserService.
UserService consists of a Web method named RetrieveUserInfo. This Web method takes a userID as input and returns a DataSet object containing user information. If the userID is not between the values 1 and 1000, a System ArgumentException is thrown.
In CKWebApp, you write a try/catch block to capture any exceptions that are thrown by UserService.
You invoke RetrieveUserInfo and pass 1001 as the user ID.
Which type of exception will be caught?

A. System.ApplicationException
B. System.ArgumentException
C. System.Web.Service.Protocols.SoapException
D. System.Web.Service.Protocols.SoapHeaderException

Answer: C

Explanation: The SoapException is thrown when an XML Web service method is called over SOAP and an exception occurs.
Note: Simple Object Access Protocol (SOAP) codifies the practice of using XML and HTTP to invoke methods across networks and computer platforms. SOAP is a XML-based protocol that lets you activate applications or

objects within an application across the Internet.
Reference: .NET Framework Class Library, SoapException Class
Incorrect Answers
A: The ApplicationException is thrown when a non-fatal application error occurs. ApplicationException is
thrown by a user program, not by the common language runtime.
B: The ArgumentException exception is thrown when one of the arguments provided to a method is not valid.
D: The SoapHeaderException is thrown when an XML Web service method is called over SOAP and an
exception occurs during processing of the SOAP header.

QUESTION 112:

You are a software developer at Certkiller .com. You create a serviced component named Certkiller Util to
transfer money between bank accounts. Certkiller Util logs information for failed transfers by using the
Trace class. You want Certkiller Util to save these log messages.
Which code segment should you use?

A. Shared Sub New()
Trace.Flush()
End Sub
B. Shared Sub New()
Trace.Listeners.Clear()
End Sub
C. Shared Sub New()
Trace.Listeners.Add(_
new TextWriterListner("transfer.log"))
End Sub
D. Protected Overloads Overrides Sub Finalize()
Trace.Flush(9
End Sub
E. Protected Overloads Overrides Sub Finalize()
Trace.Listeners.Clear(9
End Sub

Answer: C, D

Explanation: We must first add a textwriter to the trace listeners , then we must call flush, to flush them
into the file.

QUESTION 113:

You create an XML Web service that calculates taxes. You deploy the service to a production computer
named Certkiller 1. The URL of the production XML Web service is http:// Certkiller 1/WS/TaxCalc.asmx.
The service does not support all international tax rates. You want to find out which unsupported tax
rates are being requested by users. If a user requests a tax rate that is not supported, the service records
the request by using a trace message. You want to view the unsupported rates that have been requested
Which two actions should you take? (Each correct answer presents part of the solution. Choose two)

A. Modify the trace element in the Web.config file of the service by setting the pageOutput attribute to "true".
B. Modify the trace element in the Web.config file of the service by setting the enabled attribute to "true".
C. To the constructor of the TaxCalc class, add the following code segment:
Public Sub New()
InitializeComponent()
Trace.AutoFlush = True
End Sub
D. To the constructor of the TaxCalc class, ad the following code segment:
Public Sub New()
InitializeComponent()
Trace.Flush()
End Sub

A. View the page at http:// Certkiller 1/WS/TaxCalc.asmx.
B. View the page at http:// Certkiller 1/WS/Trace.axd.

Answer: B, F

Explanation:
B: You can enable tracing for an entire application in the web.config file in the application's root directory. We should set the trace attribute enabled to true:
<trace enabled="true"...
F: Once you have enabled tracing for your application, when each page in the application is requested, it will execute any trace statements that it contains. You can view these statements and the additional trace information in the trace viewer. You can view the trace viewer by requesting trace.axd from the root of your application directory.
Reference: .NET Framework Developer's Guide, Enabling Application-Level Tracing
Incorrect Answers
A: If you want trace information to appear appended to the end of the page that it is associated with, set the pageOutput attribute in the tracing configuration section of the web.config file to true. However, only you, and not the users should view the tracing information.
C: Setting AutoFlush to true means that data will be flushed from the buffer to the stream. This will not help on providing trace information.
D: The Trace.Flush method flushes the output buffer, and causes buffered data to be written to the Listeners.
E: This is the application file. We don't want it to show any trace information.

QUESTION 114:

You create an XML Web service named Certkiller
A. You use the Debug.Assert method in your code to
verify parameter values and ranges.
You find that Certkiller A does not display assertion failure messages. Instead, Certkiller A returns an HTTP 500 error message when an assertion fails. You want to view the assertion failure messages.
What should you do?

A. Modify the Web.config file to stop the Debug.Assert method from displaying a message box.
B. Modify the compilation element of the Web.config file by setting the debug attribute to "true".
C. In the constructor for Certkiller A, set the Debug.AutoFlush property to false.
D. In the constructor for Certkiller A, add an EventLogTraceListener object to the Listeners property of the Debug
class.

Answer: D

Explanation: We do not want the Web service to return error messages, but we still want to to view
failure messages. This is accomplished by using a TraceListener.
Note: The default behavior displays a message box when the application runs in user-interface mode, and
outputs the message to the default trace output. You can customize this behavior by adding a TraceListener to,
or removing one from, the Listeners collection.
Reference:
.NET Framework Class Library, Debug.Assert Method (Boolean, String) [Visual Basic]
Incorrect Answers
A: We still want to view asserton failure messages.
B: Setting the debug attribute of the compilation element to true does not make any difference in this scenario.
C: Setting AutoFlush to true means that data will be flushed from the buffer to the stream. It would not affect
the problem at hand, however.

QUESTION 115:

You are a software developer at Certkiller .com. You are creating an XML Web service named
Certkiller Customer that provides bank customer information. You write code to keep track of error
messages, warning messages, and informational messages while the service is running. You use the Trace
class to write the message to a log file.
On test computers, you want to see error messages and warning messages. On deployment computers,
you want to see error messages, but no warning messages.
Which two code segments should you use? (Each correct answer presents part of the solution. Choose
two)

A. Public Shared mySwitch as TraceSwitch
Shared Sub New()
mySwitch = new TraceSwitch("tswitch", _
"a trace switch")
End Sub
B. Public Shared level as TraceLevel
Shared Sub New()
level = TraceLevel.Error
End Sub
C. Trace.WriteLineIf(mySwitch.TraceError, _
"An error occurred.")
Trace.WriteLineIf(mySwitch.TraceWarning, _
"Warning message")

D. Trace.WriteLineIf(level = TraceLevel.Error , _
"The operation succeeded.")
Trace.WriteLineIf(level = TraceLevel.Warning, _
"Warning message")
E. Trace.WriteLineIf(Not mySwitch Is Nothing, _
"An error occurred.")
Trace.WriteLineIf(Not mySwitch Is Nothing, _
"Warning message")
F. Trace.WriteLineIf(level <> TraceLevel.Off, _
"An error occurred.")
Trace.WriteLineIf(level <> TraceLevel.Off, _
"Warning message">

Answer: B, C

QUESTION 116:

You create an XML Web service that uses the Trace class to output error messages, warning messages,
and informational messages to a log file. The service uses a TraceSwitch object to filter the trace output.
The DisplayName property of the TraceSwitch object is " CertK Switch". On a development computer, all
trace output appears in the log file.
You move the service to a production computer. You must configure the production XML Web service to
output only error messages to the log file.
What should you do?

A. To the Web.config file, add the following code segment:
<system.diagnostics> <switches> <add name=" CertK Switch" value="1" />
</switches> </system.diagnostics>
B. To the Web.config file, add the following code segment:
<system.diagnostics> <switches> <add name=" CertK Switch"
value="TraceSwitch" /> </switches> </system.diagnostics>
C. To the Web.config file, add the following code segment:
<system.diagnostics> <switches> <add name="TraceSwitch" value="1" />
</switches> </system.diagnostics>
D. To the Web.config file, add the following code segment:
<system.diagnostics> <switches> <add name="TraceSwitch"
value=" CertK Switch" /> </switches> </system.diagnostics>

Answer: A

Explanation: In the Web.config file we should specify the name of the switch (CertK Switch) and the
appropriate Tracelevel through the value attribute.Tracelevel corresponds to the values 1 through 4.
Tracelevel 1 only displays error messages.
Note: A switch provides an efficient mechanism for controlling tracing and debugging output at run time using
external settings. The Switch class implements default behavior for switches, allowing you to change the switch
level at run time.

Reference: .NET Framework Class Library, Switch Class [Visual Basic]
Visual Basic and Visual C# Concepts, Trace Switches
Incorrect Answers
B: Incorrectly the value attribute is set to "TraceSwitch". Valid Tracelevel values are 1 through 4.
C, D: We should specify the name of the switch with a name attribute in the Web.config file. We must specify
CertK Switch, not TraceSwitch.

QUESTION 117:

You are creating a .NET Remoting object. You want to add code to the object to log error messages and
warning messages. You want to log messages written to both a log file and to the Windows application
log.
Which code segment should you use?

A. Dim eventLog As New EventLog("remobj")
Dim fileLog As FileStream = File.Create("remobj.log")
Trace.WriteLine(eventLog, " Certkiller sample message")
Trace.WriteLine(fileLog, " Certkiller sample message")
B. Dim eventLog as New EventLog("remobj")
Dim fileLog As FileStream = File.Create("remobj.log")
Trace.Write(eventLog)
Trace.Write(fileLog)
Trace.WriteLine(" Certkiller sample message")
C. Trace.Listeners.Add(new EventLogTraceListener("remobj"))
Trace.Listeners.Add(_
new TextFileTraceListener("remobj.log"))
Trace.WriteLine(" Certkiller sample message")
D. Trace.Listeners.Add(new EventLogTraceListener())
Trace.Listeners.Add(_
new TextFileTraceListener("remobj.log"))
Trace.WriteLine(" Certkiller sample message")

Answer: C

Explanation: Listeners direct the tracing output to an appropriate target, such as a log, window, or text
file.
An EventLogTraceListener redirects output to an event log. A TextWriterTraceListener redirects output to an
instance of the TextWriter class.
We should take care to use the new EventLogTraceListener("remobj")constructor.
Note: Any listener in the Listeners collection gets the same messages from the trace output methods. If we set
up two listeners: a TextWriterTraceListener and an EventLogTraceListener. Each listener receives the same
message. The TextWriterTraceListener would direct its output to a stream, and the EventLogTraceListener
would direct its output to an event log.
Reference: Visual Basic and Visual C# Concepts, Trace Listeners
.NET Framework Class Library, EventLogTraceListener Class [Visual Basic]
Incorrect Answers

A: The EventLog object provides interaction with Windows event logs and filestreams enables writing of data to files. However, they are not appropriate for logging warning and error messages.
B: The following statements are incorrect.
Trace.Write(eventLog)
Trace.Write(fileLog)
The correct usage is Trace.Write(Parameter), where Parameter is either an Object or a String that should be written.
D: The EventLogTraceListener constructor() (with no parameter) initializes a new instance of the EventLogTraceListener class without a trace listener.

QUESTION 118:

You create a collection of serviced components that performs bank transfers for Certkiller Ltd. All the components are marked with the Transaction(TransactionOption.Required) attribute. All the methods in the components are marked with the AutoComplete() attribute. You discover that incorrect balance amounts are being transferred. You decide to debug the components. During debugging, a System.Runtime.InteropServices.COMException is thrown. The HRESULT for the exception is 0x8004E002. The exception includes the following message: "The root transaction wanted to commit, but transaction aborted."
You find that this exception occurs only during the debugging session, and not when the components run outside of the debugger. This exception is preventing you from continuing to debug the components. You need to resolve this problem.
What should you do?

A. Remove the AutoComplete attribute from each method.
Within each method implementation, add calls to the ContextUtil.SetComplete() and ContextUtil.SetAbort() methods
B. Remove the AutoComplete attribute form each method.
Within each method implementation, add calls to the ContextUtil.MyTransactionVote and ContextUtil.DeactivateOnReturn properties.
C. Increase the transaction timeout in the Component Services tool by using the Properties dialog box for My Computer.
D. Replace each method implementation with the following code segment:
Try
' The original method implementation goes here.
Finally
ContextUtil.SetComplete()
End Try

Answer: C

Explanation: The debugging process makes the execution time longer. The transactions will get timed out. We must therefore increase the transaction timeout interval.
Note: A COMException is thrown when an unrecognized HRESULT is returned from a COM method call.
Reference: .NET Framework Class Library, COMException Class [Visual Basic]
Incorrect Answers

Note: The COM+ done bit determines how long the object remains active after finishing its work and can affect the duration of a transaction. The consistent bit casts a vote to commit or abort the transaction in which it executes, and the done bit finalizes the vote.
A: The ContextUtil.SetComplete method sets the consistent bit and the done bit to true in the COM+ context.
The ContextUtil.SetAbort method sets the consistent bit to false and the done bit to true in the COM+ context.
B: The ContextUtil.MyTransactionVote property gets or sets the consistent bit in the COM+ context.
The ContextUtil.DeactivateOnReturn property gets or sets the done bit in the COM+ context.
D: The ContextUtil.SetComplete method sets the consistent bit and the done bit to true in the COM+ context. If asked, the COM+ context will commit the current transaction, and the object is deactivated on method return.

QUESTION 119:

You create a Windows service that processes XML messages placed in a MSMQ queue. You discover that the service is not functioning properly.
You need to debug the service to correct the program.
What should you do?

A. Start the Windows service.
Then attach a debugger to the process.
B. Attach a debugger to the Windows service.
Then start the Windows service.
C. Start the Windows service.
Then run the .NET Services Installation tool (Regsvcs.exe).
D. Place a breakpoint in the Main method of the Windows service.
Then run the application within the Visual Studio .NET integrated development environment (IDE).

Answer: A

Explanation: First we start the service, and then we attach the debugger to it. We must attach to available running processes.
Note: Microsoft Message Queuing Services (MSMQ) enables applications running at different times to communicate across heterogeneous networks and systems that may be temporarily offline.
Reference: Visual Studio, Attaching to a Running Program
Incorrect Answers
B: We must attach the debugger to a running service.
C: The NET Services Installation Tool (Regsvcs.exe) cannot help in debugging the service processing the MSMQ queue.
Note: Regsvsc.exe loads and registers an assembly, generates, registers, and installs a type library into a specified COM+ 1.0 application, and configures services that you have added programmatically to your class.

QUESTION 120:

You create a serviced component named SessionDispenser. This computer is in the Certkiller .Utilities assembly and is registered in a COM+ server application. SessionDispenser has multiple callers.
You discover that there are logic problems in the Create New Session method. You want to debug any calls to this method.

What should you do?

A. Open the SessionDispenser solution.
Set a breakpoint on the CreateNewSession method.
Start the debugger.
B. Attach the debugger to the client process.
Set a breakpoint on the SessionDispenser.CreateNewSession method.
C. Attach the debugger to the Certkiller .Utilites.exe process.
Set a breakpoint on the CreateNewSession method.
D. Attach the debugger to a Dllhost.exe process.
Set a breakpoint on the CreateNewSession method.

Answer: D

Explanation: Since this is a COM+ SERVER application we have to attach the debugger to the
Dllhost.exe.
Reference: .NET Framework Developer's Guide, Using Serviced Components with the Global Assembly
Cache
Incorrect Answers
A: The debugger must be attached to the program that should be debugged.
B: The debugger should be attached to Dllhost.exe, not to the client process.
C: We are not debugging a Library application, so we should not attach the debugger to the
Certkiller .Utilities.exe process.

QUESTION 121:

You create a serviced component named Scheduler. Scheduler is registered in a library application. The
Scheduler methods parse String objects into Date Time objects.
You write a console application named CKCoverage.exe to test each method in Scheduler. You want
Coverage.exe to test Scheduler for multiple cultures to verify its globalization support.
What should you do?

A. Create a CultureInfo object for each culture locale before calling the Scheduler methods.
B. Create a RegionInfo object for each culture locale before calling the Scheduler methods.
C. Set the current thread's CurrentCulture property to each culture locale before calling the Scheduler methods.
D. Create a CKCoverage.exe.config file and add a <location> element to the configuration file for each culture
locale.

Answer: C

Explanation: We set the CurrentCulture property to a local culture, then we call the Scheduler method.
We repeat this step for each local culture.
Reference: Visual Studio, Globalization Testing
Incorrect Answers
A: CultureInfo objects would not by themselves be tested.

B: RegionInfo objects would not by themselves be tested.
D: This is not how to set up this.

QUESTION 122:

You are a software developer at Certkiller .com. You create a .NET Remoting object named Time. The Time class in the Utils namespace and is in an assembly file named Certkiller .dll.
The Time class is hosted in an Internet Information Services (IIS) virtual directory named UtilsSrv. The Time class is configured to be a server-activated object and uses a URI named Time.ren.
You use a client application named Test.exe to test the Time object. Test.exe creates instances of the Time object by using the following method signature:
Public Function CreateInstance() As Time
RemotingConfiguration.Configure("Test.exe.config")
Return new Time()
End Function
You want Test.exe to create instances of the Time class on a computer named Hosting.
What should you do?

A. Create a Test.exe.config file that includes the following code segement:
<configuration> <system.runtime.remoting>
<application> <client>
<wellknown>
type="Utils.Time, Certkiller "
url="tcp://Hosting:80/UtilsSrv/Time.rem"/>
</client> </application>
</system.runtime.remoting> </configuration>
B. Create a Test.exe.config file that include the following code segement:
<configuration> <system.runtime.remoting>
<application> <client>
<wellknow
type="Utils.Time, Certkiller "
url="http://Hosting/UtilsSvr/Time.rem"/
</client> </application>
</system.runtime.remoting> </configuration>
C. Create a Test.exe config file that includes the following code segment:
<configuration> <system.runtime.remoting>
<application>
<client url="http://Hosting/UtilsSrv/Time.rem">
<activated
type="Utils.Time, Certkiller "/>
</client> </application>
</system.runtime.remoting> </configuration>
D. Create a Test.exe config file that inclides the following code segment:
<configuration> <system.runtime.remoting>
<application>
<client url="tcp://Hosting:80/UtilsSrv/Time.rem">

```
<activated
type="Utils.Time, Certkiller "/>
</client> </application>
</system.runtime.remoting> </configuration>
```

Answer: C
Incorrect Answers:

A. This is configuring TCP channel not Http
B. This is client Activated, we do not want it like this.
C. This is wrong because of the both mistakes above.

QUESTION 123:

You create a collection of serviced components that performs bank transfers. All the components are marked with the Transaction(TransactionOption.Required) attribute. All the methods in the components are marked with the AutoComplete() attribute.
You discover that incorrect balance amounts are being transferred. You decide to debug the components. During debugging, a System.Runtime.InteropServices.COMException is thrown. The HRESULT for the exception is 0x8004E002. The exception includes the following message: "The root transaction wanted to commit but transaction aborted."
You find that this exception occurs only during the debugging session, and not when the components run outside of the debugger. This exception is preventing you from continuing to debug the components. You need to resolve this problem.
What should you do?

A. Remove the AutoComplete attribute from each method.
Within each method implementation, add calls to the ContextUtil.SetComplete() and ContextUtil.SetAbort() methods.
B. Remove the AutoComplete attribute from each method.
Within each method implementation, add calls to the ContextUtil.MyTransactionVote and ContextUtil.DeactivateOnReturn properties.
C. Increase the transaction timeout in the Component Services tool by using the Properties dialog box for My Computer.
D. Replace each method implementation with the following segment:
try { // Existing method body goes here. }
Finally { ContextUtil.SetComplete() }

Answer: C

QUESTION 124:

You are using Visual Studio .NET to develop an application to replace a COM-based application. A former colleague began writing a .NET class for the new application. This class will be used by client applications as a COM object. You are assigned to finish writing the class.
The class includes the following code segment:

```
<ComVisible(False)>
Public Class CKClass
Public Sub New()
'Implementation code goes here.
End Sub
<ComVisible(True)>_
Public Function CKMethod(param As String) As Integer
Return 0
End Function
<ComVisible(True)>_
Protected Function CKOtherMethod() As Boolean
Return True
End Function
<ComVisible(True)>_
Public ReadOnly Property CKProperty() As Integer
Get
Return 0
End get
End Property
'More implementation code goes here.
End Class
```

When this code runs, it will expose one or more methods to the client applications through COM.
Which member or members will be exposed? (Choose all that apply)

A. CKMethod
B. CKOtherMethod
C. CKProperty
D. CKClass constructor

Answer: A, C

Explanation: The ComVisible attribute must be True to make a member visible. Furthermore, the member must also be declared as public.
Incorrect Answers
B: A protected function is not visible.
D: ComVisable(False) ensures that the CKClass Constructor is not visable.

QUESTION 125:

You are developing an application that loads two DataReader objects from a Microsoft SQL Server database Certkiller Sales. The DataReader objects are named customersDataReader and productsDataReader.
The customersDataReader object is loaded from the Customers table. The productsDataReader object is loaded from the Products table.
You create a SqlCommand object named myCommand and a SqlConnection object named myConnection. You write the following code segment. (Line numbers are included for reference only.)

01 myCommand.Connection = myConnection
02 Dim CustomersDataReader As SqlDataReader
03 Dim productsDataReader As SqlDataReader
04 myCommand.CommandText = "SELECT * FROM Customers"
05 myConnection.Open()
06 customersDataReader = myCommand.ExecuteReader
07 ' Code to process the data reader goes here
08 ' Insert new code.
09 myCommand.CommandText = "SELECT * FROM Products"
10 productsDataReader = myCommand.ExecuteReader
11 ' Code to process the data reader goes here.
You run the application and an exception is thrown on line 10. To correct the problem, you need to insert additional code on line 08.
Which code segment should you use?

A. myCommand.ResetCommandTimeout()
B. myCommand.Dispose()
C. customersDataReader.NextResult()
D. customersDataReader.Close()

Answer: D

Explanation: You should always call the Close method when you have finished using the DataReader object. While a DataReader is open, the Connection is in use exclusively by that DataReader. You will not be able to execute any commands for the Connection, including creating another DataReader, until the original DataReader is closed.
Reference: .NET Framework Developer's Guide, Retrieving Data Using the DataReader [Visual Basic]
Incorrect Answers
A: Resetting the CommandTimouot to it is default value will not change anything. It has already the default value.
B: The SqlConnection.Dispose method releases the unmanaged resources used by the SqlConnection and optionally releases the managed resources.
C: The SQLCommand.Nextresult method advances the data reader to the next result, when reading the results of batch Transact-SQL statements.

QUESTION 126:

You are creating an XML Web service named ShoppingCartService. All requests made to web methods of ShoopingCartservice require that callers present a valid key input. This key indicates that the user has been authenticated to make ShoppingCartService requests.
To obtain a valid key, the callers must first call GetKey.
You write the following code segment. (Line numbers are include for reference only)
01 <WebMethod ( ) > _
02 Public Function GetKey (ByVal caller As String) As String
03 Dim Key As String
04 If Not Context.Session ("key") Is Nothing

05 key = Context.Session ("key")
06 Return key
07 Else
08 Dim isAuthenticated As Boolean
09 ' Code to validate the caller goes here.
10 If isAuthenticated Then
11 ' Code to generate "key" goes here.
12 Context.Session ("Key") = key
13 Return key
14 Else
15 Throw New Exception ("User not authenticated")
16 End If
17 End If
18 End Function

You run the code and an exception is thrown on line 04. You want this code to run without exceptions. What should you do?

A. Delete lines 04 through 07 and delete line 17.
B. Delete "Context." From lines 04, 05, and 12.
C. On line 01, set the EnableSession property of the WebMethod Attribute to true.
D. On line 01, set the CacheDuration property of the WebMethod attribute to a value greater than zero.

Answer: C

Explanation: The EnableSession property of the WebMethod attribute enables session state for an XML Web service method. Once enabled, the XML Web service can access the session state collection directly from HttpContext.Current.Session or with the WebService.Session property if it inherits from the WebService base class. The default value is false.
Reference: Visual Basic and Visual C# Concepts, Using the WebMethod Attribute
Incorrect Answers
A: We should keep the key for the session. Furthermore, the Context.Session ("Key") = key statement on line 12 would fail.
B: We should keep the key for the session. Furthermore, there would be an End If statement with no matching If statement.
D: Changing caching configuration would not help with the session data.

QUESTION 127:

You develop a Windows-based application named MyWinApp that contain a Windows Form named Certkiller 1. To MyWinApp, you add a Web reference to an XML Web Service named Service1. Service1 exposes two Web methods named Authentication and RetrieveData. Both methods have sessions enabled. Authenticate authenticates a caller. If the caller is authenticated, Authenticate creates a unique key, stores that key by using the Session object, and returns that key.
RetrieveData expects a valid key that has been generated by Authenticate as input before it will return data. If the key matches the key in the current session, retrieveData will return data to the customer.
You write the following code segment in the Page_load event of Certkiller 1. (Line numbers are included

for reference only)
01 Dim service1 As New localhost.Service1 ( )
02 Dim key As String
03 Dim userData As DataSet
04 ' Insert new code.
05 key = service1.Authenticate (myUser, myPassword)
06 userData = service1.RetrieveData (key)
07 DataGrid1.DataSource = userData
You run the application. When line 06 executes, the Web service returns an exception, which indicates that the key is invalid. To ensure that the application runs without exceptions, you must insert additional code on line 04.
Which code segment should you use?

A. service1.PreAuthenticate = True
B. service1.InitializeLifetimeService()
C. service1.CookieContainer = New _
System.Net.CookieContainer()
D. Dim cookie As New System.Net.Cookie("Key" , key)

Answer: C

Explanation: ASP.NET uses 2 mechanisms to implement sessions: cookies and URL variables. Since it is impossible to use URL variables in web services, it must be using cookies. In the question, the reason for the session not functioning properly is that a new cookie is created each time. We need to add a cookie container to hold the cookie across 2 web service calls. This is verified against MSDN.

QUESTION 128:

You create an XML Web service named TimeService. Each time TimeService is started, it checks for the existence of an event log named TimeServiceLog. If TimeServiceLog does not exist, TimeService creates it.
You discover that when TimeService creates TimeServiceLog, it throws a
System.Security.SecurityException. The exception includes the following message: "Requested registry access is not allowed". You need to resolve this problem.
What should you do?

A. Configure Inetinfo.exe to run as the local administrator user account.
B. Create an installer for TimeService, and create the new event log in the installer code.
C. Modify the Web.config file by adding an identity element to impersonate the LOGON user specified by Internet Information Services (IIS).
D. Modify the permissions of the HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Eventlog registry key to give full control to the IUSR_computername user account.

Answer: B

Explanation: There really is no good answer here.

A. you don't really want to do that, big security issue.
B. Best answer but does not work if a user deletes the event log or the log gets corrupted.
C. There is no description on what authentication mechanism is being used so it may not work.
D. yet again, a bad security issue that will not even work since the aspnet_wp.exe process that hosts the web service runs under the aspnet user account.

QUESTION 129:

You create an XML Web service named Certkiller Code. Your project source includes a code-behind file and a file named Certkiller Code.asmx.
During implementation, you use the Debug class to record debugging log messages, to verify values, and to report debugging failures.
You want to deploy Certkiller Code to a production computer. You do not want any of the debugging code to execute on the production computer.
What should you do?

A. Set the project's active configuration to Release and rebuild the DLL.
B. Modify the trace element of the Web.config file by setting the enabled attribute to "false".
C. Modify the compilation element of the Web.config file by setting the debug attribute to "false".
D. Add code to the constructor of the Certkiller Code class to set the AutoFlash property of the Debug class to false.
E. Add code to the constructor of the Certkiller Code class to call the Clear method of the Debug.Listeners property.

Answer: A

Explanation: We can only exclude the debugging code from being executed by setting the Project Active Configuration to 'Release' and rebuild the Web Server again.
Note: Project build configurations are listed in the Project Property Pages dialog box and list all of the available types of project builds, such as Debug or Release
Reference: Visual Studio, Creating Solution and Project Build Configurations

QUESTION 130:

Cert Killer is a software developer at Certkiller .com. Jack creates an XML Web service named Certkiller Op that converts steer addresses to latitude and longitude coordinates. Certkiller charges for this service and allows only existing customers to use the service.
If a customer ID is not passed as part of a SOAP header, you want the service to refuse the request. You want these service refusal messages to be logged to an event log named Certkiller OpLog. You anticipate that there will be a lot of these log entries over time. A String object named refusalMessage contains the message to log.
Which code segment should Jack use?

A. Dim log As New EventLog(" Certkiller OpLog")
log.WriteEntry(refusalMessage, EventLogEntryType.Error)

B. Dim log As New EventLog()
log.Source = " Certkiller OpLog"
log.WriteEntry(refusalMessage, EventLogEntryType.Error)
C. If Not EventLog.SourceExists(" Certkiller OpSource") Then
EventLog.CreateEventSource(" Certkiller OpSource", _
" Certkiller OpLog")
End If
EventLog.WriteEntry(" Certkiller OpSource",
refusalMessage, EventLogEntryType.Error)
D. If Not EventLog.SourceExists(" Certkiller OpSource") Then
EventLog.CreateEventSource(" Certkiller OpSource", _
" Certkiller OpLog")
End If
Dim If
Dim log As New EventLog(" Certkiller OpLog")
log.WriteEntry(refusalMessage, EventLogEntryType.Error)

Answer: C

QUESTION 131:

You are creating an XML Web service named WeatherService that provides the current weather
conditions for cities around the world. Your development cycle includes three stages: development,
testing, and production. In each stage, WeatherService will be deployed on a different server.
For testing, you create an ASP.NET application named WeatherTest. To WeatherTest, you add a Web
reference to WeatherService. You then build a user interface and add the necessary code to test the
service.
The WeatherService interface will not change between testing and deployment. You want to ensure that
you do not have to recompile WeatherTest every time WeatherService is moved from one server to
another.
What should you do?

A. Each time WeatherService is moved, set the URL property of the generated proxy class to the new location.
B. Each time WeatherService is moved, set the Web Reference URL property of the generated proxy class to
the new location.
C. Set the URLBehavior property of the generated proxy class to dynamic.
Each time WeatherService is moved, update the appropriate key in the Web.config file to indicate the new
location.
D. Take the location of WeatherService as input to WeatherTest, and set the Proxy property of all proxy class
instances to that location.

Answer: C

QUESTION 132:

You are preparing to deploy an XML Web service named Certkiller InventoryService. This service

queries a Microsoft SQL Server database and return information to the caller.
You are Visual Studio .Net to create a setup project. You need to install Certkiller InventorySystem. You also need to run a script to create the necessary SQL Server database and tables to store the data. To accomplish this, you need to configure the project to have administrator rights to the SQL Server database.
You add a custom dialog box to the project that prompts the user for the administrator user name and password that are used to connect to the SQL Server database. You need to make the user name and password available to a custom Installer class that will execute the script.
What should you do?

A. Add a launch condition that passes the user name and password to the Install subroutine.
B. Add a merge module to the project that captures the user name and password. Use the merge module to access these values in the Install subroutine.
C. Retrieve the user name and password from the savedState object in the install subroutine.
D. Create a custom install action. Set the CustomActionData property to the entered user name and password. Then access these values in the Install subroutine.

Answer: D

Explanation:
The CustomActionData Property specifies additional data that can be evaluated by a custom action during installation. Custom actions are run at the end of an installation and cannot access information about the installation; the CustomActionData property allows you to store information about the installation that can be read by the custom action.
Reference: Visual Studio, CustomActionData Property
Incorrect Answers
A: It is not possible to achieve the goal with a launch condition.
B: Merge modules would be of no use here.
Note: A merge module is like a snapshot of a particular version of a component. A new merge module should be created for each successive version of a component in order to avoid version conflicts.
C: The savedStateGets property gets an IDictionary that represents the current state of the installation.

QUESTION 133:

You create an XML Web service that provides stock information to its customers. You successfully test the service. You are now ready to deploy the service to a new virtual directory on a production computer. You want to deploy the service without having to manually configure any settings on the production computer.
Which deployment mechanism should you use?

A. FTP
B. Xcopy command
C. Web setup project
D. Copy Project command

Answer: C

Explanation: Using deployment to install files on a Web server provides an advantage over simply copying files, in that deployment handles any issues with registration and configuration automatically.
Reference: Visual Studio, Deployment of a Web Setup Project
Incorrect Answers
A: Download files through FTP would require manual registration and configuration.
B: Just copying the files would require manual registration and configuration.
D: Copying a project, rather than deploying it, is the simpler way to move your project's content to a target Web server. However, copying does not automatically configure Internet Information Services (IIS) directory settings.

QUESTION 134:

You create three Windows services named CKService1, CKService2, and CKService3. You want to install all three services on a computer named Certkiller A by using the Installer tool (Installutil.exe).
On the command line of Certkiller A, you enter and run the following command:
Installutil CKService1 CKService2 CKService3
During the installation process, CKService3 throws an installation error. The installation process completes.
How many of the three services are now installed on Certkiller 1?

A. None
B. One
C. Two
D. Three

Answer: A

Explanation:
Installutil.exe performs installation in a transactional manner; if one of the assemblies fails to install, it rolls back the installations of all other assemblies.
Reference: .NET Framework Tools, Installer Tool (Installutil.exe)
Incorrect Answers
B, C; D: The installation of CKService3 fails and the installation of CKService2 and CKService1 is rolled back.

QUESTION 135:

You create an XML Web Service project that consists of three services, named BronzeService, SilverService, and GoldService. All three services are located in the same virtual directory on a production computer. When customers subscribed to your service, they select only one of the three available services.
A new customer subscribes to SilverService. You need to create a discovery document that enables this customer to use only SilverService.
Which discovery document should you create?

A. <disco:discovery
xmlns:disco=http://schemas. Certkiller .org/disco/
xmlns:sc1=http://schemas. Certkiller .org/disco/scl/>
<scl:contractRef ref="SilverService.asmx?wsdl"/>
</disco:discovery>
B. <disco:discovery
xmlns:disco=http://schemas. Certkiller .org/disco/
xmlns:sc1=http://schemas. Certkiller .org/disco/scl/">
<scl:contractRef ref="SilverService.asmx"/>
</disco:discovery>
C. <dynamicDiscovery xmlns="urn:schemas-dynamicdiscovery:disco.2000-03-17">
<exclude path="_vti_cnf"/>
<exclude path="_vti_pvt"/>
<exclude path="_vti_log"/>
<exclude path="_vti_script"/>
<exclude path="_vti_txt"/>
<exclude path="Web References"/>
</dynamicDiscovery>
D. <dynamicdiscovery xmlns="urn:schemas-dynamicdiscovery:disco.2000-03-17">
<exclude path="_vti_cnf"/>
<exclude path="_vti_pvt"/>
<exclude path="_vti_log"/>
<exclude path="_vti_script"/>
<exclude path="_vti_txt"/>
<exclude path="Web References"/>
<exclude path="BronzeService.asmx"/>
<exclude path="GoldService.asmx"/>
</dynamicDiscovery>

Answer: A

Explanation: We should create a static discovery file. We use a <discovery> element. Service description references are specified in a discovery document by adding a <contractRef> element. We should use the SilverService.asmx?wsdl query string, since the web page may and the web service may not be located in the same directory.
Note: XML Web service discovery is the process of locating and interrogating XML Web service descriptions, which is a preliminary step for accessing an XML Web service. Programmatic discovery can be enabled when an XML Web service publishes a .disco file, which is an XML document that can contains links to other discovery documents.
Note Dynamic Discovery: Dynamic discovery is a process by which ASP.NET can perform an iterative search through a hierarchy of folders on a development Web server to locate available XML Web services. A dynamic discovery (.vsdisco) file is an XML-based file with a root node called <dynamicDiscovery>. To maintain positive control over which XML Web services clients can discover, you should only use dynamic discovery on development Web servers. When deploying an XML Web service to a production Web server, you should instead create a static discovery file (.disco) for those XML Web services you want to enable clients to discover.

Reference: .NET Framework Developer's Guide, Enabling Discovery for an XML Web Service
Visual Basic and Visual C# Concepts, Deploying XML Web Services in Managed Code
Incorrect Answers
B: A file path to a Web Service must include the ?WSDL query string. The short form of the URL
(SilverService.asmx) is sufficient, provided that the Web service is located in the same folder as the Web page
using the WebService behavior.
C, D: We should create a static discovery file, not a dynamic discovery file.

QUESTION 136:

You create an XML Web service named myService. This service exposes a Web method named
MyMethod. You need to register myService in UDDI. First, you add a new business name and a new
tModel. You now need to list a valid access point to myService.
Which URL should you use?

A. http:// CertK Server/AppPath/myService
B. http:// CertK Server/AppPath/myService=wsdl
C. http:// CertK Server/AppPath/myService.asmx
D. http:// CertK Server/AppPath/myService.asmx?MyMethod

Answer: C

Explanation: XML Web services are access through Web browser using an URL. The URL to access an
XML Web service has the format:
http://servername/apppath/webservicename.asmx
The XML Web service's HTML description file is displayed. The XML Web service's HTML description page
shows you all the XML Web service methods supported by a particular XML Web service, including a valid
access to the method.
Note: The UDDI (Universal Description, Discovery and Integration) specifications define a standard way to
publish and discover information about XML Web services. The XML schemas associated with UDDI define
four types of information that would enable a developer to use a published XML Web service. These are:
business information, service information, binding information, and information about specifications for
services.
Reference: .NET Framework Developer's Guide, Accessing XML Web Services from a Browser [Visual Basic]
Incorrect Answers
A: The .asmx extension must be specified as well.
B: Use of Web Services Description Language (WSDL) is not required (and the syntax is incorrect as well).
D: This is not the format used to access a method within a XML Web service. The format to directly access an
method within a service is: http://servername/appath/webservicename.asmx/Methodname?parameter=value

QUESTION 137:

You are a software developer at Certkiller .com. You are preparing to deploy a serviced component
named Certkiller ProdsAvailability. This component will be used by multiple client applications to look up
the current availability of products. Some of these client applications were written by other developers
and are installed on cpmputers at other locations.

You need to maximize the security on the deployment computer. You want to configure the component's COM+ application to run under a restricted user account named OutsideUser.
What should you do?

A. Implement the ISecurityColl interface in ProductAvilability.
B. Use the Component Services tool to manually set the Identity property of the COM+ application to OutsideUser.
C. To the Certkiller ProdsAvailability assembly, add the following attributes:
<Assembly:ApplicationAccessControl(ImpersonationLevel:= _
ImpersonationLevelOption.Impersonate)>
<Assembly:SecurityRole("OutsideUser")>
D. To the Certkiller ProdsAvailability assembly, add the following attributes:
<Assembly:ApplicationAccessControl(ImpersonationLevel:= _
ImpersonationLevelOption.Identify)>
<Assembly:ApplicationName("OutsideUser")>

Answer: B

QUESTION 138:

You have an application named MyApp that contains a reference to version 1.0.0.0 of a strongly named serviced component named Certkiller Component. This component is located in the bin directory of MyApp.
You receive version 2.0.0.0 of Certkiller Component, which you install in the global assembly cache. You reconfigure the application configuration file to redirect calls to version 2.0.0.0.
You now receive version 3.0.0.0 of Certkiller Component, which you install in the global assembly cache. You do not reconfigure the application configuration file. You then run MyApp.
Which version of Certkiller Component is loaded and from which location is it loaded?

A. Version 1.0.0.0 from the bin directory.
B. Version 2.0.0.0 from the global assembly cache.
C. Version 2.0.0.0 from the bin directory.
D. Version 3.0.0.0 from the global assembly cache.

Answer: B

Explanation: The runtime uses the following steps to resolve an assembly reference:
1. Determines the correct assembly version by examining applicable configuration files, including the application
configuration file, publisher policy file, and machine configuration file.
In this scenario the application configuration file states that Version 2.0.0.0 should be used.
2. Checks whether the assembly name has been bound to before and, if so, uses the previously loaded assembly.
3. Checks the global assembly cache. If the assembly is found there, the runtime uses this assembly.
In this scenario Version 2.0.0.0 is installed in the Global assembly cache.
4. Probes for the assembly using additional steps.
Reference: .NET Framework Developer's Guide, How the Runtime Locates Assemblies

Incorrect Answers
A: The application configuration file states that version 2.0.0.0 should be used.
C: The global assembly cache is checked first.
D: The application configuration file states that version 2.0.0.0 should be used. Newer versions will not be considered.

QUESTION 139:

You are creating a serviced component named CKComponent that will be distributed to your customers.
You are also creating a setup project that will register the component in the global assembly cache on each customer's computer.
You anticipate that there will be future updates to CKComponent that you will provide to your customers. All updates to CKComponent will be backward compatible. You will create similar setup projects for each update of CKComponent that will register the updated assembly in the global assembly cache.
You need to ensure that any applications on your customers' computer that reference CKComponent use the most recent version of the component.
Which action or actions should you take? (Choose all that apply)

A. Sign CKComponent by using a strong name.
B. Compile CKComponent as a satellite assembly.
C. Include a publisher policy file that is registered in the global assembly cache on your customer's computers.
D. Increment the assembly version for each update of CKComponent.
E. Add an application configuration file to CKComponent that includes assembly binding information that redirects prior versions to the updated version.

Answer: A, C, D

Explanation:
A: We must use a strong name for CKComponent.
Note:
You cannot redirect versions for assemblies that are not strong-named. The common language runtime ignores the version for assemblies that are not strong-named.
C: Vendors of assemblies can state that applications should use a newer version of an assembly by including a publisher policy file with the upgraded assembly. In this scenario a publisher policy can be used since the newer versions of the component will be backward compatible.
D: We must make sure that we increment the assembly version for each update of the component.
Reference: .NET Framework Developer's Guide, Redirecting Assembly Versions
Incorrect Answers
B: An satellite assembly is not required.
Note: By definition, satellite assemblies only contain resource files. They do not contain any application code. In the satellite assembly deployment model, you create an application with one default assembly (which is the main assembly) and several satellite assemblies.
E: An application configuration file can be used redirect one version of an assembly to another. However, it is not the preferred solution and is mostly used for non-backward compatible components.

QUESTION 140:

You have an ASP.NET application named CertK WebApp. This application uses a private assembly named Employee to store and retrieve employee data. Employee is located in the bin directory of CertK WebApp.

You develop a new ASP .NET application named CertK WebApp2 that also needs to use employee. You assign Employee a strong name, set its version to 1.0.0.0, and install it in the global assembly cache. You then create a publisher policy assembly for version 1.0.0.0 and install it in the global assembly cache. You complete CertK WebApp2 against version 1.0.0.0. You do not recompile CertK WebApp. You then run MyWebApp.

What is the most likely result?

A. A VersionNotFoundException is Thrown.
B. Employee is loaded from the bin directory.
C. Version 1.0.0.0 of Employee is loaded from the global assembly cache.
D. Version 1.0.0.0 of Employee is loaded by the publisher policy assembly.

Answer: D

Explanation:
Vendors of assemblies can state that applications should use a newer version of an assembly by including a publisher policy file with the upgraded assembly.
Reference:
.NET Framework Developer's Guide. Creating a Publisher Policy File
.NET Framework Developer's Guide, Versioning
Incorrect Answers
A: A VersionNotFoundExceptio represents the exception that is thrown when attempting to return a version of a DataRow that has been deleted.
B, C: The Publisher Policy Assembly will be used.

QUESTION 141:

Dr Bill is a software developer at Certkiller .com. She is creating a .NET Remoting object named Certkiller Deal for an automobile dealership. Certkiller Deal exposes a method named SaveSales that saves sales information for the dealership.
Certkiller Deal is configured to use Integrated Windows authentication to authenticate its callers. You must ensure that all users of SaveSales are members of the Manager group before allowing the code within SaveSales to run.
Which code segment should Dr Bill use?

A. <PrincipalPermissionAttribute(SecurityAction.Demand, _
Role:="Manager")> _
Public Function SaveSales(sales As DataSet) As DataSet
' Code to save sales data goes here.
End Function
B. <PrincipalPermissionAttribute(SecurityAction.LinkDemand,

Role:="Manager")> _
Public Function SaveSales(sales As DataSet) As DataSet
' Code to save sales data goes here.
End Function
C. <PrincipalPermissionAttribute(SecurityAction.InheritanceDemand,
Role:="Manager")> -
Public Function Save(sales As DataSet) As DataSet
'Code to save sales data goes here.
End Function
D. Public Function SaveSales(sales As DataSet) As DataSet
Dim role As String = "Manager"
Dim principalPerm As New PrincipalPermisson(Nothing, _
Role)
' Code to save sales data goes here.
End function

Answer: A

QUESTION 142:

You are a software developer at Certkiller .com. You create an XML Web service named PhoneService
that returns telephone information to its customers. You configure the Web.config file and Internet
Information Services (IIS) to use Basic authentication to authenticate calls to the Web service.
You are now creating a Windows-based application named Certkiller App to test PhoneService. To
Certkiller App, you add a Web reference to PhoneService. You add a Windows Forms named Form1 to
Certkiller App.
You write the following code segment in the Form1.Load event. (Line numbers are included for reference
only.
01 Dim phoneService As New MyService.PhoneService()
02 Dim phoneNumber As String
03 ' Insert new code beginning here.
04 phoneNumber = phoneService.GetPhoneNumber("Alex"
You run Certkiller App. However, when line 04 executes, and exception is thrown indicating that access is
denied. You need to add code beginning on line 03 to ensure that Certkiller App runs without exceptions.
Which code segment should you use?

A. Dim credCache As New CredentialCache()
phoneService.Credentials = credCache
B. Dim credCache As New CredentialCache()
credCache.Add(New Uri(phoneService.Url), "Basic", New _
NetworkCredential(myUser, userPassword))
phoneService.Credentials = credCache
C. Dim credCache As New CredentialCache()
Dim creds As New NetworkCredential()
credCache.Add(New Uri(phoneService.Url), userPassword, _
creds)

phoneService.Credentials = creds
D. Dim credCache As New CredentialCache()
Dim creds As New NetworkCredential()
credCache.Add(New Uri(phoneService.Url), "Basic", creds)
phoneService.Credentials = credCache

Answer: B

QUESTION 143:

You create an assembly that contains a collection of serviced components. You want to secure these
components by using a collection of COM+ roles. Different groups of roles will secure different
components.
You need to ensure that role-based security is enforced in the assembly. You want to accomplish this goal
by adding an attribute to the project source code.
Which attribute should you use?

A. [assembly: SecurityRole("Assembly", true)]
B. [assembly:
SecurityPermission(SecurityAction.RequestOptional)]
C. [assembly:
ApplicationActivation(ActivationOption.Server)]
D. [assembly: ApplicationAccessControl(AccessChecksLevel =
AccessChecksLevelOption.ApplicationComponent)]

Answer: D

Explanation: ApplicationComponent enables access checks at every level on calls into the application.
Reference: .NET Framework Developer's Guide, Registering Serviced Components
Incorrect Answers
A: This allows a role named assembly access. It also allows everyone access. This does not make much sense.
B: We don't want to configure permission for additional functionality.
C: Server specifies that serviced components in the marked application are activated in a system-provided
process.

QUESTION 144:

You are creating an XML Web service named InventoryService for a nationwide clothing retailer
Certkiller Inc. The service provides near real-time inventory information to individual store managers by
using a virtual private network (VPN).
InventoryService exposes a Web method named RetrieveInventory that returns inventory information to
the caller. You configure Internet Information Services (IIS) and InventoryService to use Integrated
Windows authentication.
You need to write code in InventoryService to ensure that only members of the Manager group can
access RetrieveInventory.
What should you do?

A. To the <authorization> section of the Web.config file, add the following element:
<allow roles="Manager" />
B. To the <authorization> section of the Web.config file, add the following element:
<allow users="Manager" />
C. In RetrieveInventory, add the following code segment:
If User.Identity.Name.Equals("Manager") Then
' Code to retrieve inventory data goes here.
End If
D. In RetrieveInventory, add the following code segment:
If User.Identity.AuthenticationType.Equals("Manager")_
Then
' Code to retrieve inventory data goes here.
End If

Answer: A

Explanation: We should use the authorization element of the Web.config file to allow the Manager group
with the <allow roles="Manager" /> element.
Reference: .NET Framework General Reference, <authorization> Element
Incorrect Answers
B: This proposed solution would allow the user name Manager access, not the group.
C: The Name property gets the user's Windows logon name. We cannot compare this to a group name.
D: The proposed solution is incorrect. The AuthenticationType cannot be equal to "Manager".

QUESTION 145:

You are creating an XML Web service that processes credit card information. This service will be
consumed by computers that run on Microsoft Windows operating systems, as well as computers that
run on other operating systems.
You must ensure that client credentials passed to the service are secure and cannot be compromised. You
are not as concerned with the length of time that Web method calls take to maintain this level of security.
You need to configure authentication for this service.
Which type of authentication should you use?

A. Basic
B. Forms
C. Client Certificate
D. Integrated Windows

Answer: C

Explanation: Client certificates can be used on both Windows and non-Windows systems. Client
certificates provide a secure connection.
Note: Client Certificates is used for secure identification of clients in Internet and intranet scenarios. It requires
each client to obtain a certificate from a mutually trusted certificate authority.

Reference: .NET Framework Developer's Guide, Securing XML Web Services Created Using ASP.NET [Visual Basic]
Incorrect Answers
A: Basic authentication is not secure. Login name and password are transferred unencrypted in clear text.
B: Forms authentication is not supported by XML Web services. It is a system by which unauthenticated requests are redirected to an HTML form using HTTP client-side redirection.
D: Integrated Windows authentication can only be used on Windows computers.

QUESTION 146:

You are creating an XML Web service named myWebService. This service will be used to exchange highly confidential information over the Internet with your company's business partner named Certkiller , Inc.
You want only callers from Certkiller , Inc., to be able to access myWebService. You do not want to have to accept a user name and password from callers.
Once callers are authenticated, you want to use Windows user accounts to authorize access to the Web methods exposed by the Web service. You set up two Windows user accounts named Certkiller Associate and Certkiller Manager. You need to configure myWebService to meet these security requirements.
Which type of authentication should you use?

A. Basic
B. Digest
C. Anonymous
D. Client Certificate

Answer: D

Explanation: Client certificate authentication meets the requirements of this scenario:
1. would only allow specific users to gain access
2. no username or password would be required.
Incorrect Answers
A, B: Basic authentication and Digest Authentication would require a user name and a password from the callers.
C: Anonymous access would allow public access.

QUESTION 147:

You are creating an XML Web service named CKWebService. Callers must be authenticated by using credentials passed in the SOAP header of each Web service call.
You want to use role-based security to secure each method on CKWebService. The roles that users are assigned are stored in a custom database table. You need to write code that will allow you to dynamically change which roles can execute specific methods at run time.
What should you do?

A. Create a WindowsIdentity object and a WindowsPrincipal object.
Then implement declarative role-based security.

B. Create a WindowsIdentity object and a WindowsPrincipal object.
Then implement imperative role-based security.
C. Create a GenericIdentity object and a GenericPrincipal object.
Then implement declarative role-based security.
D. Create a GenericIdentity object and a GenericPrincipal object.
Then implement imperative role-based security.

Answer: D

Explanation: The GenericIdentity class in conjunction with the GenericPrincipal class to create an
authorization scheme that exists independent of a Windows NT or Windows 2000 domain. Furthermore,
we should use imperative role-based security to allow dynamic permissions that are decide at runtime.
Reference: .NET Framework Developer's Guide, Creating GenericPrincipal and GenericIdentity Objects
[Visual Basic]
Incorrect Answers
A, B: WindowsPrincipal allows code to check the Windows group membership of a Windows user. However,
in this scenario we are creating a customized security scheme and have no use of WindowsPrincipal objects.
C: Declarative role-based security would not allow dynamic permissions that are decide at runtime.

QUESTION 148:

You are creating an XML Web service named Certkiller SalesInformation. This service provided sales
information to regional managers and directors by using a virtual private network (VPN).
Certkiller SalesInformation exposes a Web method named GetSalesInfo that returns sales information to
the caller. You must use role-based security to restrict access to GetSalesInfo to only members if the two
Windows groups named Manager and Director. You configure Certkiller SalesInformation to use
Integrated Windows authentication.
You write the following code to create permissions in GetSalesInfo:
Dim myPermission1 As New_PrincipalPermission(Nothing, "Manager")
Dim myPermission2 As New_PrincipalPermission(Nothing, "Director")
You need to write the remaining code in GetSalesInfo to ensure that only users in the Manager group
and the Director group can access SalesInformation.
Which code segment should you use?

A. myPermission1.Intersect(myPermission2).Demand()
B. myPermission1.Union(myPermission2).Demand()
C. myPermission1.Demand() myPermission2.Demand()
D. myPermission2 = myPermission1.Copy() myPermission2.Demand()

Answer: B

Explanation: The Union method creates a permission that is the union of the current permission and the
specified permission. We want a union of the Manager and the Director group.
Reference:
.NET Framework Class Library, SecurityPermission.Union Method [Visual Basic]
.NET Framework Class Library, PrincipalPermission.Demand Method [Visual Basic]

Incorrect Answers
A: An intersect would only give permissions of to users that are members of both the Manager and the Director groups.
C: This code first test the membership of the Managers groups and the tests the membership of the Director group. Unless both these conditions match an exception will be thrown.
D: The copy method creates and returns an identical copy of the current permission. The code would only test the membership of the Manager group.

QUESTION 149:

You are creating a .NET Remoting object named Certkiller Payroll. The Certkiller Payroll class allows remote client applications to access payroll data for your company. Client applications are developed by using Windows Forms and Web Forms.
You must ensure that remote client applications are securely authenticated prior to gaining access to Payroll object. You want to accomplish this task by writing the minimum amount of code.
What should you do?

A. Use a TcpChannel and a BinaryFormatter for the Certkiller Payroll class.
B. Use an HttpChannel and a SoapFormatter for the Certkiller Payroll class.
C. Host the Certkiller Payroll class in Internet Information Services (IIS) and implement Basic authentication.
D. Host the Certkiller Payroll class in Internet Information Services (IIS) and implement Integrated Windows authentication.

Answer: D

Explanation: Hosting the application on an IIS server configured for Windows authentication would:
1. client applications are securely authentication prior to gaining access to the Class.
2. miniminal coding would be required
Incorrect Answers
A: This proposed solution does not address the secure authentication requirement.
Note: A TcpChannel provides an implementation for a sender-receiver channel that uses the TCP protocol to transmit messages.
The BinaryFormatter Class serializes and deserializes an object, or an entire graph of connected objects, in binary format.
B: This proposed solution does not address the secure authentication requirement.
Note: A Http channel provides an implementation for a sender-receiver channel that uses the HTTP protocol to transmit messages.
The SoapFormatter serializes and deserializes an object, or an entire graph of connected objects, in SOAP format.
C: Basic authentication is not secure.

QUESTION 150:

You are creating an XML Web service named InventoryService for a national automobile dealership. Each branch of the dealership will build its own client application to consume InventoryService. Each branch connects to the main office of the dealership by using a virtual private network (VPN). All

computers in the dealership run on Microsoft Windows operating systems.
You need to ensure that callers of InventoryService are authenticated based on their Windows logon
name and password. You configure Internet Information Services (IIS) according to your security needs.
You need to configure the authentication type in the Web.config file.
Which code segment should you use?

A. <authentication mode="Basic" />
B. <authentication mode="Forms" />
C. <authentication mode="Integrated" />
D. <authentication mode="Windows" />

Answer: D

Explanation: Integrated Windows authentication can delegate security credentials among computers
running Windows 2000 and later that are trusted and configured for delegation.
Note: ASP .NET supports Forms Authentication, Passport Authentication, Windows Authentication, and None.
In the Web.config file these are denoted Cookie, Passport, Windows and None.
Reference: Building Distributed Applications, Authentication in ASP .NET: .NET Security Guidance
Incorrect Answers
A: Basic authentication does not use the Windows logon name and password.
B: Integrated is not a valid authentication mode in the Web.config file. Furthermore Cookie authentication
mode does not use Windows login and Windows password.
C: Integrated is not a valid authentication mode in the Web.config file.

QUESTION 151:

You are creating an XML Web service named Accountinformation for a community bank.
Accountinformation exposes a Web method named GetAccountBalance that returns the account balance
as a string. You must limit access to GetAccountBalance to users who have credentials stored in your
Microsoft SQL Server database.
You need to design GetAccountBalance to receive encrypted user credentials by using two customs fields
named Username and password in the SOAP header. To accomplish this goal, you must write the code
for GetAccountBalance.
Which code segment should you use?

A. Public Class AuthenticateUser Inherits SoapHeader
Public username As String
Public Password As String
End Class
In the accountInformation class add this code:
Public authenticateUserHeader As AuthenticateUser
<WebMethod(), SoapHeader("authenticateUserHeader")> _
Public Function GetAccountBalance() As String
If (authenticateUserHeader Is "") Then
Return "Please supply Credentials."
Else

' Code to authenticate the user and return
' the account balance goes here.
End If
End Function
B. Public Class AuthenticateUser
Public username As String
Public Password As String
End Class
In the accountInformation class add this code:
Public authenticateUserHeader As AuthenticateUser
<WebMethod(), SoapHeader("authenticateUserHeader")> _
Public Function GetAccountBalnce() as String
If (authenticateUserHeader Is "") Then
Return "Please supply Credentials."
Else
' Code to authenticate the user and return
' the account balance goes here.
End If
End Function
C. Public Class AuthenticateUser Inherits SoapHeader
Public Username As String
Public Password As String
End Class
In the accountInformation class add this code:
Public authenticateUserHeader As AuthenticateUser
<WebMethod()>
Public Function GetAccountBalance() As String
If (authenticateUserHeader Is "") Then
Return "Please supply credentials."
Else
' Code to authenticate the user and return
' the account balance goes here.
End If
End Function
D. Public Class AuthenticateUser
Public username As String
Public Password As String
End Class
In the accountInformation class add this code:
Public authenticateUserHeader As AuthenticateUser
<WebMethod() > _
Public Function GetAccountBalnce() As String
If (authenticateUserHeader Is "") Then
Return "Please supply Credentials."
Else
' Code to authenticate the user and return

' the account balance goes here.
End If
End Function

Answer: A

Explanation:
Step 1: Defining a SOAP header is accomplished by defining a class representing the data in a particular SOAP header and deriving it from the SoapHeader class.
Step 2: Apply a SoapHeader attribute to each XML Web service method that intends to process the SOAP header. Set the MemberName property of the SoapHeader attribute to the name of the member variable created in the first step.
In this scenario:
<WebMethod(), SoapHeader("authenticateUserHeader")>
Reference: .NET Framework Developer's Guide, Using SOAP Headers [Visual Basic]
Incorrect Answers
B, D: The class must inherit from the SoapHeader class.
C: We must add a SoapHeader attribute to the XLM Web service method. We can't use just <WebMethod()>.

QUESTION 152:

You are creating an XML Web service named ViewOrders that is available to customers over the Internet. ViewOrders exposes a Web method named ViewShippingDetail that requires additional security. You decide to use generic role-based security to secure ViewShippingDetail.
You need to write code to ensure that once the caller is authenticated, a user identity named Generic is created. This user identity has membership in a group named Shipping to allow access to ViewShippingDetail.
Which code segment should you use?

A. Dim myIdentity As IIdentity = New GenericIdentity("Generic", "Custom")
Dim Roles As String() = {"Shipping"}
Dim myPrincipal = New GenericPrincipal(myIdentity, Roles)
myIdentity = WindowsIdentity.GetCurrent
B. Dim myIdentity As GenericIdentity = New GenericIdentity("Generic", "Custom")
Dim Roles As String() = {"Shipping"}
Dim myPrincipal = New GenericPrincipal(myIdentity, Roles)
Thread.CurrentPrincipal = myPrincipal
C. Dim myIdentity As IIdentity = New Generic {"Shipping"}
Dim myPrincipal As IPrincipal = New WindowsPrincipal(myIdentity)
Thread.CurrentPrincipal = myPrincipal
D. Dim myGenericIdent As IIdentity = New GenericIdentity("Generic", "Custom")
Dim myId As WindowsIdentity = myGenericIdent
Dim Roles As String() = {"Shipping"}
Dim myPrincipal = New GenericPrincipal(myIdentity, Roles) Windows

Answer: B

QUESTION 153:

You are creating an XML Web service named A that is available only on your company's intranet. The service exposes a Web method named Close that updates the status of open orders to "closed".
You configure ApproveService to use only Integrated Window authentication. You must ensure that access to specific functionality within the service is based on a user's membership in specific Windows groups. You want to accomplish this by using role based security.
You want to allow all members of the Reviewers group and of the Admins group to be able to execute the Close method without creating a third group that contains members from both grouos.
Which code segment should you use?

A. (SecuerityAction.Demand, Role:="Reviewers, Admins")>
Public Sub Close()
'Code for the Close method goes here.
End Sub
B. (SecurityAction.Demand, Role:="Reviwers", Role:=Admins")>
Public Sub Close()
'Code for the Close method goes here.
End Sub
C. Public Sub Close()
Dim myPermission1 As New PrincipalPermission(Nothing, "Reviwers")
Dim myPermission2 ad New PrincipalPermission(Nothing, "Admins")
myPermission1.Demand()
myPermission2.Demand()
'Code for the Close method goes here.
End Sub
D. Public Sub Close()
Dum myPermission As New PrincipalPermission(Nothing, "Reviwers", "Admins")
myPermission.Demand()
'Code for the Close method goes here.
End Sub

Answer: A

QUESTION 154:

You create a serviced component named HealthInfo. The component exposes patient health records. You declaratively secure HealthInfo by using role-based security.
You must ensure that the security checks are enforced. You want to prevent HealthInfo from executing if administrators turns off security for the COM+ application.
What should you do?

A. To the project source code, add the following attribute:

<Assembly: ApplicationAccessControl(AccessChecksLevel:=
AccessChecksLevelOption.ApplicationComponent)>
B. To all methods, add the following attribute:
<SecurityRole("Administrators", False)>
C. To the beginning of all methods, add the following code segment:
IfNot ConnectUtil.IsSecurityEnabled
Then ContextUtil.DisableCommit()
End If
D. To the beginning of all methods, add the following code segment:
IfNot ContextUtil.IsSecurityEnabled
Then Throw New SecurityException(_
"Security must be enabled.")
End If

Answer: D

Explanation: We use ContextUtil.IsSecurityEnabled property to decide whether role-based security is
active in the current context. If it is not active we throw a securityException. This will prevent HealthInfo
from executing if security is disabled.
Reference: .NET Framework Class Library, ContextUtil.IsSecurityEnabled Property [Visual Basic]
Incorrect Answers
A: The AccessChecksLevelOption.ApplicationComponent specifies the level of access checking for an
application. It is not of use here.
B: Does not apply here.
C: The ContextUtil.DisableCommit method is used in the context of transactions. It odes not apply here.

QUESTION 155:

You create a serviced component named BankTransfer. BankTransfer is in a COM+ application named
Certkiller Bank. BankTransfer is secured by using the SecurityRole attribute for the Tellers and
Managers roles.
You want members of the Certkiller BankTellers group to be assigned to the Tellers role.
What should you do?

A. Add another SecurityRole attribute to the BankTransfer class for the Certkiller BankTellers group.
B. Modify the Tellers SecurityRole attribute on the BankTransfer class to include the Certkiller BankTellers
group.
C. Use the Component Services tool to add a new role named Certkiller BankTellers.
D. Use the Component Services tool to add the Certkiller BankTellers group to the existing Tellers role.

Answer: D

QUESTION 156:

You create a serviced component named StockQuote that implements the IStockQuote interface. The
StockQuote class includes the following code segment:

Public Class StockQuote
Inherits ServicedComponent Implements IStockQuote
Public Function GetQuote(stock as Ticker) as Price_
Implements IStockQuote.GetQuote
'Implementation code goes here.
End Function
End Class
You want to secure StockQuote so that it can only be accessed by users in the Customers and Managers roles. Which actions should you take? (Each correct answer presents part of the solution. Choose two)

A. To the StockQuote class, add the following attribute:
<ComponentAccessControl>
B. To the StockQuote class, add the following attribute:
<Transaction(TransactionOption.Required)>
C. Implement the ISecurityCallContext COM interface in the StockQuote class.
Implement the IsCallerInRole method for the Customers and Managers roles.
D. To the StockQuote class, add the following attributes:
<SecurityRole("Customers", False),_
SecurityRole("Managers", False)>
E. To the beginning of the GetQuote method, add the following code segment:
IfNot ContextUtil.IsCallerInRole("Managers,Customers")_
Then Throw New SecurityException("Access is denies.")

Answer: A, D

Explanation:
A: The component attribute ComponentAccessControl is used to enable or disable access checks at the component level.
D: You can use the SecurityRole attribute to add the roles at the assembly level. We must set the SetEveryoneAccess property to false:
[SecurityRole("Customers", false)]
[SecurityRole("Managers", false)]
Incorrect Answers
B: We are not interested in configuring a transaction.
C: Incomplete.
E: The IsCallerInRole method determines whether the caller is in the specified role. We must specify a single role, we cannot specify two roles.

QUESTION 157:

You create an XML Web service named CertK Service. You must ensure that this service meets the following URL authorization requirements.
1. Anonymous access must be disabled for CertK Service.
2. An authenticated user named User1 cannot access CertK Service.
3. All other authenticared users can access CertK Service.
You configure Internet Information Services (IIS) to meet these requirements. You now need to

configure the authorization section in the Web.config file to properly authorize the users.
Which code segment should you use?

A. <allow users="*" />
<deny users="User1" />
B. <allow users="?" />
<deny users="User1" />
C. <deny users="*" />
<deny users="User1" />
<allow users="?" />
D. <deny users="?" />
<deny users="User1" />
<allow users="*" />

Answer: D

Explanation: The elements are applied in order one by one. The first matching element decides whether the user should be granted access or not.
Step 1: We deny access permissions to anonymous users with <deny users="?" />
Step 2: We deny access to User1 with <deny users="User1" />
Step 3: We allow access for all other users with <allow users="*" />
Note:

Identity	Description
*	Refers to all identities
?	Refers to the anonymous identity

Reference: .NET Framework Developer's Guide, ASP.NET Authorization
Incorrect Answers
A: All users are allowed access. We must deny before we allow.
B: All anonymous users are allowed access.
C: All users are denied access.

QUESTION 158:

You create an XML Web service named ReportService for an application on Certkiller 's intranet. You configure Internet Information Services (IIS) and ReportService to use Integrated Windows authentication.
You configure the Access Control List (ACL) for ReportService to allow access to only members of a Windows group named FieldAgents. You test and confirm that only members of the FieldAgents group can use ReportService.
ReportService includes a method named SubmitSurveillance that calls a serviced component named ReportData. ReportData uses COM+ role-bases security to restrict component access to members of the COM+ Agents role. The COM+ Agents role is configured to include the FieldAgents group.
You call SubmitSurveillance. However, when the call to ReportData is attempted, an exception is thrown

indicating that access is denied. You need to correct this problem.
What should you do?

A. In IIS, enable Anonymous access.
B. In the <system.web> section of the Web.config file, add the following line of code:
<identity impersonate="true"/>
C. In the <system.web> section of the Web.config file, add the following line of code:
<identity impersonate="false"/>
D. In the <system.web> section of the Web.config file, add the following line of code:
<authentication mode="None"/>

Answer: B

Explanation: We must allow impersonation to allow the COM+ Agents role to be used, if they the
FieldAgent group is running the ReportService.
Note: Impersonation is when ASP.NET executes code in the context of an authenticated and authorized client.
Reference: .NET Framework General Reference, <identity> Element
Incorrect Answers
A: Anonymous access would be a security risk.
C: We should allow, not deny, impersonation.
D: Authentication mode none, specifies that no authentication. Only anonymous users are expected.

QUESTION 159:

You have just created an ASP.Net application. You also need to confige the Web.config file. You ensure
that Baker can access all of the application's resources, except for those resources that are located in the
/Apps/ResumeApplication directory. Baker is a member of the HRDepartment group.
What should you do? (Select the best choice.)

A. <system.web>
<authorization>
<allow roles="HRDepartment" />
<deny roles="HRExecutives" />
<deny users="*" />
</authorization>
</system.web>
<location path="/apps/resumeApplication">
<system.web>
<authorization>
<allow roles="HRExecutives"/>
<deny users="?" />
</authorization>
</system.web>
B. <system.web>
<authorization>
<allow roles="HRDepartment" />

```
<deny roles="HRExecutives" />
<deny users="*" />
</authorization>
</system.web>
<system.web>
<authorization>
<allow roles="HRExecutives"/>
<deny users="?" />
</authorization>
<system.web>
<authorization>
<allow roles="HRDepartment" />
<deny roles="HRExecutives" />
<deny users="*" />
</authorization>
</system.web>
<location path="/apps/resumeApplication">
</system.web>
C. <system.web>
<authorization>
<allow roles="HRDepartment" />
<deny users="*" />
</authorization>
</system.web>
<location path="/apps/resumeApplication">
<system.web>
<authorization>
<allow roles="HRExecutives"/>
<deny users="?" />
</authorization>
</system.web>
D. <location path="/apps/resumeApplication">
<system.web>
<authorization>
<allow roles="HRExecutives"/>
<deny users="?" />
</authorization>
</system.web>
```

Answer: A
Baker can access all of the application's resources, including the resources in the /Apps/ResumeApplication
directory. The first <authorization> section beginning on line 120 grants the HRDepartment group access to the
application; thus, by virtue of his
The second <authorization> block beginning on line 200 revokes access to the resources in the
/Apps/ResumeApplication directory from anonymous users, but it does not revoke this access from Baker.
Therefore, Baker can access the entire application.

QUESTION 160:

You have written a class named MyClass that should be accessed only from a user with a name of "JAMES."
Which of the following lines of code should you use to control access to your class? (Select the best choice.)

A. <PrincipalPermissionAttribute(SecurityAction.Demand, Name := "JAMES")> Public Class MyClass
B. <PrincipalPermissionAttribute(SecurityAction.Demand, Role := "JAMES")> Public Class MyClass
C. <PublisherIdentityPermissionAttribute(SecurityAction.LinkDemand) Name :="JAMES"> Public Class MyClass
D. <PublisherIdentityPermissionAttribute(SecurityAction.LinkDemand) Role :="JAMES"> Public Class MyClass

Answer: A
You should use the code <PrincipalPermissionAttribute(SecurityAction.Demand, Name := "JAMES")> Public Class MyClass to allow only a user with a name of "JAMES" to access the code in MyClass.

QUESTION 161:

You have created the code shown below: (Line numbers are for reference purposes only.)
01 Dim CKRemotingApp As cRemoteObject
02 Dim sVal As String
03 Dim str As String
04 CKRemotingApp = CType(Activator.GetObject(_
GetType(cRemoteObject), _
"tcp://CKServer:454/ObjectApplicationName" _
), cRemoteObject)
05 sVal = CKRemotingApp.GetData()
Which line of code results in the object's creation on the server? (Select the best choice.)
E. Line 03
F. Line 04
G. Line 02
H. Line 01

Answer: B
The object will be created on the server when line 04
CKRemotingApp = CType(Activator.GetObject(_
GetType(cRemoteObject), _
"tcp://servername:8320/ObjectApplicationName" _
), cRemoteObject)
is executed. Client-activated objects are created on the server when New() or the Activator.GetObject method is called. This mechanism causes the same object on the server to be used by the proxy for allcalls made to the object by the client.

QUESTION 162:

You need to use the <keyref> element in an XML schema definition. One student is related to many subjects. You need to ensure that datasets created with the XML data will produce a foreign key constraint between two columns in two of the tables.
Which other elements must you not use with the <keyref> element in order to properly build the constraint?
(Select the best choice.)

A. <key>
B. <selector>
C. <field>
D. <union>
E. <choice>

Answer: D, E
The <key> and <keyref> elements are used to place a foreign key constraint on two fields when a dataset is created from XML data. The <key> element identifies the key column of the parent table. The <keyref> element establishes the link between a parent column and a child column. When a dataset is created from the XML schema, a foreign key constraint will be created with the information supplied by the <keyref> element. When you use the <key> and <keyref> elements, you should use the <selector> and <field> elements to identify the tables and columns that are being constrained.

QUESTION 163:

You are modifying the XSD schema for the FlightData data table. You want to add a primary key thatconsists of the fields FlightNo and IATAAirportCode.
Which of the following XML code segments should you use? (Select the best choice.)

A. <xs:unique name="UniqueFlightData" msdata:PrimaryKey="true">
<xs:selector xpath=".//FlightData" />
<xs:field xpath="FlightNo, IATAAirportCode" />
</xs:unique>
B. <xs:primaryKey name="UniqueFlightData" >
<xs:selector xpath=".//FlightData" />
<xs:field xpath="FlightNo" />
<xs:field xpath="IATAAirportCode" />
</xs:primaryKey>
C. <xs:unique name="UniqueFlightData" msdata:PrimaryKey="true">
<xs:selector xpath=".//FlightData" />
<xs:field xpath="FlightNo" />
<xs:field xpath="IATAAirportCode" />
</xs:unique>
D. <xs:primaryKey name="UniqueFlightData">
<xs:selector xpath=".//FlightData" />
<xs:field xpath="FlightNo, IATAAirportCode" />

</xs:primaryKey >

Answer: C
The <xs:unique> element defines a unique constraint. When combined with the msdata:PrimaryKey="true" attribute, the element defines a primary key. The xpath property of the <xs:selector> element points to the table element to which the constraint will be applied, and the xpath property of the <xs:field> element identifies the fields that make up the primary key.

QUESTION 164:

You are quering an SQL server for customers with Gold status. To do this, you create a SqlDataReader object that contains data from the CustomerInfo table in a Microsoft SQL Server database. The SQL Server data type of one of the columns, CustomerStatus, is SmallInt. You want to store the value of the CustomerStatus column in a variable named currentIndex. You need to maintain the best performance. What should you do? (Select the best choice.)

A. GetValue
B. GetInt16
C. GetInt64
D. GetInt32

Answer: B
In order to read the data in a column of type SmallInt with the greatest performance, the GetInt16 method of a SqlDataReader object should be used. For this reason, when the data type of a column is known, typed accessors should be used rather than the generic GetValue method. Once retrieved, column values should be stored in variables of the appropriate type.

QUESTION 165:

You have created an ASP.Net application for BlueFliers Inc. The application must ensure that all flight bookings can be shared and displayed quickly among all users of the application.
Which of the following storage methods should you choose? (Select the best choice.)

A. an XML file on the Web server
B. an array in the Session object
C. a DataSet object stored in a Cache object
D. an array in a hidden field

Answer: C
You should create a DataSet object with the seismic data and store the dataset in a Cache object. By placing the dataset in a Cache object, the dataset resides in memory on the Web server and is available for all users of the application.

QUESTION 166:

You have created an ASP.Net application for BlueFliers Inc. You need to ensure that each customer is

given a unique OD.
Which schema segment will place the proper constraint on the CustomerID field? (Select the best choice.)

A. <xs:PrimaryKey msdata="CustomerID">
B. <xs:unique msdata:IsDataSet="true">
<xs:selector xpath="Table1" />
<xs:field="CustomerID" />
</xs:unique>
C. <xs:element PrimaryKey="CustomerID">
D. <xs:unique msdata:ConstraintName="UniqueKey">
<xs:selector xpath="Table1" />
<xs:field xpath="CustomerID" />
</xs:unique>

Answer: D
The unique element in an XML schema will create a unique constraint in a dataset so that no duplicate values are allowed. The msdata:ConstraintName property specifies the name of the constraint. The field element specifies the column that the constraint applies to. The selector element specifies the table that contains the column.

QUESTION 167:

You are to perform maintenance programming on an existing ASP.net application used by BlueInc to update their customers' profile information. Your observation is shown below:
1. The existing code uses a SqlCommand object to execute thirty Update statements in succession.
2. Before each ExecuteNonQuery method, the code opens a connection to the database.
3. After each ExecuteNonQuery command, the code closes the connection. The code uses the SQL Server managed provider.
What should you do to improve the performance of the code? (Select the best choice.)

A. Keep the SqlConnection object open during all Execute statements.
B. Encompass the Update statements inside a transaction.
C. Use a DataReader object to execute the command.
D. Use OleDbConnection and OleDbCommand objects instead of SqlConnection and SqlCommand objects.

Answer: A
You should keep the SqlConnection object open during all
Execute statements in order to improve the performance of the code. Opening and closing connections takes considerable resources to perform and should only be performed when needed. You should explicitly close the connection when your code no longer needs to use it. You cannot use a transaction in this scenario unless you leave the connection open during each command. Transactions are committed when connections are closed.

QUESTION 168:

You are standardising your application's exception handling for BlueFlier Inc. BlueFlier is promoting its frequenty flier program. To do this, you have created a class named ExceptionHandler that inherits from

System.Exception. ExceptionHandler is the base class for classes that define broad categories of exceptions, such as LoyaltyPointsRulesException. LoyaltyPointsRulesException, like all of the broad category classes, is the base class for more specific errors such as TooLittlePoints.
Which of the following code will implement these three custom classes as described? (Select the best choice.)

A. Public Class TooLittlePoints
Inherits System.Exception
End Class
Public Class BusinessRulesException
Inherits TooLittlePoints
End Class
Public Class ExceptionHandler
Inherits BusinessRulesException
End Class
B. Public Class ExceptionHandler
Inherits System.Exception
End Class
Public Class BusinessRulesException
Inherits ExceptionHandler
End Class
Public Class TooLittlePoints
Inherits ExceptionHandler
End Class
C. Public Class ExceptionHandler
Inherits System.Exception
End Class
Public Class BusinessRulesException
Inherits System.Exception
End Class
Public Class TooLittlePoints
Inherits System.Exception
End Class
D. Public Class ExceptionHandler
End Class
Public Class BusinessRulesException
Inherits ExceptionHandler
End Class
Public Class TooLittlePoints
Inherits ExceptionHandler
End Class

Answer: B
You should not base all of your custom classes on the System.Exception object because this will not build the hierarchical structure of exception classes described in the scenario.

QUESTION 169:

You have created a Web services client that will communicate with a Web service to determine the quantity of each aircraft spare parts that AirSpares Inc offers. Your client application will use this information to order required spare parts. You application must ensure that AirSpares has enough to meet your orders. You use the ExecuteNonQuery method of a SqlCommand object.
Which of the following values will be returned by the ExecuteNonQuery method? (Select the best choice.)

A. an integer indicating the number of rows affected
B. a Boolean value indicating that the command processed correctly
C. a string with the name of the stored procedure or query string that executed
D. a string with the description of any errors that may have occurred

Answer: A
The ExecuteNonQuery method returns an integer indicating the number of rows that were deleted, inserted or updated. The method is used to process Transact-SQL statements that perform Delete, Insert and Update functions. The ExecuteNonQuery method does not return any rows, but will populate any output parameters that are present in the Command object.

QUESTION 170:

You are going to deploy your flight reservations application your client's server at Newark Airport. The application is to be installed a .NET assembly into the Global Assembly Cache (GAC). Which tool is not necessary? (Each choice presents a complete solution.) (Select all choices that are correct.)

A. Windows Installer
B. Tlbimp.exe
C. Secutil.exe
D. Gacutil.exe
E. Regasm.exe
F. Ngen.exe
G. Disco.exe
H. Tlbexp.exe

Answer: B, C, E, F, G, H
The Windows Installer and the Gacutil.exe utilities can be used to install .NET assemblies into the GAC. Secutil.exe is used to manage strong name public key information or Authenticode signatures. Regasm.exe is used to register assemblies so that they can be used by COM components. Ngen.exe is used to compile native images of .NET applications and assemblies. Tlbexp.exe and Tlbimp.exe are used to export and import, respectively, type library information from .NET assemblies and COM components. Disco.exe is used to discover the URLs of Web services that are running on a server.

QUESTION 171:

You are creating an XML service for customers of HighWorld resort. The XML service will authenticate club users before accepting reservations. "A" customers may access all bookings application, while "B"

customers must be given access to all booking applications except the golf course. What is the best method to authenticate users? (Select the best choice.)

A. Authentication
B. Impersonation
C. SOAP Headers
D. Authorization

Answer: D
The security mechanism that determines what rights a user who has submitted a valid username and password has in a Web service is Authorization. Authentication is the process of validating credentials obtained from a user against a trusted authority. Impersonation allows a Web service, or other Web application, to run using the credentials of the client. SOAP Headers are sometimes used to transfer a user's credentials for authentication, but cannot be used to determine the rights that a user has in the context of an application.

QUESTION 172:

You are creating an XML service for customers of Certkiller Test Center. The Web service expects that the user of your application should be authenicated with Windows before placing a booking for an exam. You will pass this information to the Web service in a SOAP header named mySoapHeader. You have declared a WindowsIdentity object and a WindowsPrincipal object with the following code:
Dim myIdentity As WindowsIdentity = WindowsIdentity.GetCurrent()
Dim myPrincipal As New WindowsPrincipal(myIdentity)
Which of the following lines of code will not work? (Select all choices that apply.)

A. mySoapHeader.IsAuthenticated = myPrincipal.IsAuthenticated
B. mySoapHeader.IsAuthenticated = myIdentity.IsInRole()
C. mySoapHeader.IsAuthenticated = myIdentity.IsAuthenticated
D. mySoapHeader.IsAuthenticated = myPrincipal.IsInRole()

Answer: A, B, D
You should use the code mySoapHeader.IsAuthenticated = myIdentity.IsAuthenticated to pass to the SOAP header if the current user has been authenticated by Windows. The property IsAuthenticated is exposed by the WindowsIdentity class. The GetCurrent method returns the identity of the current Windows user. The WindowsPrincipal class reveals information regarding Windows user groups.

QUESTION 173:

You are creating an application to edit XML documents for BlueFliers Inc. Which property of the XmlNode class will be useful to you to allow users to examine the actual XML syntax? (Select the best choice.)

A. OuterText
B. OuterXml
C. InnerText
D. InnerXml

Answer: B
The property OuterXml of the XmlNode class allows you to examine the actual XML syntax of the current node and all child nodes. The InnerXml property returns the XML syntax of only child nodes. The InnerText property returns the concatenated values of the nodes. There is no OuterText property of the XmlNode class.

QUESTION 174:

You are creating an XML service for customers of HighSpeed ISP to charge their customers' internet access. The XML service will transfer a user's credentials for authentication before directing them to their online control panel which they can charge their bill to their credit card? (Select the best choice.)

A. Authentication
B. Impersonation
C. SOAP Headers
D. Authorization

Answer: D
SOAP Headers are used to transfer a user's credentials for authentication, but cannot be used to determine the rights that a user has in the context of an application.

QUESTION 175:

You have created a SOAP extension called SoapApp that should be compiled and placed in the Global Assembly
Cache (GAC).
What action should you take after the assembly is compiled? (Select the best choice.)

A. Use gacutil.exe /I SoapApp.dll and add the attribute <AssemblyKeyFile("c:\project\key\mykey.snk")>
B. Use gacutil.exe and Xcopy the file SoapApp.dll to the GAC.
C. Use gacutil.exe and RegSvr.exe utility to register the assembly.
D. Add the attribute <AssemblyKeyFile("c:\project\key\mykey.snk")> and Xcopy the file Mykey.snk to the GAC.

Answer: A
You should use the Gacutil.exe utility to register the assembly and copy it to the GAC. Once the SOAP extension assembly is given a strong name and is compiled, the assembly must be registered on the computer if you have decided to place the assembly in the GAC. The command you should use would be similar to. None of the other actions should be taken.

QUESTION 176:

Which command will sign an assembly named RegistrationAssm.dll with a key stored in the file CKStrongKey.snk? (Select the best choice.)

A. sn CKStrongKey.snk RegistrationAssm.dll

B. sn -R CKStrongKey.snk RegistrationAssm.dll
C. gacutil.exe RegistrationAssm.dll CKStrongKey.snk
D. sn -R RegistrationAssm.dll CKStrongKey.snk
E. sn.exe RegistrationAssm.dll CKStrongKey.snk
F. RegSvr - R RegistrationAssm.dll

Answer: D
In order to sign an assembly with the strong name tool, Sn.exe, you should use the -R command switch
followed by the name of the assembly's DLL file and the name of the file that contains your organization's
public and private key pair.

QUESTION 177:

You have created a method to calculate the speed of light. It involves some recursive functions. You need
to convert it into a web method and ensure that it performs well. The function's name is CalcLight.
Which of the following changes should you make? (Select the best choice.)

A. Add <WebMethod(EnableSession := True)> _.
B. Add <WebMethod()>
C. Add <WebMethod(EnableSession := False)> _.
D. Add <WebMethod(MessageName := " CalcLight ", EnableSession := False)> _.

Answer: D
You should change line 01 to <WebMethod(MessageName := "Square", EnableSession := False)> _.
Unnecessarily enabling session state in Web services may result in a performance penalty. When a Web method
does not make use of Session variables, it is best to set the EnableSession attribute to the default value of False.
Changing the message name, the function name, or assigning the return value to the function name rather than
using the Return statement will not affect execution speed.

QUESTION 178:

You are required to write data to your log file when you run a debug version of your web service
XMLServ. You want this technique to cause the body of the logging subroutine to be compiled only if the
application is compiled in debug mode. Which will require the least effort? (Select the best choice.)

A. Use the statement Debug.WriteLineIf(#Debug, strLogData) to write the data to the log file.
B. Use the trace switch method
C. Use Trace.WriteLine(strLogData) to write the data to thelog file.
D. Add the statement #If Debug Then just after the logging subroutine's declaration. Add the statement #End If
just before the logging subroutine's End If statement.

Answer: D
You should add the statement #If Debug Then just after the logging subroutine's declaration. Add the statement
#End If just before the logging subroutine's declaration. This technique will cause the body of the logging
subroutine to be compiled only if the application is compiled in debug mode. The #Debug identifier is a
compile-time variable.

QUESTION 179:

You are developing a COM+ component for use for your multilevel marketing application. Only Level 1 members are allowed to use the class, ViewAllDownLines. Other members who are not on Level 1, may not see all methods in the class. Which attribute should you use? (Each choice presents a part of the solution.)
(Select all choices that are correct.)

A. Add the ComVisible attribute to the ViewAllDownLines class. Set the attribute's value to False.
B. Declare the methods you want to hide from COM+ as Private.
C. Declare the methods you want to hide from COM+ as Static.
D. Add the ComVisible attribute to the twelve methods that you want to be visible by COM+. Set each attribute's value to False.
E. Declare the methods you want to hide from COM+ as Friend.
F. Declare the methods you want to hide from COM+ as Public.
G. Declare the methods you want to hide from COM+ as Protected.
H. Add the ComVisible attribute to the ViewAllDownLines class. Set the attribute's value to True.
I. Add the ComVisible attribute to the methods that you want to be visible by COM+. Set each attribute's value to True.

Answer: A, I
You should add the ComVisible attribute with a value of False to the ViewAllDownLines class and add the ComVisible attribute to the methods that you want to be visible by COM+ with a value of True. Setting the ComVisible attribute of the class to False hides the class and all of its members from COM+. However, individual members of the class can be exposed to COM+ by setting the ComVisible attribute value to True for each member. Although a method that is to be exposed to COM+ must be declared as Public, in this scenario, the methods to be hidden from COM+ should be declared as required by the needs of the .NET assembly. Because the class itself is hidden from COM+, the methods are also hidden from COM+ unless explicitly overridden.

QUESTION 180:

You have created an XML web service to find out whether a course is full or not. Which of the following methods should you use to query the database? (Select the best choice.)

A. SqlCommand.ExecuteNonQuery
B. DataReader.Read
C. SqlCommand.ExecuteScalar
D. SqlCommand.ExecuteReader

Answer: C
The ExecuteScalar method of the SqlCommand class returns the value of the first row and first column that is returned by the query. Because the method only returns a single value, it is appropriate for stored procedures and queries that return one value.

QUESTION 181:

You are ready to deploy your XML Web Service to BuyPC Inc. The Web service consists of a file named ShoppingCart.asmx and an assembly named BuyPC.dll. You want to deploy your Web service to a production server. You create a virtual directory and associated subdirectories on the production server and copy ShoppingCart.asmx into the folder.
Which action must you take next? (Select the best choice.)

A. Copy BuyPC.dll to the virtual directory on the production server.
B. Run Regasm.exe to register ShoppingCart.asmx.
C. Copy BuyPC.dll to the \BIN folder under the virtual directory.
D. Run Sn.exe to give ShoppingCart.asmx a strong name.

Answer: C
After copying the Web service file ShoppingCart.asmx to the virtual directory, you should copy BuyPC.dll to the \BIN folder. If you use Visual Studio .NET to create your Web service, your Web service will be deployed to the development server when the application is compiled. To move the Web service to another server, you can copy the Web service .asmx file to a virtual directory and copy any assemblies used by the application to a \BIN folder under the virtual directory.

QUESTION 182:

You work for a transportation broking company and you need to access the discovery document of the Web service by another company offering full truck load parcel transportation, FullParcel. You know their server and the application name. Which should you choose? (Select the best choice.)

A. http://disco: Certkiller Server/Parceltracking.asmx
B. http:// Certkiller Server/disco
C. http:// Certkiller Server/Parceltracking.asmx?DISCO
D. http:// Certkiller Server/Parceltracking/disco

Answer: C
To obtain the discovery document of the Web service, your application should use the URL http:// Certkiller Server/Parceltracking.asmx?DISCO. Discovery documents provide information about an XML Web service. Clients can learn how to properly interact with the Web service from the information retrieved from the discovery document. The ?DISCO parameter causes the Web service to automatically generate the discovery document.

QUESTION 183:

You are working for Textilekam. All of your salespersonnel use their notebook computers to access your XML web service. They have windows accounts in your company.
Which of the following combinations should you use to most easily secure your Web service? (Select the best choice.)

A. Basic Authentication and the CredentialCache object

B. Windows Integrated Authentication and Impersonation
C. Forms Authentication and Impersonation
D. Digest Authentication and NT Domain roles

Answer: B
You should use Windows Integrated Authentication and Impersonation. Because the clients and server will both be using Windows-based operating systems, Windows Integrated security is a logical choice. Impersonation allows the Web service to use the credentials of the client to access the database. This allows the database-defined users and roles to be utilized.

QUESTION 184:

Manukam Inc manufactures household items. Its suppliers are now sending their products' information through XML files. These files may or may not have schemas. Which code segment should you use to load the datasets? (Select the best choice.)

A. Dim dsData As DataSet
dsData.ReadXml ("myinfo.xml", XmlReadMode.InferSchema)
B. Dim fsMain As New SystemIO.FileStream ("myinfo.xml",
System.IO.FileMode.Create)
Dim dsData As DataSet
dsData.ReadXml(fsMain, XmlReadMode.IgnoreSchema)
C. Dim dsData As DataSet = New dsData.ReadXml("myinfo.xml",
XmlReadMode.IgnoreSchema)
D. Dim dsData As DataSet
dsData.ReadXml ("myinfo.xml", XmlReadMode.DiffGram)

Answer: A
When InferSchema is used, elements and attributes in the XML help determine tables and columns.

QUESTION 185:

Which of the following lines of code will cause an error? (Each choice presents a complete solution.)
(Select all choices that are correct.)

A. Cache.Session.Insert("myKey") = stringValue
B. Cache("myKey") = stringValue
C. Cache.Insert("myKey", stringValue)
D. Cache.Item("myKey") = stringValue
E. Cache.Get("myKey", stringValue)
F. Cache.Session("myKey") = stringValue
G. Cache.Add("myKey") = stringValue

Answer: A, D, E, F, G
You can add data to the Cache object in three ways: by specifying a key/value pair, by using the Add method or by using the Insert method.

QUESTION 186:

You are developing a simple word ASP.NET XML Web service. When the Web service is run, you want it to initialize variables that will be used throughout the Web service code.
Which file should contain the code that will initialize the variables? (Select the best choice.)

A. Global.asax
B. Web.config
C. Global.asa
D. Machine.config

Answer: A
In order to initialize the variables when the Web service initially runs, you should place the initialization code in the Application_OnStart subroutine in the Global.asax file of the application. The Global.asax file is used by ASP.NET applications, including Web services, to define application events.

QUESTION 187:

You need to fill a combo box with a list of cultures supported. The computer supports more than one culture. Which code segment will allow you to fill the combo box with all the detected cultures?

A. Dim CKCultureInfo As CultureInfo
For Each CKCultureInfo In
CultureInfo.GetCultures(CultureTypes.AllCultures)
cboCulture.Items.Add(CKCultureInfo.ToString & " " &
CKCultureInfo.NativeName & " (" &
CKCultureInfo.EnglishName & ")")
Next CKCultureInfo
B. Dim CKCultureInfo As CultureInfo
For Each CKCultureInfo In
CultureInfo.GetCultures(CultureTypes.InstalledWin32Cultures)
cboCulture.Items.Add(CKCultureInfo.ToString & " " &
CKCultureInfo.NativeName & " (" &
CKCultureInfo.EnglishName & ")")
Next CKCultureInfo
C. cboCulture.Items =
CultureInfo.GetCultures(CultureTypes.InstalledWin32Cultures)
D. cboCulture.Items = CultureInfo.GetCultures(CultureTypes.AllCultures)
Original choice order: bdac

Answer: B
To populate the cboCulture combo box, you should iterate through the cultures returned by the GetCultures method using a parameter of CultureTypes.InstalledWin32Cultures. This will return all cultures recognized by the operating system. The AllCultures member of the CultureTypes enumeration will return all known cultures,

even if they are not supported by the operating system. You cannot assign a collection directly to the Items collection of a ComboBox.

QUESTION 188:

You have created a class that is derived from the CKServicedComponent class. You plan to create a public/private key pair by using the command sn.exe -k "CKmyKey.snk".
What action should you take before you compile the assembly? (Select the best choice.)

A. Run the command regsvr32.exe
B. Run the command sn.exe -r "CKmyKey.snk" "publickey.snk".
C. Run the command sn.exe -p "CKmyKey.snk" "publickey.snk".
D. Run the command al.exe -v "CKmyKey.snk".
E. Add the attribute <assembly: AssemblyKeyFileAttribute("CKmyKey.snk")> to the class.
F. Add the attribute <assembly: Transaction("CKmyKey.snk")> to the class.

Answer: E
You should add the attribute <assembly: AssemblyKeyFileAttribute("CKmyKey.snk")> to the class before you compile the assembly. Your class must identify the key pair through the AssemblyKeyFileAttribute property of the <assembly> attribute. Without specifying the name of the key pair in the class, the compiled assembly will not have a strong name. None of the other actions should be taken.

QUESTION 189:

Your Web service needs to call a subroutine named CKModule that resides in a standard DLL
named Win32api.dll. You want to refer to this subroutine as MyRoutine in your Web service source code.
The subroutine returns a Boolean value.
Which of the following declarations should you use? (Select the best choice.)

A. <DllImport("Win32api.dll", EntryPoint := "MyRoutine", _
SetLastError := True, CharSet := CharSet.Unicode, _
ExactSpelling := True, _
CallingConvention := CallingConvention.StdCall)> _
Public Shared Function CKModule() As Boolean
B. <DllImport("CKModule", EntryPoint := "Win32api.dll", _
SetLastError := True, CharSet := CharSet.Unicode, _
ExactSpelling := True, _
CallingConvention := CallingConvention.StdCall)> _
Public Shared Function MyRoutine() As Boolean
C. <DllImport("MyRoutine", EntryPoint := "Win32api.dll", _
SetLastError := True, CharSet := CharSet.Unicode, _
ExactSpelling := True, _
CallingConvention := CallingConvention.StdCall)> _
Public Shared Function CKModule() As Boolean
D. <DllImport("Win32api.dll", EntryPoint := "CKModule", _
SetLastError := True, CharSet := CharSet.Unicode, _

ExactSpelling := True, _
CallingConvention := CallingConvention.StdCall)> _
Public Shared Function MyRoutine() As Boolean

Answer: D
You should use the declaration:
<DllImport("Win32api.dll", EntryPoint := "CKModule", _
SetLastError := True, CharSet := CharSet.Unicode, _
ExactSpelling := True, _
CallingConvention := CallingConvention.StdCall)> _
Public Shared Function MyRoutine() As Boolean

QUESTION 190:

You have wrote a serviced component and now you want it to take advantage of the automatic transactions.
Which of the following lines of code properly defines the function? (Select the best choice.)

A. Function MyFunction () As String <Automatic>
B. Function MyFunction () As String <Auto>
C. < autotrans > Function MyFunction () As String </autotrans>
D. <AutoComplete> Function MyFunction () As String
E. <AutoComplete()> Function MyFunction () As String
F. Function MyFunction () As String <AutoComplete/>

Answer: E
The code <AutoComplete()> Function MyFunction () As String properly defines the MyFunction function so that it implements automatic transactions. Serviced components can take advantage of COM+ services, such as automatic transactions. A function within the component that is defined with the <AutoComplete()> attribute will start a transaction when the function is called and will end the transaction when the function ends. None of the other lines of code properly define the function.

QUESTION 191:

You are trying to debug this errronous XML discovery file. The file is shown below:
<?xml version="1.0"?>
<discovery xmlns="http://schemas.xmlsoap.org/disco/">
<discoveryRef ref="http://CKProductionSrv/Default.disco" />
<contractRef ref="http://CKProductionSrv/StudyGuidesOrder.asmx?WSDL"
docRef="Service.htm" xmlns="http://schemas.xmlsoap.org/disco/scl/" />
<schemaRef ref="Schema.xsd" />
</discovery>
What action should you perform to correct the discovery document? (Select the best choice.)

A. Change the <discovery> element to <disco:discover>.
B. Change the <schemaRef> element to <schemaReference>.

C. Change the <discovery> element to <disco:discovery>.
D. Change the <schemaRef> element to <schema>.
E. Add an xmlns property to the <schemaRef> element with the value of
http://schemas.xmlsoap.org/disco/schema .
F. Add an xmlns property to the <discoveryRef> element with the value of
http://schemas.xmlsoap.org/disco/schema.
G. Add an xmlns property to the <schema> element with the value of http://schemas.xmlsoap.org/disco/schema
.

Answer: E
To correct the discovery document, you should add a xmlns property to the <schemaRef> element with the
value of http://schemas.xmlsoap.org/disco/schema. Discovery documents provide information about an XML
Web service. Clients can learn how to properly interact with the Web service from the information retrieved
from the discovery document. Your discovery document must reference the namespace
http://schemas.xmlsoap.org/disco/schema.

QUESTION 192:

What will this code achieve?
<channels>
<channel ref="http" />
<clientproviders>
<formatter ref="binary" />
</clientproviders>
</channels>

A. The Web service is using the HTTP protocol
B. It uses binary-formatted messages
C. There is low performance
D. There is higher performance
E. There is less security
F. It is very secure
G. We cannot utilize the security features of IIS
H. We can utilize the security features of IIS
I. Binary-formatted messages perform much slower than SOAP-formatted messages.
Answers: A, B, D, F, H
The Web service should use HTTP protocol and binary-formatted messages for the greatest performance and
security. You must use the HTTP protocol in order to utilize the security features of IIS. Binary-formatted
messages perform much faster than SOAP-formatted messages. The HTTPChannel class in the .NET
Framework provides the mechanism to communicate with the HTTP protocol.

QUESTION 193:

You are working for Bank of Certkiller . Your application will allow client software to retrieve information
from your e-banking Web service. The client will populate the structure with data and return the
populated structure to the Web service. The unpopulated structure has this format:

```
<BankAccount>
<AccountInfo Name="UserID" Prompt="User Id:" />
<AccountInfo Name="Password" Prompt="Password:"><![CDATA[]]></AccountInfo>
<AccountInfo Name="Timeout" Default="5" />
</BankAccount>
```
Which of the following sections of code will build this unpopulated structure? (Select the best choice.)

A. Dim Parms, Parm As Xml.XmlElement
Parms = dom.AppendChild(dom.CreateElement("BankAccount"))
Parm = Parms.AppendChild(dom.CreateElement("AccountInfo"))
Parm.SetAttribute("Name", "UserID")
Parm.SetAttribute("Prompt", "User Id:")
Parm = Parms.AppendChild(dom.CreateElement("AccountInfo"))
Parm.SetAttribute("Name", "Password")
Parm.SetAttribute("Prompt", "Password:")
Parm.AppendChild(dom.CreateCDataSection(vbNullString))
Parm = Parms.AppendChild(dom.CreateElement("AccountInfo"))
Parm.SetAttribute("Name", "Timeout")
Parm.SetAttribute("Default", "5")
B. B. strXML = vbNullString
strXML = strXML & "<BankAccount><AccountInfo Name=""UserID""" _
& " Prompt=""User Id:"" />"
strXML = strXML & "<AccountInfo Name=""Password""" _
& " Prompt=""Password:""><![CDATA[]]>"
strXML = strXML & "</AccountInfo><AccountInfo Name=""Timeout""" _
& " Default=""5"" /></BankAccount>"
dom.AppendChild(dom.CreateNode(Xml.XmlNodeType.DocumentFragment, strXML))
C. Dim Parms, Parm As Xml.XmlElement
Parms = dom.AppendElement(dom.CreateElement("BankAccount"))
Parm = Parms.AppendElement(dom.CreateElement("AccountInfo"))
Parm.SetAttribute("Name", "UserID")
Parm.SetAttribute("Prompt", "User Id:")
Parm = Parms.AppendElement(dom.CreateElement("AccountInfo"))
Parm.SetAttribute("Name", "Password")
Parm.SetAttribute("Prompt", "Password:")
Parm.AppendElement(dom.CreateCDataSection(vbNullString))
Parm = Parms.AppendElement(dom.CreateElement("AccountInfo"))
Parm.SetAttribute("Name", "Timeout")
Parm.SetAttribute("Default", "5")
D. strXML = vbNullString
strXML = strXML & "<BankAccount><AccountInfo Name=""UserID""" _
& " Prompt=""User Id:"" />"
strXML = strXML & "<AccountInfo Name=""Password""" _
& " Prompt=""Password:""><![CDATA[]]>"
strXML = strXML & "</AccountInfo><AccountInfo Name=""Timeout""" _
& " Default=""5"" /></BankAccount>"

dom.Load(strXML)

Answer: A
You can create the proposed XML structure by appending the nodes to the DOM Document object and setting the required attributes. The CreateNode method of the XmlDocument class cannot be used to build an XML structure from a document fragment contained in a string variable.

QUESTION 194:

You write a line of code to retrieve student counts for a specific course.
Which of the following code fragments should be used to retrieve the student count value from the stored procedure parameter? (Select the best choice.)

A. myReader.Close
Dim RecCount As Long = CLng(myReader.Parameters("@StudentCount").Value
B. myCommand.Cancel
Dim RecCount As Long = CLng(myReader.Parameters("@StudentCount").Value)
C. Dim RecCount As Long = myReader.GetString("@StudentCount")
myCommand.Cancel
D. Dim RecCount As Long = CLng(myReader.Parameters("@StudentCount").Value)
myReader.Close

Answer: A
The Close method closes the DataReader object and supplies values to output parameters. Output parameters in a DataReader object have no value until the DataReader object is closed. The Close method should also be called before checking the RecordsAffected property of the DataReader object after issuing an Update or Delete statement. The Cancel method of the Command object is used to terminate the execution of a command. The GetString property of the DataReader object is used to retrieve a string value from a specified column.

QUESTION 195:

Your ASP.Net application retrieves data from a Web service. You want to enable tracing on all but seven of the application's pages. It is important that only those pages that you select for tracing display trace information on the page. Which actions will not contribute to the solution? (Each choice presents a part of the solution.) (Select 2 choices.)

A. Set the value of the @ Page directive's Trace attribute to true on each page that should display trace information.
B. Configure the Web.config file in your application's root directory so that the Trace element's pageOutput attribute is set to false.
C. Configure the Web.config file in your application's root directory so that the Trace element's pageOutput attribute is set to true.
D. Set the value of the @ Page directive's Trace attribute to false on the two pages that should not display trace information.
E. Configure the Web.config file in your application's root directory so that the Trace element's enabled attribute is set to true.

Answer: A, B
In order to display trace information on most pages in your application, you should configure your application's Web.config file so that the Trace element's enabled attribute is set to true and the pageOutput attribute is set to true. You should also set the value of the @ Page directive's Trace attribute to false on each page that should not display trace information. The application's Web.config file, which is found in the application's root directory, can enable tracing for all pages through a single setting.

QUESTION 196:

Your colleague has implemented commands 220, 221 and 222 to be used in your ServiceBase based class. Which of the following events of the ServiceBase class should you use to process the request to excute a commands defined by your colleague? (Select the best choice.)

A. OnCustomCommand
B. OnContinue
C. OnStart
D. OnPowerEvent

Answer: A
You should process the request to purge old entries from the log file in the OnCustomCommand event handler of the ServiceBase class. The OnCustomCommand event handler is invoked when the Service Control Manager (SCM) sends a custom command to the service instance. In this scenario, you would define a custom command that would instruct the service to purge the old entries from the log file. The OnStart event handler is invoked when the SCM sends a start message to the service. The OnContinue event handler is invoked when the SCM sends a continue message to the service instance. The OnPowerEvent event is used on notebook computers to notify the service that the computer's electrical power state has changed.

QUESTION 197:

To implement a secure class, you must ensure that objects are allowed to derive from select classes. How will you achieve this? (Select the best choice.)

A. Inherits
B. Me
C. MyClass
D. TypeOf

Answer: D
The TypeOf keyword is used to determine whether an object is derived from a particular class or interface.

QUESTION 198:

Which type of components will require these:
1. Use the Sn.exe utility to sign the assembly with a strong name.
2. Inherit the ServicedComponent class.

3. Add the <Transaction(TransactionOption.Required)> attribute to the component.
4. Import the System.EnterpriseServices namespace.
5. Add the <AutoComplete()> attribute to all function definitions.

A. A web method
B. An XML service
C. Queued component
D. Serviced component

Answer: D
In order to create a serviced component that implements automatic transactions, you should import the System.EnterpriseServices namespace, inherit the ServicedComponent class, use the Sn.exe utility to sign the assembly with a strong name, add the <Transaction(TransactionOption.Required)> attribute to the component and add the <AutoComplete()> attribute to all function definitions. Serviced components can take advantage of COM+ services, such as automatic transactions. The ServicedComponent class is the base class of classes using COM+ services and is found in the System.EnterpriseServices namespace. The <Transaction> attribute determines how transactions are handled in the component. Functions within the component that are defined with the <AutoComplete()> attribute will start a transaction when the function is called and will end the transaction when the function ends. Serviced components must have a strong name, which is created by the Sn.exe utility.

QUESTION 199:

You are creating a supplier chain management system which will integrate suppliers' data. Your XML service will read an XSD file that contains only schema data and will modify the relational structure of a DataSet object.
Which DataSet method should you use to modify the dataset's structure? (Select the best choice.)

A. WriteXmlSchema
B. ReadXmlSchema
C. InferXmlSchema
D. ReadXml

Answer: B
The ReadXmlSchema method of the DataSet class will modify the relational structure of a dataset based on the schema contained in an XML source. ReadXmlSchema should be used only when you update the schema of a dataset. To read XML data into a dataset, you should use the ReadXml method. The InferXmlSchema method will also update a dataset schema, but it is used when the XML document does not contain an in-line schema. The WriteXmlSchema method will create an XML schema document based on a dataset's schema.

QUESTION 200:

You are developing an XML web service that will allow your suppliers to access your Web services. You Web services will not be online until your company merges with another larger firm. Several suppliers are impatient and want to begin developing applications based on your specifications.
What should you do to allow these vendors to begin developing their applications? (Select the best

choice.)

A. Send to the vendors the application configuration files that are associated with the Web services.
B. Use Wsdl.exe to generate proxy classes for your exposed Web services. Send these proxies to your vendors.
C. Allow the vendors to download the source code of your Web services.
D. Open your corporate firewall to allow DCOM traffic to pass through.

Answer: B
To allow the vendors to begin developing their applications, you should use the Web Services Description Language Tool, or Wsdl.exe, to generate proxy classes for your exposed Web services and send the proxies to your vendors. Wsdl.exe can generate proxy classes that enable programmers to more easily code against your Web services.

QUESTION 201:

You have developed an assembly that will be shared among the Web applications used by your company.
How should you prepare the assembly for deployment? (Select the best choice.)

A. You should use a merge module.
B. You should use a Standard Setup.
C. You should use a Web Setup.
D. You should use Xcopy deployment.

Answer: A
Merge modules are installer packages that can only be installed from other installer packages. In this scenario, the assembly should be packaged into a merge module so that the same merge module can be deployed from the installer packages of any number of applications.

QUESTION 202:

You are creating a stock broking application. You want the SearchStockPrice function to use the document SOAP format but you notice that SearchStockPrice method uses the incorrect format.
What are not the causes? (Select all that apply.)

A. The SoapRpcServiceAttribute has been applied to the SearchStockPrice method.
B. The document SOAP format cannot be used with the SoapDocumentServiceAttribute.
C. The SoapRpcMethodAttribute has been applied to the SearchStockPrice method.
D. The document SOAP format cannot be used with functions that return a String.

Answer: A, B, D
You should check to see if the SoapRpcMethodAttribute has been applied to the SearchStockPrice method. Four different attributes determine which SOAP format is used with Web service functions. The SoapDocumentServiceAttribute and SoapRpcServiceAttribute attributes are used to specify which SOAP format will be used by default for a Web service class.

QUESTION 203:

You have created a Windows form application named PowerBillingApp for Powers Inc. You will be invoke a remote object through the application. You need to control its lifetime and its channel.
Where should you record the values?
(Select the best choice.)

A. in the PowerBillingApp.exe.config file located in the root folder of the application
B. in the PowerBillingApp.config file located in the root folder of the application
C. in the PowerBillingApp.config file located on the server that hosts the remote object
D. in the Machine.config file located on the server that hosts the remote object

Answer: A
You should record the values that will affect the remoting process, such as lifetime and channel, in the PowerBillingApp.exe.config file in the root folder of the application. The application configuration file is the proper location of remoting values. The name of the application configuration file is the name of the application, including .exe, with a .config extension. In this scenario, the proper name of the application configuration file is PowerBillingApp.exe.config. None of the other choices are valid.

QUESTION 204:

How many connection pools would be created if connections were made to Microsoft SQL Server 2000 at the given times by using the following connection strings?
Integrated Security=SSPI;Initial Catalog=Nursing
Integrated Security=SSPI;Initial Catalog=Administration
Provider=SQLOLEDB.1;user ID=plantw;Initial Catalog=Personnel
Provider=SQLOLEDB.1;user ID=plantw;Initial Catalog=Accounting
Provider=SQLOLEDB.1;user ID=linkr;Initial Catalog=Nursing
Provider=SQLOLEDB.1;user ID=plantw;Initial Catalog=Accounting
Integrated Security=SSPI;Initial Catalog=Nursing
Integrated Security=SSPI;Initial Catalog=Nursing
Provider=SQLOLEDB.1;user ID=plantw;Initial Catalog=Nursing
Provider=SQLOLEDB.1;user ID=linkr;Initial Catalog=Nursing
Integrated Security=SSPI;Initial Catalog=Administrations
Provider=SQLOLEDB.1;user ID=wheatc;Initial Catalog=Accounting
(Select the best choice.)

A. 7
B. 3
C. 12
D. 2
E. 4

Answer: A
The specified connection strings will create seven connection pools. Only connections with identical connection

strings are pooled. In this scenario, seven unique connection strings are used, which will create seven connection pools.

QUESTION 205:

You are writing an assembly that will be used by an ASP.NET page for GetJobsCK. The user will enter a filename containing their resume into a text box, and the Web page will use the component to locate, open, and save the file onto the server. Which type of security should be used by the component? (Select the best choice.)

A. Role-Based Security
B. Windows NT Security
C. Imperative Security
D. Declarative Security

Answer: C
You should use imperative security for this component. Because you do not know until run-time which file will be requested, you must use imperative security methods, which are evaluated at run-time. Declarative security measures could be used if the files to be edited were known at design time. Neither Windows NT security nor role-based security is appropriate for use in this scenario.

QUESTION 206:

Which of the following elements are not used in XML Web services discovery documents? (Select 2 choices.)

A. <contractRef>
B. <discovery>
C. <disco>
D. <docRef>
E. <xmlns>

Answer: C, D, E, F
The elements <discovery> and <contractRef> are used in XML Web services discovery documents. Discovery documents provide information about an XML Web service. Clients can learn how to properly interact with the Web service from the information retrieved from the discovery document. The <discovery> element identifies the XML file as a discovery document. The <contractRef> element specifies service descriptions. None of the other choices represent elements used in discovery documents.

QUESTION 207:

You need to allow your program to show different levels of debugging information.
You examine the Web service's Web.config file: (Line numbers are for reference purposes only.)
01 <system.diagnostics>
02 <switches>

03 <add name="Tracing" value="0" />
04 </switches>
05 </system.diagnostics>
What change should you make in this section to enable the display of all error and warning messages by the Tracing trace switch? (Select the best choice.)

A. Delete line 03 and change line 02 to <switches Tracing=4>

C. Change line 03 to <add name="Tracing" value="verbose" />
D. Change line 03 to <add name="Tracing" value="3" />
E. Change line 03 to <add name="Tracing" value="2" />
F. Change line 03 to <add name="Tracing" value="1" />
G. Change line 03 to <add name="Tracing" value="4" />

Answer: G
To enable the display of all error and warning messages by the Tracing trace switch, you should change line 03 to . Trace switches allow you to start and stop tracing in an application. The
value property determines the amount of tracing that is performed. A valueof 0 turns tracing off; a value of 4 sets tracing to verbose mode. Your application will return the most information when tracing is set to verbose mode.

QUESTION 208:

You are creating an XML Web service named TimeEntryService for LawyersCK. You need to configure myWebService to meet these requirements from users of the law firm:
1. Users cannot afford to forget passwords
2. Login time is not an issue
3. Client must have a trustworth credential
Which type of authentication should you use?

A. Basic
B. Digest
C. Anonymous
D. Client Certificate

Answer: D
Client certificate authentication meets the requirements of this scenario:
1. would only allow specific users to gain access
2. no username or password would be required.

QUESTION 209:

You create an XML Web service for your company. You successfully test the service. You have already created a new virtual directory on a production computer.
Registration and configuration is preferred to be performed manually on the production computer since it is just a small application.

Which deployment mechanism should you use?

A. FTP
B. Xcopy command
C. Web setup project
D. Copy Project command

Answer: B
Just copying the files would require manual registration and configuration.

QUESTION 210:

Your deployment process is plagued with many problems such as:
The wrong release version is being used
The application is not easily updated
It is not installed in the global assembly cache
You need to ensure that future upgrades will be applied correctly. Which action or actions should you take? (Choose all that apply)

A. Sign CKComponent by using a strong name.
B. Compile CKComponent as a satellite assembly.
C. Include a publisher policy file that is registered in the global assembly cache on your customer's computers.
D. Increment the assembly version for each update of CKComponent.
E. Add an application configuration file to CKComponent that includes assembly binding information that redirects prior versions to the updated version.

Answer: A, C, D

Explanation:
We must use a strong name for CKComponent. Vendors of assemblies can state that applications should use a newer version of an assembly by including a publisher policy file with the upgraded assembly. In this scenario a publisher policy can be used since the newer versions of the component will be backward compatible. We must make sure that we increment the assembly version for each update of the component.

QUESTION 211:

You have developed a serviced component called StockBrokingApp. You need to ensure that that StockBrokingApp does not excute if administrators turns off security for the COM+ application.
What should you do?

A. To the project source code, add the following attribute:
<Assembly: ApplicationAccessControl(AccessChecksLevel:=
AccessChecksLevelOption.ApplicationComponent)>
B. To all methods, add the following attribute:
<SecurityRole("Administrators", False)>
C. To the beginning of all methods, add the following code segment:

IfNot ConnectUtil.IsSecurityEnabled
Then ContextUtil.DisableCommit()
End If
D. To the beginning of all methods, add the following code segment:
IfNot ContextUtil.IsSecurityEnabled
Then Throw New SecurityException(_
"Security must be enabled.")
End If

Answer: D

Explanation: We use ContextUtil.IsSecurityEnabled property to decide whether role-based security is
active in the current context. If it is not active we throw a securityException. This will prevent
StockBrokingApp from executing if security is disabled.

QUESTION 212:

You have created a class that is derived from the ServicedComponent class called DistributionApp. You
need to install it into the Global Assembly Cache and create the key pair that will be used to give the
compiled assembly a strong name. Which of the following commands will produce the key pair? (Select
the best choice.)

A. Tlbimp
B. Tlbexp
C. sn -k "mykey.snk"
D. sn -p "mykey.snk"
E. al -k "mykey.snk"
F. al -p "mykey.snk"

Answer: C
You should use the command sn -k "mykey.snk" to produce the key pair that will be used to give the compiled
assembly a strong name. A public/private key pair is required to sign an assembly with a strong name. The
Sn.exe utility produces the key pair. The -k parameter specifies that a new key pair file should be generated.
The -p parameter copies the public key portion of a key pair and places it in a separate file. The -p parameter is
typically used when developers need to delay signing of an assembly. The Al.exe utility compiles an assembly,
but does not produce the key pair.

QUESTION 213:

You create a .net remoting class in Visual Studio .NET. You have not upgraded all COM components to
.Net yet. You want to use the COM component in your Visual Studio .NET solution.
What should you do?

A. Register the COM component by using Regsvr32.exe.
B. Register the COM components into the GAC
C. Run installutil on the .net remoting class

D. Run the Type Library Exporter (Tlbexp.exe) and pass the COM component as the filename parameter.
E. Add a web reference to the COM component.
F. Use the GUID of the COM component.to create an instance of it
G. Add a reference to the COM component.
H. Run the Assembly Registration tool (Regasm.exe) and pass the COM component as the filename parameter.

Answer: G

Explanation: We simply need to add a reference to the COM component.

QUESTION 214:

You are creating an XML Web service named CKRetrieveExamResults. The service contains a Web method named RetrieveSubjectsTaken.
RetrieveSubjectsTaken takes as input a candidate ID and returns a DataSet object that contains information about all exams taken. You want to capture all incoming SOAP messages in RetrieveSubjectsTaken and write the messages to a file for future processing. You need to be able to capture and process SOAP messages.
What should you do?

A. Enable sessions in RetrieveSubjectsTaken.
B. Extend EnterpriseServices
C. Apply a SoapHeader attribute to RetrieveSubjectsTaken.
D. Apply a SoapRpcMethod attribute to RetrieveSubjectsTaken.
E. Create a SOAP extension for RetrieveSubjectsTaken.

Answer: E

Explanation: The ASP.NET SOAP extension architecture revolves around an extension that can inspect or modify a message at specific stages in message processing on either the client or the server. A SOAP extension would allow the capture and processing of SOAP messages.

QUESTION 215:

You are creating an XML Web service named OrderFulfillmentSys. This service must be able to allow structured data to be stored, retrieved, and manipulated through a relational DataSet. In addition, you need to be able to load either relational data and XML data to manipulate data.
You need to create the object that will provide this data access.
Which object should you use?

A. XmlDataDocument
B. XmlDocument
C. XmlDocumentFragment
D. XPathDocument

Answer: A

Explanation: XmlDataDocuments allows structured data to be stored, retrieved, and manipulated through a relational DataSet. XMLDataDocuments enables you to load either relational data or XML data and manipulate that data

QUESTION 216:

You have a strongly types DataSet object named Certkiller DataSet. This object contains three DataTable objects named Students, Subjects and SubjectTaken.
Students and Subjects have a data column named StudentsID. Subjects and SubjectTaken have a data column named OrderID.
Subjects have a foreign key constraint between Students and Subjects on StudentsID. SubjectTaken has a foreign key constraint between Subjects and SubjectTaken on OrderID.
You want to populate Students, Subjects and SubjectTaken with data from Microsoft SQL Server database.
In which ordershould you fill the Data table objects?

A. Students, SubjectTaken, Subjects
B. SubjectTaken, Subjects, Students
C. Students, Subjects, SubjectTaken
D. Subjects, SubjectTaken, Students

Answer: C

Explanation: We most populate the tables that are references by the foreign-key constraints first, namely the Students and the Subjects table. We should populate the SubjectTaken table last.

QUESTION 217:

You need to develop an application that checks emails every 15 minutes and sends all new emails to a customer response application. The application will run on computer that is used by several users who continuously log on and log off from the network to perform miscellaneous tasks.
Which type of .NET application should you use?

A. Queued component
B. Serviced component
C. COM+ application
D. Windows service
E. XML Web service
F. .NET Remoting object

Answer: D

Explanation: A Windows service would still be running even though users logs on and off.

QUESTION 218:

You are working on an XML web service for NerdBooks. You decide to output the XML data containing books published before 1998 and its declaration into a string for archive. The string will written to a file. What should you do?

A. Assign the ToString method of the Xml Document object to a string variable.
B. Assign the OuterXml property of the Xml document element property of the Xml document object to a string variable.
C. Use the WriteContentTo method of the XmlDocument object to write the document into a MemoryStream object. Use the GetXml method of the DataSet object to get a string version of the document.
D. Assign the OuterXml property of the Xml document object to a string variable

Answer: D

Explanation: The XmlNode.OuterXml property gets the markup representing this node and all its children.

QUESTION 219:

You are creating an XML web service to manage the alumni of School of Religious Arts. You want to merge exStudents into existingStudents and preserve the original values in existingStudents.
Which code segment should you use?

A. existingStudents.Merge (exStudents)
B. exStudents.Merge (existingStudents)
C. exStudents.Merge (existingStudents, True)
D. existingStudents.Merge (exStudents, False)
E. existingStudents.Merge (exStudents, True)

Answer: E

Explanation: The DataSet.Merge method merges this DataSet with a specified DataSet. The data will be merged into the dataset on which the Merge method is applied. We want to merge into our Dateset, namely the loanCustomerDataSet. Furthermore, we want to preserve the original values in loanCustomerDataSet.
The Boolean parameter is the preserveChanges. PreserveChanges indicates a value indicating whether changes made to the current DataSet should be maintained. It should be true, if changes should be maintained, like in this scenario. .