



**Exam : 070-444**

**Title : PRO: Optimizing and Maintaining a  
Database Administration Solution  
by Using Microsoft SQL Server 2005**

**Ver : 09.25.07**

---

**QUESTION 1:**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01. Certkiller -DB01 hosts a database named CK\_Sales that stores sales data for the company. Certkiller -DB01 also hosts two financial applications. You need to optimize the performance of Certkiller -DB01 and increase the performance of the two financial applications. You need to modify the SQL Server configuration to accomplish this goal.

What should you do?

- A. Configure the max worker threads server option.
- B. Configure the min memory per query server option.
- C. Configure the max server memory server option.
- D. Configure the min server memory server option.

Answer: C

Explanation: The max server memory option is used to specify the maximum amount of system memory that SQL Server 2005 is allowed to consume. Setting this option will ensure that the SQL Server 2005 does not consume all the available memory and can be used to ensure that sufficient memory is remains available for the other applications to run.

Incorrect Answers:

A: The max worker threads option is used to specify the number of processor threads that are used to supported users connected to SQL Server. This does not assist in optimizing performance for other applications.

B:

The min memory per query option is used to specify the minimum amount of memory that is allocated to the execution of a query. This is useful if there are several concurrent queries but it does not assist in optimizing performance for other applications.

D: The min server memory option is used to ensure that SQL Server 2005 does not release memory below the min server memory value once it is reached. This ensures that SQL Server 2005 always has sufficient memory but it will not ensure that the other applications have sufficient memory.

Reference:

Microsoft SQL Server 2005 Books Online (2007), Index: max server memory option

Microsoft SQL Server 2005 Books Online (2007), Index: min server memory option

Microsoft SQL Server 2005 Books Online (2007), Index: min memory per query option

Microsoft SQL Server 2005 Books Online (2007), Index: max worker threads option

---

**QUESTION 2:**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01. Certkiller -DB01 hosts a database named CK\_Sales that stores sales data for the company. Certkiller -DB01 also hosts two financial applications. Several Certkiller .com users in the Sales department complain that queries against the CK\_Sales database perform very poorly at times. You use System Monitor to monitor the performance of by using Certkiller -DB01 and discover that SQL Server 2005 does not have sufficient memory to run efficiently. You need to ensure that SQL Server 2005 always has sufficient memory to run efficiently. What should you do?

- A. Decrease the min memory per query server option.
- B. Increase the min server memory server option.
- C. Increase the max worker threads server option.
- D. Decrease the max server memory server option.

Answer: B

**Explanation:**

The min server memory option is used to ensure that SQL Server 2005 does not release memory below the min server memory value once it is reached. This ensures that SQL Server 2005 always has sufficient memory. By default, min server memory is set to 0.

**Incorrect Answers:**

A: The min memory per query option is used to specify the minimum amount of memory that is allocated to the execution of a query. This is useful if there are several concurrent queries. Decreasing this option will increase the possibility that the SQL Server 2005 will perform poorly.

C: The max worker threads option is used to specify the number of processor threads that are used to supported users connected to SQL Server. Increasing this option will not address the memory problem.

D: The max server memory option is used to specify the maximum amount of system memory that SQL Server 2005 is allowed to consume. Decreasing this option will increase the possibility that the SQL Server 2005 will perform poorly.

**Reference:**

Microsoft SQL Server 2005 Books Online (2007), Index: min server memory option

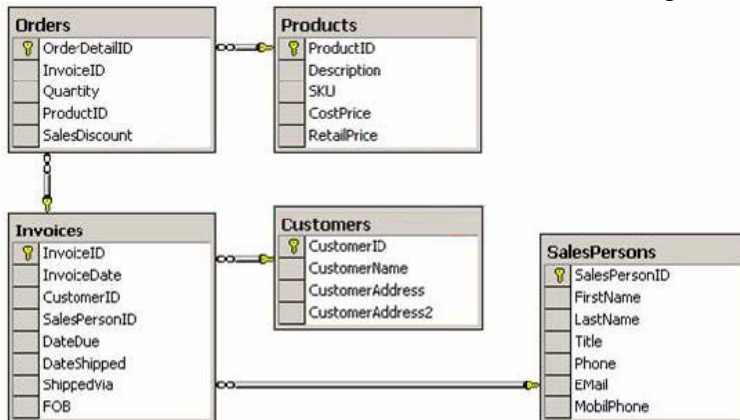
Microsoft SQL Server 2005 Books Online (2007), Index: min memory per query option

Microsoft SQL Server 2005 Books Online (2007), Index: max worker threads option

Microsoft SQL Server 2005 Books Online (2007), Index: max server memory option

**QUESTION 3:**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01. Certkiller -DB01 hosts a database named CK\_Sales that stores sales data for the company. The tables in the CK\_Sales database are shown in the following database diagram.



The recent increase in database usage at the company has resulted in several Certkiller .com users complaining of timeouts when they try to retrieve sales orders from the CK\_Sales database. You need to determine whether partitioning the Orders table would improve database performance.

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

- A. Run Database Engine Tuning Advisor.
- B. Create a performance log file to monitor SQL Server:Buffer Manager:Page reads/sec.
- C. Run SQL Server Profiler to replay the trace file and the log file.
- D. Use the SQL Server Profiler Tuning template to create a trace file.
- E. Create a performance log file to monitor Logical Disk: Disk Read Bytes/sec

Answer: A, D

Explanation:

You can use the Database Engine Tuning Advisor to determine whether indexing and partitioning of a table would improve database performance. The Database Engine Tuning Advisor analyzes a workload file that you can create by running SQL Server Profiler and creating a trace based on the SQL Server Profiler Tuning template.

Incorrect Answers:

B: The SQL Server:Buffer Manager:Page reads/sec counter is used to monitor the read activity on an instance of SQL Server. It does not help you determine whether partitioning a table will improve database performance.

C: You can use the SQL Server Profiler to analyze a trace file and a log file to determine

which queries are causing excessive resource utilization. However, this information does not help you determine whether partitioning a table will improve database performance. E: The Logical Disk: Disk Read Bytes/sec counter is used to monitor the read activity on a logical disk. It does not help you determine whether partitioning a table will improve database performance.

Reference:

Microsoft SQL Server 2005 Books Online (2007), Index: Database Engine Tuning Advisor [SQL Server]

Microsoft SQL Server 2005 Books Online (2007), Index: SQL Server Profiler

Microsoft SQL Server 2005 Books Online (2007), Index: performance counters [SQL Server]

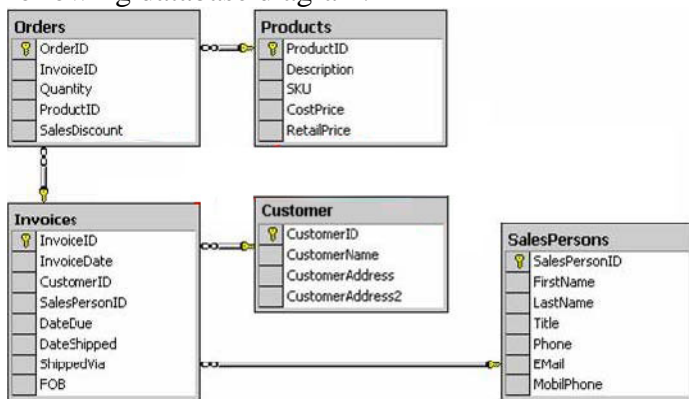
Microsoft SQL Server 2005 Books Online (2007), Index: max server memory option

---

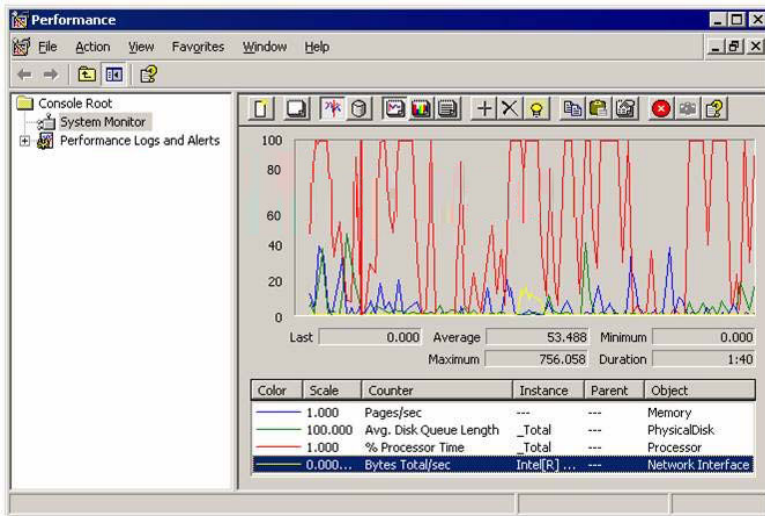
#### QUESTION 4:

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01. Certkiller -DB01 hosts a database named CK\_Sales that stores sales data for the company. The tables in the CK\_Sales database are shown in the following database diagram.



Several Certkiller .com users start complaining of slow response time when they run queries against the CK\_Sales database. You run the sys.dm\_os\_schedulers view on Certkiller -DB01 and discover that the runnable\_tasks\_count is consistently at or above ten. You run System Monitor on Certkiller -DB01 and receive the output as shown in the exhibit.



You need to improve database performance.  
What should you do?

- A. Increase the Random Access Memory (RAM).
- B. Add an additional processor.
- C. Upgrade the disk subsystem.
- D. Use the Database Engine Tuning Advisor to suggest new indexes.

Answer: B

Explanation: The Processor:% Processor Time counter in the exhibit indicates that the processor is often running at over 80%. This indicates that the processor is causing a bottleneck. Adding an additional processor to the system will improve overall system performance.

Incorrect Answers:

A: The Memory:Avg. Disk Queue Length counter in the exhibit is low. This indicates that the RAM is not causing a bottleneck. Therefore, adding additional RAM to the system will not improve overall system performance.

C: The PhysicalDisk:Pages/sec counter in the exhibit is low. This indicates that the disk subsystem is not causing a bottleneck. Therefore, upgrading the disk subsystem will not improve overall system performance.

D: The Processor:% Processor Time counter in the exhibit indicates that the processor is often running at over 80%. This indicates that the processor is causing a bottleneck. Indexing the tables will not reduce the load on the processor and will not improve overall system performance.

Reference:

Microsoft SQL Server 2005 Books Online (2007), Index: CPU [SQL Server], monitoring  
Microsoft SQL Server 2005 Books Online (2007), Index: Database Engine Tuning Advisor [SQL Server]

## QUESTION 5:



You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. You use a client computer named Certkiller -WS444.

The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01. Certkiller -DB01 hosts a database named CK\_Products. The recent increase in database usage at the company has resulted in several Certkiller .com users complaining of poor query performance and query timeouts try to retrieve data from the CK\_Products database. You need to determine the cause of the poor performance. You need to minimize the effect of your monitoring strategy on system performance. What should you do?

- A. Run the SQL Server Profiler from Certkiller -WS444 and create a trace that monitors Certkiller -DB01. Save the trace file to a table.
- B. Run the Performance tool on Certkiller -DB01 to create a log that monitors Certkiller -DB01. Save the log file to a folder on Certkiller -DB01.
- C. Run the SQL Server Profiler on Certkiller -DB01 and create a trace that monitors Certkiller -DB01. Save the trace file to a table.
- D. Run the Performance tool on Certkiller -WS444 to create a log that monitors Certkiller -DB01. Save the log file to a folder on Certkiller -WS444.

Answer: D

Explanation: You can use the Windows Performance tool on a client computer to monitor system performance on the database server without negatively affecting the performance of the database server. You can use the Windows Performance tool to create a log on the client computer that you can analyze to determine the cause of a resource bottleneck.

Incorrect Answers:

A, C: SQL Server Profiler is used to trace SQL Server events. It is not used to troubleshoot resource bottlenecks.

B: You should run the Windows Performance tool from you client computer and save the log file to your computer. This will reduce the impact of monitoring on the database server.

Reference:

Microsoft SQL Server 2005 Books Online (2007), Index: CPU [SQL Server], monitoring  
Microsoft SQL Server 2005 Books Online (2007), Index: Database Engine Tuning Advisor [SQL Server]

---

## QUESTION 6:

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client

computers run Windows XP Professional.

The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01. Certkiller -DB01 is running a default SQL Server instance and a named instance named CK\_Sales. Certkiller .com users complain that performance for both instances has deteriorated over the last six months. You want to determine the memory and processor resource requirements of the two instances as well as any resource conflicts between the two instances.

What should you do?

- A. Use SQL Server Profiler to create a trace and capture typical activity for each instance with both instances running.
- B. Use Windows Performance to create counter log that captures performance counters for each instance with both instances running.
- C. Use Windows Performance to create counter log that captures performance counters for each instance separately with each instance running on its own.
- D. Use SQL Server Profiler to create a trace and capture typical activity for each instance separately with each instance running on its own.

Answer: B

Explanation: You can use the Windows Performance to monitor system performance on the database server but you must capture the counters with both instances running at the same time to collect accurate data.

Incorrect Answers:

A, D: SQL Server Profiler is used to trace SQL Server events. It is not used to troubleshoot memory and processor resource bottlenecks.

C: Multiple SQL Server instances share system resources and interact with each other; therefore you must capture the counters with both instances running at the same time to collect accurate data.

---

## QUESTION 7:

### DRAG DROP

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server2003. The Certkiller .com network contains a SQL Server 2005 on a server named Certkiller -DB01. Certkiller -DB01 has five 120 GB hard disk drives. Two of the hard disks are configured as a mirrored volume that contains the operating system. The other three hard disks are configured as a RAID-5 volume. All database files are located on the RAID-5 volume while the transaction log files are located on the mirrored volume.

Certkiller -DB01 is running a default SQL Server instance and a named instance named CK\_DB. The default instance hosts an Online Transaction Processing (OLTP) database named CK\_Sales while the named instance hosts historical data used for reporting.



Certkiller .com users complain that database performance is deteriorating. You suspect that a disk problem might be causing the bottleneck. You want to determine which SQL Server instance is using the most disk time.

What should you do? (To answer, select the appropriate performance counters that you should monitor in the left pane and drag them to the right pane.)

Performance Counters, select from these	Performance Counters, place here
Physical Disk:Disk Read Bytes/sec	Place here.
SQL Server:Buffer Manager:Page writes/sec	Place here, if any.
Logical Disk:Disk Read Bytes/sec	Place here, if any.
Physical Disk:Disk write Bytes/sec	Place here, if any.
Logical Disk:Disk Write Bytes/sec	Place here, if any.
SQL Server:Buffer Manager:Page reads/sec	Place here, if any.

**Answer:**

Performance Counters, select from these	Performance Counters, place here
Physical Disk:Disk Read Bytes/sec	SQL Server:Buffer Manager:Page writes/sec
	SQL Server:Buffer Manager:Page reads/sec
Logical Disk:Disk Read Bytes/sec	Place here, if any.
Physical Disk:Disk Write Bytes/sec	Place here, if any.
Logical Disk:Disk Write Bytes/sec	Place here, if any.
	Place here, if any.

**Explanation:**

The SQL Server:Buffer Manager object is used to monitor resource usage for each SQL Server instance. You need to monitor the SQL Server:Buffer Manager:Page reads/sec counter to determine the number of page reads performed by each instance and the SQL Server:Buffer Manager:Page writes/sec counter to determine the number of page writes performed by each instance.

**Incorrect Answers:**

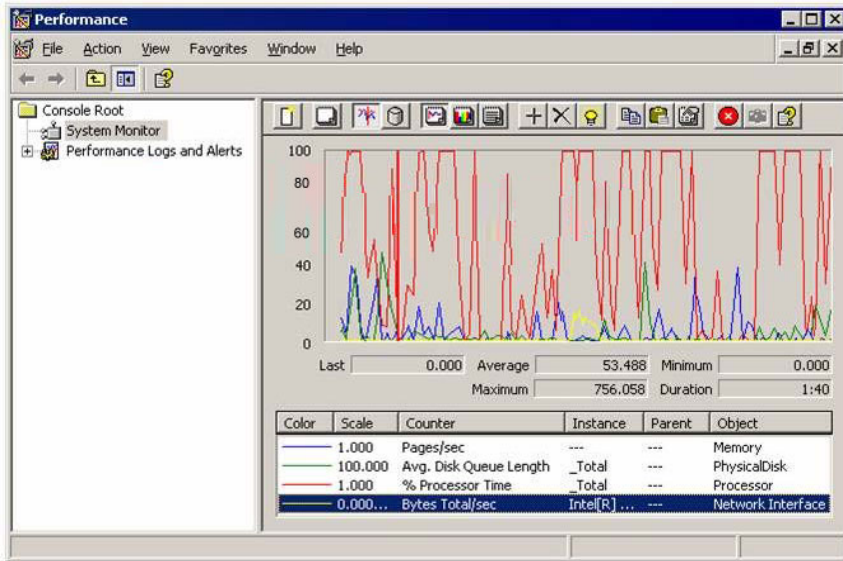
The Logical Disk:Disk Write Bytes/sec and Logical Disk:Disk Read Bytes/sec counters can be used to monitor the total number of disk reads or writes per second for a volume. Neither can be used to determine instance is using the most disk time.

The PhysicalDisk counters can be used to monitor a RAID volume but this cannot used to determine instance is using the most disk time.

## QUESTION 8:

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01 that hosts a database

named CK\_Sales. The CK\_Sales database stores sales data for the company. Certkiller .com users complain that the performance of the CK\_Sales database has deteriorated over the last few weeks. You use System Monitor to monitor the performance of Certkiller -DB01 and receive the output as shown in the exhibit.



You also notice that the ratio of SQL Recompilations/sec to Batch Requests/sec is unusually high. You suspect that the number of recompiles is causing the high processor time value. You need to improve the performance of the CK\_Sales database.

What should you do?

- A. Turn off automatic updates of statistics for all tables in the CK\_Sales database.
- B. Install an additional processor on Certkiller -DB01.
- C. Run the Database Engine Tuning Advisor.
- D. Use SQL Server Profiler to identify the stored procedures being recompiled.

Answer: D

Explanation: You can use SQL Server Profiler to identify the stored procedures that are being recompiled. SQL Profiler will indicate which stored procedures are being recompiled and why each recompilation is occurring.

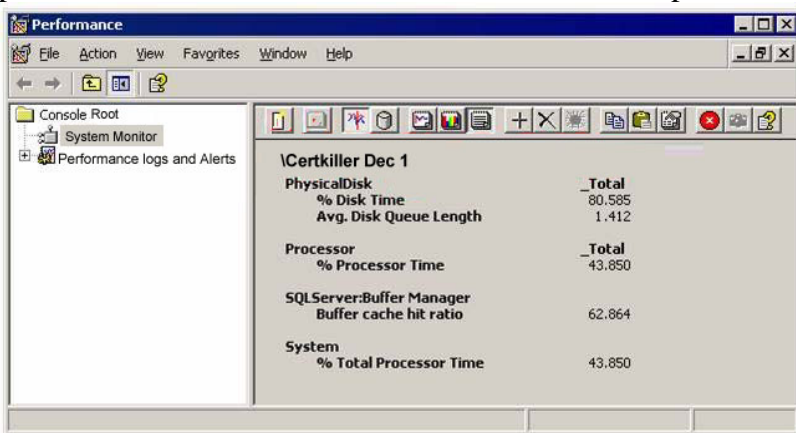
Incorrect Answers:

- A: Turning off automatic updates of statistics for the tables may improve performance but it does not address the problem caused by the recompiles.
- B: The high processor usage could be caused by the high number of recompiles. You should first reduce the number of recompiles before installing extra hardware on the server.
- C: You can use the Database Engine Tuning Advisor to determine whether indexing and partitioning of a table would improve database performance but you cannot use it to identify which stored procedures are being recompiled.

**QUESTION 9:**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01 that has a single 120 GB hard disk, 1 GB of random access memory (RAM), and has a single 2.8 GHz Pentium 4 processor. Certkiller -DB01 hosts a database named CK\_Sales that stores sales data for the company.

Certkiller .com users complain that the performance of the CK\_Sales database has deteriorated over the last six months. You use System Monitor to monitor the performance of Certkiller -DB01 and receive the output as shown in the exhibit.



You need to improve server performance.

What should you do?

- A. Add an additional processor.
- B. Add more Random Access Memory (RAM).
- C. Upgrade the disk subsystem.
- D. Install a second hard disk and split data between the disks.

Answer: B

Explanation: A value of 62.8 for the SQL Server:Buffer Manager:Buffer Cache Hit Ratio counter indicates that the system requires more RAM. This counter should be above 90. A lower value indicates that you need more RAM.

Incorrect Answers:

A: A value of 43.8% for the Processor:% Processor Time and System:% Total Processor Time counters are well below the 80% threshold that indicates a processor problem.  
 C, D: A value of 1.4 for the PhysicalDisk:Avg. Disk Queue Length is close to indicating a bottleneck, but this is probably caused by insufficient memory than by hard disk performance. Disk activity is likely to drop when you add more memory.

**QUESTION 10:**

## DRAG DROP

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01 that has a RAID-5 disk array, 2 GB of random access memory (RAM), and has a single 3.2 GHz Xeon processor. Certkiller -DB01 hosts a database named CK\_Sales that stores sales data for the company.

Certkiller .com users complain that the performance of the CK\_Sales database becomes sluggish at certain times of the day. You use System Monitor to monitor the performance of Certkiller -DB01 during a typical day and compare them to baseline results collected shortly after the database was deployed. You identify times during the day when the hardware resources on Certkiller -DB01 become a performance bottleneck.

You need to determine which database activities are causing the hardware bottlenecks. You want to accomplish this using minimal amount of administrator effort and do not want to consume any more system resources than necessary.

What should you do? (To answers, select the appropriate actions from the pane on the left and place them in the pane on the right.)

Steps, Select from these	Steps, place here
Capture a SQL Server Profiler trace and a Performance log over the same time period	Place here.
Import both into database tables.	Place here, if any.
Use SQL Server Analysis Services to compare server activity and Resource Requirements	Place here, if any.
Create Windows Alerts based on performance thresholds.	Place here, if any.
Use the date and time stamps in the Windows Event Viewer logs to Analyze the profiler trace	Place here, if any.
Correlate the view between the trace and performance log.	Place here, if any.
Run a SQL Server Profiler trace.	Place here, if any.

Answer:

Steps, Select from these	Steps, place here
	Capture a SQL Server Profiler trace and a Performance log over the same time period.
Import both into database tables.	Corriate the view between the trace and performance log.
Use SQL Server Analysis Services to compare server activity and resource requirements	Place here, if any.
Create Windows Alerts based on performance thresholds.	Place here, if any.
Use the date and time stamps in the Windows Event Viewer logs to analyze the Profiler trace	Place here, if any.
	Place here, if any.
Run a SQL Server Profiler trace.	Place here, if any.

Explanation:

You should capture a SQL Profiler trace and Windows counter log over the same time period. You can open the trace in SQL Server Profiler and the counter log in the Windows Performance utility at the same time and compare the two.

---

#### **QUESTION 11:**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01 that hosts a database named CK\_Sales. The CK\_Sales database stores sales data for the company. Certkiller .com users complain that the performance of the CK\_Sales database has deteriorated over the last six months. You use System Monitor to monitor the performance of Certkiller -DB01 and compare it to a baseline that was prepared six months ago. You notice that SQL Server:Buffer Manager:Buffer Cache Hit Ratio counter is consistently lower than the original baseline. You need to improve server performance. What should you do?

- A. Add an additional processor.
- B. Install a second hard disk.
- C. Add more Random Access Memory (RAM).
- D. Upgrade the disk controllers.

Answer: C

Explanation: A lower value for the SQL Server:Buffer Manager:Buffer Cache Hit Ratio counter indicates that the system requires more RAM. This counter should be about 90 or higher. A lower value indicates that you need more RAM.

Incorrect Answers:

A: The processor and disk subsystem has no effect on the SQL Server:Buffer Manager:Buffer Cache Hit Ratio counter. Therefore a lower SQL Server:Buffer Manager:Buffer Cache Hit Ratio count is not related to a processor or disk subsystem problem.

---

#### **QUESTION 12:**

You work as the database administrator at Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all database servers run SQL Server 2005. The Certkiller .com network contains a database server named Certkiller -DB01. Certkiller -DB01 hosts a database named CK\_Sales that stores sales data for the company. There is at least one index on each table in the CK\_Sales database. The tables in the CK\_Sales database are shown in the following database diagram.



Certkiller .com users in the Finance department run several stored procedures against the CK\_Sales database to create month end reports. You have recently altered some of the stored procedures. How Finance department users complain that the month-end reports take longer to create. You need to improve the performance of the stored procedures.

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

- A. Use System Monitor to monitor the execution of the stored procedures and save the results to a trace file.
- B. Use SQL Server Profiler with the Tuning template to generate a trace file for the stored procedures.
- C. Use the Index Tuning Wizard to analyze the trace file.
- D. Run the stored procedures in the Query Editor and save the results to a trace file.
- E. Use the Database Engine Tuning Advisor to analyze the trace file.

Answer: B, E

Explanation: You should use SQL Server Profiler with the Tuning template to generate a trace file for the stored procedures and then use the Database Engine Tuning Advisor to analyze the trace file and tune the database.

Incorrect Answers:

A: The Windows Server 2003 System Monitor cannot be used to monitor the execution of a stored procedure. System Monitor is used to monitor system resources such as processor, hard disk, and services, etc.

C: The Index Tuning Wizard has been replaced in SQL Server 2005 by the Database Engine Tuning Advisor.

D: The results from the Query Editor cannot be saved to a trace file and cannot be used by the Database Engine Tuning Advisor to analyze the trace file and tune the database.

Reference:

Microsoft SQL Server 2005 Books Online (2006), Index: optimizing databases [SQL Server]

Microsoft SQL Server 2005 Books Online (2006), Index: performance [SQL Server], Database Engine Tuning Advisor



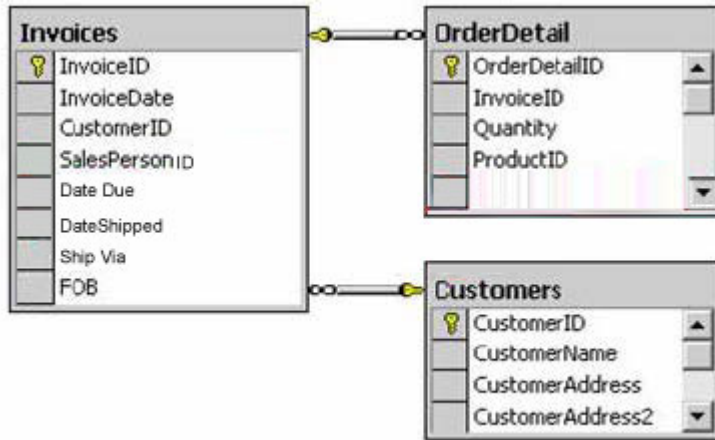
Microsoft SQL Server 2005 Books Online (2006), Index: performance [SQL Server], queries

---

**QUESTION 13:**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01 that has a single 240 GB hard disk, 2 GB of random access memory (RAM), and has a single 3.2 GHz Pentium 4 processor. Certkiller -DB01 hosts a database named CK\_Sales that stores sales data for the company.

CK\_Sales is also used for online transaction processing (OLTP). The tables in the CK\_Sales database are shown in the following database diagram.



Each of the tables in the CK\_Sales database contains more than one million rows. You have created a index on the tables during the initial database deployment. You created a clustered index on the primary key column of each table and nonclustered indexes on the Invoices and OrderDetail tables as these two tables are used very frequently. The indexes have not been modified since creation.

Several Certkiller .com users complain that the performance of the CK\_Sales database has deteriorated over the last few months. You use System Monitor to monitor the performance of Certkiller -DB01 and compare it to a baseline that was prepared six months ago. You notice that hard disk activity is approaching maximum capacity. You also monitor the SQL Server:Buffer Manager:Page writes/sec and SQL Server:Buffer Manager:Page reads/sec and notice that buffer reads and writes account for most of the disk activity.

You need to improve database server performance without negatively affecting currently connected users.

What should you do?

- A. Increase the Random Access Memory (RAM).
- B. Use the Database Engine Tuning Advisor to recommend new indexes.
- C. Drop all existing table indexes.

- D. Add a new hard disk and move half of the tables indexes to the new disk.
- E. Add an additional processor.

Answer: B

Explanation:

The SQL Server:Buffer Manager:Page reads/sec and SQL Server:Buffer Manager:Page writes/sec counters are used to monitor the disk input/output (I/O) activity generated by SQL Server. If the SQL Server I/O activity is responsible for most of the disk activity then you should try to reduce the SQL Server I/O activity. One of the things you can do is use the Database Engine Tuning Advisor to generate tuning hints and index suggestions to reduce SQL Server I/O activity.

Incorrect Answers:

A, D, E: Adding an additional processor, hard disk or RAM, would require you to shut down the server if these items are not hot swappable. This will affect database users.  
C: Dropping the indexes will result in more SQL Server I/O activity. Indexes reduce SQL Server I/O activity but they need to be optimized.

---

#### QUESTION 14:

##### DRAG DROP

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01 that hosts a database named CK\_Sales that stores sales data for the company.

A sharp increase in sales has resulted in several Certkiller .com users complaining of timeouts when they try to retrieve sales orders from the CK\_Sales database. You need to determine whether partitioning the Orders table would improve database performance.

What should you do? (To answers, select the appropriate actions from the pane on the left and place them in the pane on the right.)

Steps, Select from these	Steps, place here
Run the Database Engine Tuning Advisor.	Place here.
Run SQL Server Profiler to replay the trace file and the log file.	Place here, if any.
Monitor the SQL Server:BufferManager: Page read/sec performance counter	Place here, if any.
Use SQL Server Profiler Tuning template to create a trace file.	Place here, if any.

Answer:

Steps, Select from these	Steps, place here
	Run the Database Engine Tuning Advisor.
Run SQL Server Profiler to replay the trace file and the log file.	Use SQL Server Profiler Tuning template to create a trace file.
Monitor the SQL Server:BufferManager: Page read/sec performance counter	Place here, if any.
	Place here, if any.

**Explanation:**

You can use the Database Engine Tuning Advisor to determine whether indexing and partitioning of a table would improve database performance. The Database Engine Tuning Advisor analyzes a workload file that you can create by running SQL Server Profiler and creating a trace based on the SQL Server Profiler Tuning template.

**Incorrect Answers:**

The SQL Server:Buffer Manager:Page reads/sec counter is used to monitor the read activity on an instance of SQL Server. It does not help you determine whether partitioning a table will improve database performance.

You can use the SQL Server Profiler to analyze a trace file and a log file to determine which queries are causing excessive resource utilization. However, this information does not help you determine whether partitioning a table will improve database performance.

**Reference:**

Microsoft SQL Server 2005 Books Online (2007), Index: Database Engine Tuning Advisor [SQL Server]

Microsoft SQL Server 2005 Books Online (2007), Index: SQL Server Profiler

Microsoft SQL Server 2005 Books Online (2007), Index: performance counters [SQL Server]

Microsoft SQL Server 2005 Books Online (2007), Index: max server memory option

---

**QUESTION 15:**

You work as the database administrator at Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all database servers run SQL Server 2005. The Certkiller .com network contains a database server named Certkiller -DB01. Certkiller -DB01 hosts a database named CK\_Sales that stores sales data for the company. CK\_Sales is also used for online transaction processing (OLTP).

Several tables in the CK\_Sales database have more than one million rows. You have created a clustered index on each table in the CK\_Sales database as well as a nonclustered index on each table that is used frequently. You want to optimize performance for the clustered and nonclustered indexes. You want to generate index recommendations.

What should you do?

- A. Run the Index Tuning Wizard and save the recommended changes to a file.
- B. Run the Database Engine Tuning Advisor and save the data to a SQL script file.
- C. Run the SQL Server Profiler with the Tuning template and save the result to a file.

D. Run the `sys.dm_db_index_operational_stats` statement and save the results to a file.

Answer: C

Explanation: You should use SQL Server Profiler with the Tuning template to generate a workload file and then use the Database Engine Tuning Advisor to analyze the workload file.

Incorrect Answers:

A: The Index Tuning Wizard has been replaced in SQL Server 2005 by the Database Engine Tuning Advisor.

B: You should first use SQL Server Profiler with the Tuning template to generate a workload file and then use the Database Engine Tuning Advisor to analyze the workload file.

D: You cannot use the `sys.dm_db_index_operational_stats` statement to generate index recommendations.

Reference:

Microsoft SQL Server 2005 Books Online (2006), Index: optimizing databases [SQL Server]

Microsoft SQL Server 2005 Books Online (2006), Index: performance [SQL Server], Database Engine Tuning Advisor

Microsoft SQL Server 2005 Books Online (2006), Index:  
`sys.dm_db_index_operational_stats`

---

### **QUESTION 16:**

You work as the database administrator at Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all database servers run SQL Server 2005. The Certkiller .com network contains two database servers named Certkiller -DB01 and Certkiller -B02. Certkiller -DB01 hosts a database named CK\_Sales that stores sales data for the company. The CK\_Sales database is also used for online transaction processing (OLTP).

Certkiller .com develops a new Web application that you deploy on Certkiller -DB01. Certkiller .com's Web customers start complaining about excessive delays and intermittent timeout errors. You monitor the systems resources on Certkiller -DB01 on Windows System Monitor and are satisfied that system resource usage is well within expected parameters. You request that the application developers test the Web application and identify the cause of the performance problems. The application developers report that the problem is related to the time required to retrieve data from CK\_Sales. You need to create a SQL Server Profiler trace to identify the poorly performing queries in the Web application.

What should you do?

A. Capture events related to the Sessions and Stored Procedure event classes. Group data by EventClass.

B. Capture events related to the Stored Procedure and TSQL event classes. Group data by Duration.

C. Capture events related to the ExistingConnection event classes.

Group data by EventClass.

D. Capture events related to the ExistingConnection and Sessions event classes.

Group data by ClassProcessID.

Answer: B

Explanation: The Web application can use stored procedures and Transact-SQL (T-SQL) statements to run queries against the CK\_Sales database. Therefore you need to create a trace that captures events that are related to Stored Procedure and TSQL event classes. The captured data should be grouped by duration to determine how long each query takes to run.

Incorrect Answers:

A: Events related to the Sessions event classes can be used to trace user activity while events related to Stored Procedure event classes can be used to trace stored procedure queries. You do not need to trace user activity. You also need to trace events related to the TSQL event classes as the Web application can use stored procedures and Transact-SQL (T-SQL) statements to run queries against the CK\_Sales database. Furthermore, grouping data by EventClass will organize data by event class. This will not indicate how long the queries take to run.

C: Events related to the ExistingConnection event classes can be used to trace user activity. This will not identify poorly performing queries. Furthermore, grouping data by EventClass will organize data by event class. This will not indicate how long the queries take to run.

D: Events related to the ExistingConnection and Sessions event classes can be used to trace user activity. This will not identify poorly performing queries. Furthermore, grouping data by ClassProcessID will organize the data by process. This will not indicate how long the queries take to run.

---

### **QUESTION 17:**

You work as the database administrator at Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all database servers run SQL Server 2005. The Certkiller .com network contains a database server named Certkiller -DB01. Certkiller -DB01 hosts a database named CK\_Sales that stores sales data for the company and is also used for online transaction processing (OLTP).

Several tables in the CK\_Sales database have more than one million rows. You have created indexes on each table in the CK\_Sales database when the database was deployed. These indexes were based on projected query requirements. However, query requirements have changed over time. You suspect that certain queries are not adequately supported by indexes. You want identify table columns that need to be included in indexes based on current queries.

What should you do?

A. Run the DBCC SHOW\_STATISTICS statement.

- B. Run the sys.dm\_db\_index\_operational\_stats dynamic management view.
- C. Run the sys.dm\_db\_missing\_index\_columns dynamic management view.
- D. Run the DBCC SQLPERF statement.

Answer: C

Explanation: The sys.dm\_db\_missing\_index\_columns dynamic management view returns information about indexes that the query analyzer would use. This information returned can be used to determine the appropriate key columns for new indexes.

Incorrect Answers:

A: The DBCC SHOW\_STATISTICS statement returns information about table distribution statistics. It does not provide information about which columns are used by queries.

B: The sys.dm\_db\_index\_operational\_stats dynamic management view returns information about locking and low-level access. It does not provide information about which columns are used by queries.

D: DBCC SQLPERF statement returns transaction log usage statistics information. It does not provide information about which columns are used by queries.

Reference:

Microsoft SQL Server 2005 Books Online (2006), Index:

sys.dm\_db\_missing\_index\_columns

Microsoft SQL Server 2005 Books Online (2006), Index:

sys.dm\_db\_index\_operational\_stats

Microsoft SQL Server 2005 Books Online (2006), Index: DBCC SHOW\_STATISTICS

Microsoft SQL Server 2005 Books Online (2006), Index: DBCC SQLPERF

---

### **QUESTION 18:**

You work as the database administrator at Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all database servers run SQL Server 2005. The Certkiller .com network contains a database server named Certkiller -DB01 that hosts a database named CK\_Products.

As the tables in the CK\_Products database have grown, the performance of the database has deteriorated. You want to improve database performance. You run several test queries using table scans only in SQL Server Management Studio and display the execution plans.

What should you do next?

- A. Modify the queries to include table-level locking hints.
- B. Modify the queries to include row-level locking hints.
- C. Use the Database Engine Tuning Advisor to suggest table indexes.
- D. Create clustered indexes on each table based on the primary key.

Answer: C



Explanation: The tables have grown over time so it is likely that the tables now require indexes to support the queries. The fastest way to create appropriate indexes is to use the Database Engine Tuning Advisor.

Incorrect Answers:

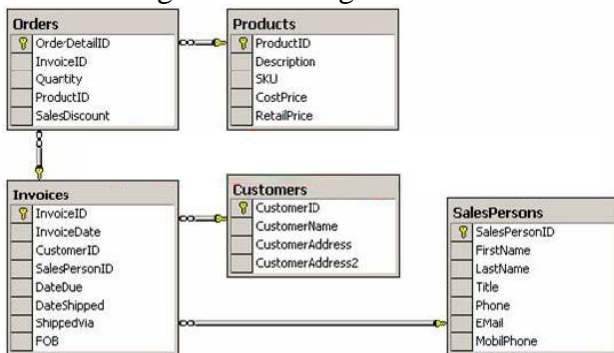
A, B: The question does not indicate the need for locking hints at either the table or row level.

D: Creating clustered indexes based on the primary key of each table might provide some performance improvement but may not optimize query performance. You need to use the Database Engine Tuning Advisor to indicate which indexes would be appropriate to your query needs.

---

### QUESTION 19:

You work as the database administrator at Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all database servers run SQL Server 2005. The Certkiller .com network contains a database server named Certkiller -DB01 that hosts a database named CK\_Sales. The CK\_Sales database stores sales data for the company. The tables in the CK\_Sales database are shown in the following database diagram.



You are reviewing the performance of several queries that are run against the CK\_Sales database. You notice several instances where values such as returned row count vary significantly between the estimated and actual graphic execution plans. You need to correct this problem.

What should you do?

- A. Defragment the nonclustered indexes.
- B. Update the index statistics.
- C. Defragment the clustered indexes.
- D. Do not manually specify query hints.

Answer: B

Explanation: Out of date statistics will cause the estimated plan to vary from the actual plan. This can result in the query optimizer using less than optimal execution plans.

Incorrect Answers:

A, C: Index fragmentation will not cause variations between the estimated and actual

graphic execution plans.

D: Manually specifying query hints would not cause variations between the estimated and actual graphic execution plans as they would be used by both the estimated and actual query plans.

---

**QUESTION 20:**

You work as the database administrator at Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all database servers run SQL Server 2005. The Certkiller .com network contains a database server named Certkiller -DB01. Certkiller -DB01 hosts a database named CK\_Sales that stores sales data for the company. Certkiller .com uses an in-house client/server application to access the CK\_Sales database.

You recently deployed a new version of an in-house client/server application on Certkiller -DB01. Now Certkiller .com users complain that the CK\_Sales database responds slowly when certain functions are performed. You create a trace file that includes execution plan information. You want to identify the possible cause of the problem.

Which functions process every row of a table?

- A. Clustered index scans and clustered index seeks.
- B. Clustered index scans, nonclustered index scans, and table scans.
- C. Clustered index seeks and nonclustered index seeks.
- D. Clustered index scans, clustered index seeks, nonclustered index scans, and nonclustered index seeks.

Answer: B

Explanation: A table scan, a nonclustered index scan, and a clustered index scan process each row in a table while a nonclustered index seek and a clustered index seek processes only the rows that match the criteria of the query.

Incorrect Answers:

A, C, D: A table scan, a nonclustered index scan, and a clustered index scan process each row in a table while a nonclustered index seek and a clustered index seek processes only the rows that match the criteria of the query.

---

**QUESTION 21:**

You work as the database administrator at Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all database servers run SQL Server 2005. The Certkiller .com network contains a database server named Certkiller -DB01. Certkiller -DB01 hosts a database named CK\_Sales that stores sales data for the company. The CK\_Sales database is also used for online transaction processing (OLTP).

Several tables in the CK\_Sales database have more than one million rows. You have created a clustered index on each table in the CK\_Sales database as well as a

nonclustered index on each table that is used frequently when the database was deployed. These indexes were based on projected query requirements. Certkiller .com users complain that query performance has degraded over time. You want to optimize performance for the clustered and nonclustered indexes. You run the Index Tuning Wizard to generate index recommendations but no changes are recommended for the indexes. You suspect that the indexes are fragmented. You need to optimize the indexes and ensure that fragmentation of the indexes do not occur in the future. What should you do?

- A. Run ALTER INDEX statement with the REORGANIZE option and create a Database Consistency Check scheduled maintenance task.
- B. Run ALTER INDEX statement with the REORGANIZE option and create a Reorganize Index scheduled maintenance task.
- C. Run ALTER INDEX statement with the REBUILD option and create a Rebuild Index scheduled maintenance task.
- D. Run ALTER INDEX statement with the REBUILD option and create a Database Consistency Check scheduled maintenance task.

Answer: D

Explanation: The tables have clustered and nonclustered indexes; therefore you should run the ALTER INDEX statement with the REBUILD option to address the problem immediately. You should also create a Rebuild Index scheduled maintenance task to reduce the possibility of this problem reoccurring in the future. Clustered indexes affect the ordering of the table so, when clustered index is fragmented, the table is also fragmented and the index has to be rebuilt rather than reorganized.

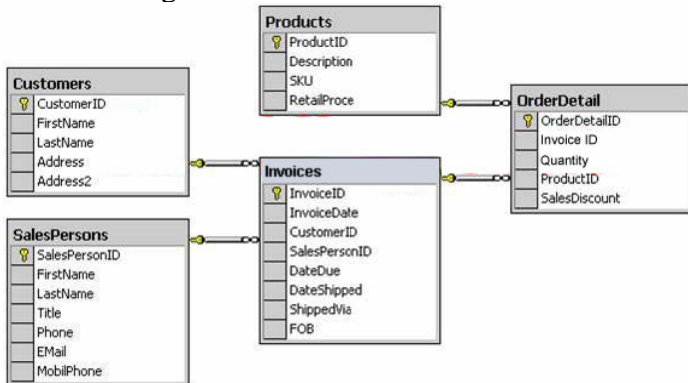
Incorrect Answers:

- A: The tables have clustered and nonclustered indexes. Clustered indexes affect the physical ordering of the data in the table. Thus, when clustered index is fragmented, the table is also fragmented and the index has to be rebuilt rather than reorganized. You should also create a Rebuild Index scheduled maintenance task to reduce the possibility of this problem reoccurring in the future. A Database Consistency Check scheduled maintenance task detects problems with the database but does not correct them.
- B: The tables have clustered and nonclustered indexes. Clustered indexes affect the physical ordering of the data in the table. Thus, when clustered index is fragmented, the table is also fragmented and the index has to be rebuilt rather than reorganized.
- D: You should run the ALTER INDEX statement with the REBUILD option to address the problem immediately but you need to create a Rebuild Index scheduled maintenance task to reduce the possibility of this problem reoccurring in the future. A Database Consistency Check scheduled maintenance task detects problems with the database but does not correct them.

---

## QUESTION 22:

You work as the database administrator at Certkiller .com. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01 that runs on a Windows 2000 Server computer. Certkiller -DB01 hosts a database named CK\_Sales. The tables in the CK\_Sales database are shown in the following database diagram.



An index named PK\_Customers\_CustomerID has been created on the Customers table. The index is used extensively throughout the day. Over the last few months, several new pages have been added to the index. Certkiller .com users complain that the performance queries against the index is very slow. You suspect that fragmentation is affecting query performance. You want to reduce fragmentation. You need to ensure that the index remain online and that no completed work is lost if the operation is interrupted.

What should you do?

- A. Run the ALTER INDEX PK\_Customers\_CustomerID ON CK\_Sales.Customers REBUILD WITH (ONLINE = ON) Transact-SQL statement.
- B. Run the DBCC INDEXDEFRAG Transact-SQL statement.
- C. Run the ALTER INDEX PK\_Customers\_CustomerID ON CK\_Sales.Customers REORGANIZE Transact-SQL statement.
- D. Drop and recreate the PK\_Customers\_CustomerID index.

Answer: C

Explanation: To ensure that no completed work is lost if the operation is interrupted, you must perform the operation on the index while it is online. The ALTER INDEX REORGANIZE statement is used to reduce fragmentation of an index while the index is online.

Incorrect Answers:

- A: The ALTER INDEX REBUILD WITH ONLINE statement can be used to reduce fragmentation of an index while the index is online but data loss will occur should the operation be interrupted.
- B: The DBCC INDEXDEFRAG can be used to defragment indexes on a table. However, this statement is supported for backward compatibility and is not recommended. The ALTER INDEX statement is preferred.
- D: When you DROP an index, the index is offline. You need to ensure that the index remains online.

Reference:

Microsoft SQL Server 2005 Books Online (2006), Index: ALTER INDEX statement

Microsoft SQL Server 2005 Books Online (2006), Index: indexes [SQL Server],  
reorganizing

---

### **QUESTION 23:**

You work as the database administrator at Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all database servers run SQL Server 2005. The Certkiller .com network contains a database server named Certkiller -DB01.

You need to create an audit plan for Certkiller -DB01. The audit plan must include the number of times a stored procedure executes. You want to gather the data over a set period of time so you can estimate how often the stored procedure is used in a typical load scenario. You want to obtain this information using the least amount of administrative effort.

What should you do?

- A. Alter the stored procedure to include the SET NOCOUNT ON statement.
- B. Alter the stored procedure to send a message to the Application log.
- C. Use the SQL Server Profiler to create a trace file.
- D. Use System Monitor to monitor the execution of the stored procedure and save the results to a file.

Answer: C

Explanation: You can use SQL Server Profiler to create a trace that includes information that can be used to determine how many times the stored procedure has been executed.

Incorrect Answers:

A: Altering the stored procedure to include the SET NOCOUNT ON statement will reduce network traffic as clients do not receive messages indicating the number of rows affected by the stored procedure. However, it will not indicate how many times the stored procedure executed.

B: You can alter the stored procedure to send a message to the Application log every time it executes but you would need to check the Application log to determine how many times the stored procedure executed. This would require more administrative effort than using the SQL Server Profiler.

D: The System Monitor is used to monitor system resources. It is not used to monitor stored procedures.

---

### **QUESTION 24:**

You work as the database administrator at Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all database servers run SQL Server 2005. The Certkiller .com network contains a database server named

Certkiller -DB01. Certkiller -DB01 hosts a database named CK\_Sales that stores sales data for the company.

Certkiller .com uses an in-house client/server application to access the CK\_Sales database. Certkiller .com users use the client/server application to modify records on the CK\_Sales database. You are configuring default transaction isolation levels for the CK\_Sales database. The transaction level must be properly configured to prevent the application from having problems with uncommitted dependencies and nonrepeatable reads. You must ensure that the transaction level is properly configured but you must avoid introducing blocking locks that can result in deadlock conditions.

What should you do?

- A. Use read uncommitted isolation.
- B. Use read committed isolation.
- C. Use serializable isolation.
- D. Use snapshot isolation.

Answer: D

Explanation: Snapshot isolation prevents both uncommitted dependencies (dirty reads) and nonrepeatable reads. It is also lower isolation level than Serializable and therefore less likely to result in blocking locks and deadlock conditions.

Incorrect Answers:

- A: Read uncommitted isolation is the least likely to cause deadlock conditions, but prevents neither uncommitted dependencies (dirty reads) nor nonrepeatable reads.
- B: Read committed isolation prevents uncommitted dependencies (dirty reads) but does not prevent nonrepeatable reads.
- C: Serializable isolation prevents both uncommitted dependencies (dirty reads) and nonrepeatable reads but it serializable is also the highest isolation level and is the most likely to result in deadlocks.

---

## QUESTION 25:

### DRAG DROP

You work as the database administrator at Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all database servers run SQL Server 2005. The Certkiller .com network contains a database server named Certkiller -DB01 that hosts a database named CK\_Sales. The CK\_Sales database stores sales data for the company and is also used for online transaction processing (OLTP).

A sharp increase in sales has more than doubled the number of users and connection to the CK\_Sales database. Recently several problems have been reported by database users. The most commonly reported error message is similar to the following message:

"Transaction (Process ID 44) was deadlocked on [lock] resources with another process and has been chosen as the deadlock victim. Rerun the transaction."



You want to reduce these errors.

What should you do? (To answer, select the appropriate actions in the pane on the left and place them in the pane on the right. You do not need to use all the actions.)

Steps, Select from these

Use a higher transaction isolation level
Use a lower transaction isolation level.
Rewrite transactions to run more efficiently.
Use query hints to reduce table locks for all Transaction
Bundle more transactions as a batch.
Implement row-versioning over shared locks.

Steps, place here

Place here.
Place here, if any.
Place here, if any.
Place here, if any.
Place here, if any.
Place here, if any.

Answer:

Steps, Select from these

Use a higher transaction isolation level
Use query hints to reduce table locks for all transactions
Bundle more transactions as a batch.

Steps, place here

Use a lower transaction isolation level.
Rewrite transactions to run more efficiently.
Implement row-versioning over shared locks.
Place here, if any.
Place here, if any.
Place here, if any.

Explanation:

The error message indicates that deadlock conditions that are preventing transactions from completing. A deadlock occurs when two or more transactions want access to the same data at the same time and one transaction, known as the blocking transaction, holds a lock on the data, which blocks the second transaction's access to the data. You can minimize blocking locks and deadlocked transactions by using a lower transaction isolation level. You can also use row-versioning to prevent deadlocks. With row-versioning, data is written to tempdb for processing; therefore shared locks are not required. You can also minimize deadlocks by writing short transactions that run as quickly as possible, because they tie up data for less time during processing.

Incorrect Answers:

Using a higher isolation level will increase the possibility of deadlock conditions.

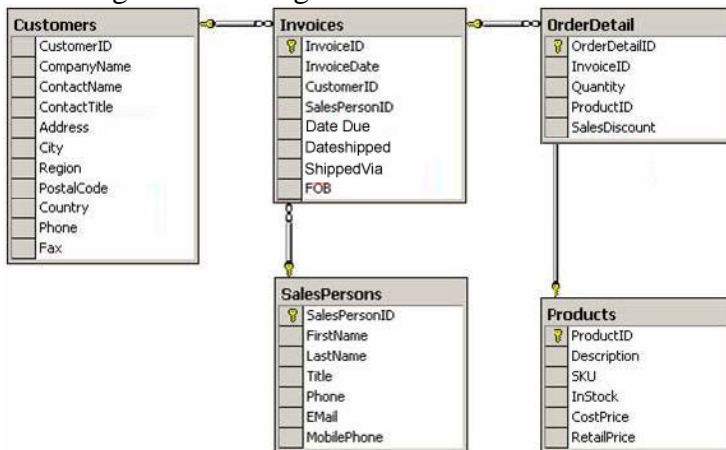
Query hints to require table locks and causes a transaction to block all rows in a table when a lock is acquired. This will increase the possibility of deadlock conditions.

Batched transactions take longer to execute and will hold locks for longer. This will increase the possibility of deadlock conditions.

## QUESTION 26:

You work as the database administrator at Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all database servers run SQL Server 2005.

The Certkiller .com network contains a database server named Certkiller -DB01 that hosts a database named CK\_Sales that stores sales data for the company. The CK\_Sales database is currently configured to use the READ COMMITTED transaction isolation level. The tables in the CK\_Sales database are shown in the following database diagram.



The Products table stores a list of products that are available for sale and product information, such as cost and retail prices, and stock levels.

Certkiller .com takes mail orders, telephone orders and online orders. Online orders are processed through a Web application that allows customers to pay for their purchases when they place an order online. Telephone and mail orders are processed manually and are entered into the CK\_Sales database by data capturers. The data capturers use an in-house application to enter the telephone and mail orders. The application uses a transaction that checks the current stock levels of a product, and then updates the Products table with the quantity change. The transaction uses the HOLDLOCK table hint, which is issued when the stock level checked and is held throughout the life of the transaction. Data capturers report that deadlocks are common during peak posting times. You need to minimize deadlocks without compromising the current levels of data integrity.

What should you do?

- A. Change the table hint to UPDLOCK.
- B. Change the isolation level to READ UNCOMMITTED.
- C. Change the isolation level to SERIALIZABLE.
- D. Change the table hint to REPEATABLEREAD.

Answer A

Explanation: With the UPDLOCK table hint locks are taken and held for the duration of the transaction but users can still access the data as long as they do not attempt to make changes to it. This will help to minimize blocking transactions and deadlocks, but will not prevent all potential deadlocks.

Incorrect Answers:

B: Although the READ UNCOMMITTED isolation level will reduce the number of deadlocks, it does not protect against inconsistent data changes and does not maintain data integrity.

C: The SERIALIZABLE transaction isolation level is functionally the same as issuing the HOLDLOCK table hint during a transaction.

D: The REPEATABLE READ table hint provides the lowest level of concurrency.

---

**QUESTION 27:**

You work as the database administrator at Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all database servers run SQL Server 2005. The Certkiller .com network contains a database server named Certkiller -DB01. Certkiller -DB01 hosts a database named CK\_Sales that stores sales data for the company.

You create a maintenance job named DB\_CleanUp for Certkiller -DB01 that will be run manually. However, when you attempt to run the job, you discover that the job is blocked by a process. You identify the session ID (SPID) of the blocking process as SPID 44. You want to determine which user is using SPID 44.

What should you do?

- A. Run the sp\_who stored procedure.
- B. Run sys.dm\_exec\_connections.
- C. Run sys.dm\_tran\_locks.
- D. Run the sp\_lock stored procedure.

Answer: A

Explanation: The sp\_who system stored procedure can be used to return a result set that contains information about current SQL Server 2005 users and the processes they are using. The information can be filtered to return only those processes that belong to a specific session

Incorrect Answers:

B: The sys.dm\_exec\_connections dynamic management view can be used to return information about the connection. It does not return information about the user logged in to a session.

C: The sys.dm\_tran\_locks dynamic management view can be used to return information about the current locks held or requested on resources in the database. This information does not include the identity of the user who is logged in to a session.

D: The sp\_lock system stored procedure can be used to return a result set that contains information about the locks on the system. It does not return information about the user whose session acquired the lock.

Reference:

Microsoft SQL Server 2005 Books Online (2006), Index: sp\_who

Microsoft SQL Server 2005 Books Online (2006), Index: sp\_lock

Microsoft SQL Server 2005 Books Online (2006), Index: sys.dm\_exec\_connections dynamic management view

Microsoft SQL Server 2005 Books Online (2006), Index: sys.dm\_tran\_locks dynamic management view

---

**QUESTION 28:**

You work as the database administrator at Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all database servers run SQL Server 2005. The Certkiller .com network contains a database server named Certkiller -DB01 that hosts a database named CK\_Sales that stores sales data for the company. The CK\_Sales database is also used for online transaction processing (OLTP).

A sharp increase in sales has more than doubled the number of users and connection to the CK\_Sales database. Recently several problems have been reported by database users. The most commonly reported error message is similar to the following message:

"Transaction (Process ID 44) was deadlocked on [lock] resources with another process and has been chosen as the deadlock victim. Rerun the transaction."

You want to reduce these errors.

What should you do?

- A. Bundle transactions as a batch.
- B. Use query hints for all transactions.
- C. Use serializable isolation.
- D. Use snapshot isolation.

Explanation: The error message indicates that deadlocks conditions that are preventing transactions from completing. A deadlock occurs when two or more transactions want access to the same data at the same time and one transaction, known as the blocking transaction, holds a lock on the data, which blocks the second transaction's access to the data. You can minimize blocking locks and deadlocked transactions by using snapshot isolation. Snapshot isolation uses row-versioning. With row-versioning, data is written to tempdb for processing; therefore shared locks are not required.

Incorrect Answers:

- A: Batched transactions take longer to execute and will hold locks for longer. This will increase the possibility of deadlock conditions.
- B: Query hints to require table locks and causes a transaction to block all rows in a table when a lock is acquired. This will increase the possibility of deadlock conditions.
- C: Serializeable is the highest isolation level. Using a higher isolation level will increase the possibility of deadlock conditions.

---

**QUESTION 29:**

You work as the database administrator at Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all database servers run SQL Server 2005.

The Certkiller .com network contains two database servers named Certkiller -DB01 and Certkiller -DB02. Each database server is configured with a default SQL Server instance and no named SQL Server instance. Both database servers have the hard disk configuration as shown in the following table.

Drive	Volume Type	Hosts
Drive C:	Simple	Operating System, SQL Server program files
Drive D:	RAID-0	Transaction log files
Drive E:	RAID-5	Database files

The performance of the database on Certkiller -DB01 degrades suddenly while database size and usage has not increased significantly. You use System Monitor to monitor the performance of Certkiller -DB01 compare it to baseline results collected shortly after the database was deployed. All of the performance counters are within acceptable variance except the PhysicalDisk:Ave Disk Queue Length for Drive E:, which has increased. You need to identify the cause of this problem. What should you do?

- A. Check the disk status for Drive E: in Computer Management.
- B. Check the SQL Server error logs in SQL Server Management Studio.
- C. Run SQL Server Profiler and Windows Performance.  
Correlate the out put from SQL Server Profiler and Windows Performance.
- D. Run SQL Server Profiler.  
Create a workload file based on the current load.

Answer: A

Explanation: The PhysicalDisk:Ave Disk Queue Length for Drive E: indicates a problem with the RAID-5 volume. A sudden problem with a RAID-5 volume is usually caused by a disk failure. You can check the status of the disks in the RAID-5 volume under Disk Management in Computer Management.

Incorrect Answers:

- B: The SQL Server error log records errors in SQL Server. It does not indicate the cause of disk problems.
- C, D: SQL Server Profiler is used to monitor SQL Server activity; however, database size and usage has not increased so SQL Server activity cannot the cause of the problem.

---

### **QUESTION 30:**

You work as the database administrator at Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all database servers run SQL Server 2005 with the default settings. The Certkiller .com network contains a database server named Certkiller -DB01 that hosts a database named CK\_Sales.

The CK\_Sales database stores sales data for the company.

One morning Certkiller .com users complain that they are unable to connect to Certkiller -DB01. You log on to your client computer named Certkiller -WS444. You attempt to connect to Certkiller -DB01 using the Dedicated Administrator Connection (DAC) but the connection fails. You need to be able to connect to Certkiller -DB01 from Certkiller -WS444.

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

- A. Start the SQL Server Agent service on Certkiller -DB01.
- B. Start the SQL Browser service on Certkiller -DB01.
- C. Run the sp\_configure 'remote admin connections', 0; statement on Certkiller -DB01.
- D. Enable the remote admin connection option on Certkiller -DB01.
- E. Enable named pipes on Certkiller -DB01.

Answer: B, D

Explanation: By default, only local dedicated administration connections (DACs) are allowed as DAC only listens on the loop-back IP address (127.0.0.1). You need to enable the remote admin connection option on Certkiller -DB01 by running the sp\_configure 'remote admin connections', 1; statement. You should also start the SQL Browser service on Certkiller -DB01 as the SQL Server client uses this service to determine the port number that DAC is listening on. Alternatively, you can configure DAC to use a specific port.

Incorrect Answers:

B: The Dedicated Administrator Connection (DAC) does not require the SQL Server Agent service.

C: The sp\_configure 'remote admin connections', 0; statement allows SQL Server to accept only local dedicated administration connections (DACs) using port 1434 on the loop-back IP address (127.0.0.1). This is the default setting.

E: The Dedicated Administrator Connection (DAC) uses TCP/IP and does not require named pipes.

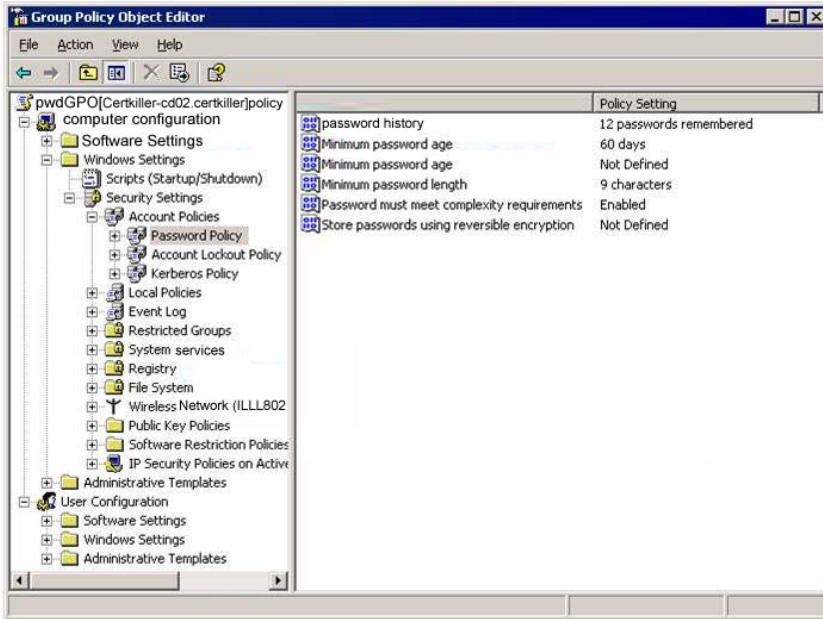
---

### **QUESTION 31:**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all database servers run SQL Server 2005 with the default settings. The Group Policy object shown in the following exhibit is applied to all computers in the domain.

Exhibit:





The Certkiller .com network contains a database server named Certkiller -DB01 that hosts a database named CK\_Sales. The CK\_Sales database stores sales data for the company. The SQL Server service on Certkiller -DB01 is configured to use the SQLSrv domain account. You have Domain Admin privileges and have been delegated permission to manage the SQLSrv account in Active Directory. Full-text search is enabled on Certkiller -DB01 to allow users to search the CK\_Sales database for product information.

Certkiller .com users complain that they cannot run searches against the CK\_Sales database. You attempt to start the SQL Server service on Certkiller -DB01 but receive an error message indicating that the password for the SQLSrv account has expired and could not be authenticated. You change the password for the SQLSrv account in Active Directory but the SQL Server service on Certkiller -DB01 still does not start. You need to start the SQL Server service and you need to ensure that the Certkiller .com users can run searches against the CK\_Sales database.

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

- A. Configure the SQL Server service to use the Network Service account.
- B. Change the password for the SQL Server service in the Services applet in Control Panel.
- C. Change the password for the Microsoft Search service in the Services applet in Control Panel.
- D. Change the password for the SQL Server service in the SQL Server Configuration Manager.

Answer: B, D

Explanation: You will need to configure the SQL Server service in the Services applet and SQL Server Configuration Manager with the SQLSrv account

password. The password in the Services applet will allow the SQL Server service to start and the password in the SQL Server Configuration Manager will allow full-text searches to be performed.

Incorrect Answers:

A: Configuring the SQL Server service to use the built-in Network Service account would be a security risk as the Network Service account has the same permissions as the Users group.

C: The Microsoft Search service uses the LocalSystem account that is configured by the operating system. You should not change this account.

---

### **QUESTION 32:**

You work as the database administrator at Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all database servers run SQL Server 2005. The Certkiller .com network contains a database server named Certkiller -DB01 B01. Certkiller -DB01 hosts a database named CK\_Manufacturing that stores data for the Manufacturing department. One morning Certkiller .com users complain that they cannot access the CK\_Manufacturing database on Certkiller -DB01. When you attempt to open the SQL Server Management Studio on Certkiller -DB01, you discover that the server is not responding. You are unable to connect using sqlcmd with a standard connection. You need to be able to connect to Certkiller -DB01 to be able to diagnose the problem. What should you do?

- A. Run sqlcmd with the -A option from the command prompt.
- B. Run the sp\_configure 'remote admin connections', 1; statement.
- C. Run the DBCC CHECKDB statement.
- D. Determine the session ID of the errant process and terminate that process.

Answer: A

Explanation: The sqlcmd command with the -A option to establish a dedicated administration connection (DAC) to Certkiller -DB01. You will be able to run queries to diagnose the problem once a DAC is established.

Incorrect Answers:

B: By default, only local dedicated administration connections (DACs) are allowed as DAC only listens on the loop-back IP address (127.0.0.1), port 1434. The sp\_configure 'remote admin connections', 1; statement allows a remote DAC to be established. It does not establish the DAC.

C: You will not be able to run the DBCC CHECKDB statement on a nonresponsive server until you establish a dedicated administration connection (DAC). Furthermore, the DBCC CHECKDB statement is used to check the structural and logical integrity of a database. It is not used to diagnose a nonresponsive server.

D: You will not be able to identify the session ID of any process on a nonresponsive server until you establish a dedicated administration connection (DAC).

Reference:

Microsoft SQL Server 2005 Books Online (2006), Index: sqlcmd commands

Microsoft SQL Server 2005 Books Online (2006), Index: remote admin connections option

Microsoft SQL Server 2005 Books Online (2006), Index: DBCC CHECKDB statement

---

### **QUESTION 33:**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server2003.

You need to deploy a database named CK\_Sales that will be used to store sales transactions for the company. You need to ensure fault tolerance for the database.

You must also ensure high availability of the CK\_Sales database.

What should you do?

- A. Deploy the database on a database server and use a RAID-5 volume for database file storage.
- B. Deploy two database servers in a database mirroring configuration and use a RAID-5 volume for database file storage.
- C. Deploy two servers in a Windows cluster configuration, deploy the database on the cluster and use a RAID-5 volume for database file storage.
- D. Deploy two database servers in a log shipping configuration and use a RAID-5 volume for database file storage.

Answer: B

Explanation: Database mirroring can be configured for automatic failover to minimize downtime while a RAID-5 volume can be used to minimize data loss.

Incorrect Answers:

A: A RAID-5 volume can be used to minimize data loss and provide fault tolerance at the disk subsystem level but it will not ensure high availability.

C: Windows clustering uses shared disk storage. Should a disk fail and need to be replaced, high availability will be affected.

D: Log shipping does not provide automatic failover. Thus high availability cannot be ensured.

---

### **QUESTION 34:**

You work as the database administrator at Certkiller .com. Certkiller .com has its headquarters in Washington and branch offices in Miami, Dallas and San Francisco. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server2003 and all database servers run SQL Server 2005. You work at headquarters.

You need to deploy a database named CK\_Sales to each office. The CK\_Sales

database will store sales transactions for the company and will also be used for online transaction processing (OLTP). You need to ensure that if the database server fails at one office, the database servers at any other office will act as a standby server.

What should you do?

- A. Configure snapshot replication.
- B. Configure failover clustering.
- C. Configure database mirroring.
- D. Configure log shipping.

Answer: D

Explanation: You require log shipping to allow a database server at another office to act as a standby server. With log shipping a database sends its transactions to one or more standby servers so that the transactions are applied to all the servers.

Incorrect Answers:

A: Snapshot replication sends the whole database to its replication partners. This can be time and bandwidth consuming.

C: Failover clustering uses shared disk storage. This is not practical in a wide area network.

D: Database mirroring is performed between two database servers. Certkiller .com has at least four database servers, one in each office.

---

### QUESTION 35:

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. The Certkiller .com network contains a database server named Certkiller -DB01 B01 that runs on Windows 2000 Server. Certkiller -DB01 hosts a database named CK\_Manufacturing that stores data for the Manufacturing department.

You need to replace Certkiller -DB01 with a new server named Certkiller -DB02 that is running Windows Server 2003. Certkiller -DB02 has four 200 GB hard disk drives that are named Disk0, Disk1, Disk2 and, Disk3. You need to move the CK\_Manufacturing database to Certkiller -DB02. The CK\_Manufacturing database currently consumes 312 GB of disk space and uses a single filegroup. You need to ensure that the CK\_Manufacturing database is protected against a single disk failure without creating additional filegroups. You also want to ensure the best disk read performance for the database.

What should you do?

- A. Configure Disk0 as a simple volume and install the operating system and SQL Server on it.
- B. Configure Disk0 and Disk1 as a RAID-1 volume and install the operating system and SQL Server on it.
- C. Configure Disk0 and Disk1 as a RAID-0 volume and install the operating system and

SQL Server on it.

D. Configure Disk2 and Disk3 as a RAID-1 volume and move the database to this volume.

E. Configure Disk2 and Disk3 as a RAID-0 volume and move the database to this volume.

F. Configure Disk 1, Disk2 and Disk3 as a RAID-5 volume and move the database to this volume.

Answer: A, F

Explanation: You need a RAID-5 volume to protect against a single disk failure. A RAID-5 volume uses striping with parity for improved performance and fault tolerance. A RAID-5 volume requires a minimum of three hard disk drives. The remaining disk can be used to host the operating system and the SQL Server 2005 installation files.

Incorrect Answers:

B: RAID-1 is disk mirroring which provides fault tolerance but at the cost of disk performance.

C, E: RAID-0 uses striping for improved performance but does not provide fault tolerance. This configuration does not protect against a single disk failure.

D: RAID-1 is disk mirroring which provides fault tolerance but at the cost of disk performance. It also has a high disk cost as the same data is written to two disks. This means that the RAID-1 volume would only have 200 GB disk space. This is too little for the CK\_Manufacturing database currently requires 312 GB of disk space.

---

### **QUESTION 36:**

You work as the database administrator at Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all database servers run SQL Server 2005. The Certkiller .com network contains a database server named Certkiller -DB01 that hosts a database named CK\_Sales that stores sales data for the company.

You want to implement a backup strategy for the CK\_Sales database. You attach two tape drives to Certkiller -DB01 and configure a scheduled Full backup of the CK\_Sales database at 1.00 A.M. every day. You alternated the backups between the two tapes so that a different tape is used each day. Later, while testing a restore strategy, you discover that a backup tape is faulty. You need to ensure that you avoid this type of failure. Due to budget constraints you are unable to install additional hardware.

What should you do?

A. Alternate with a Full and a Differential backup every other day.

B. Enable backup checksum generations.

C. Backup the database to an empty folder on Certkiller -DB01.

D. Implement mirrored media sets.

Answer: D

Explanation: Backup media set mirroring allows you to increase the reliability of backups without impacting on database performance. With backup media set mirroring the database is backed up to both tape drives. If one backup tape is faulty, the other backup tape can be used.

Incorrect Answers:

A: Performing Full and Differential backups will not protect against faulty backup tapes.

B: Backup checksums verifies the integrity of the backup. This however has a negative impact on system performance.

C: Backing up the database to the local hard disk will not protect the database against a hard disk failure.

---

### QUESTION 37:

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run on Windows Server2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains two SQL Server 2005 database servers that are configured in a failover cluster with two nodes named NodeA and NodeB. NodeA hosts a database named CK\_Sales that stores sales data for the company. The CK\_Sales database is also used for online transaction processing (OLTP) and must be available 24 hours a day, 7 days a week.

One morning you discover that the disk controller on NodeA has failed. You replace the faulty disk controller. You now need to start the failover cluster recovery process.

Where should you begin?

- A. Move the CK\_Sales database to NodeB.
- B. Remove NodeA from the cluster.
- C. Bring NodeA back online and rejoin the cluster.
- D. Reinitialize NodeA as the active node.

Answer: B

Explanation: Removing the faulty node from the cluster is the first step in failover cluster recovery process. Once the node is removed, the server can be repaired and returned to the cluster. Thereafter the node can be reinitialized as the active node.

Incorrect Answers:

A: You do not need to move the database to NodeB as the nodes in a failover cluster share the same disk subsystem.

C: Removing the faulty node from the cluster is the first step in failover cluster recovery process. Once the node is removed, the server can be repaired and returned to the cluster.

D: Once the active node fails, it must be removed from the cluster, repaired and then joined back to the cluster. Thereafter the node can be reinitialized as the active node.



---

**QUESTION 38:**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run on Windows Server2003 and all client computers run Windows XP Professional. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller-DB01. Certkiller -DB01 hosts a database named CK\_Projects that stores project development data for the company.

One weekend you make several configuration changes to Certkiller -DB01. The configuration changes require you to reboot the server before the changes take effect. You reboot Certkiller -DB01 but discover that the SQL Server service refuses to start. You need to undo the configuration changes to Certkiller -DB01. You need to accomplish this task as quickly as possible. What should you do?

- A. At the command prompt, run sqlserver.exe and reconfigure Certkiller -DB01.
- B. At the command prompt, run sqlserver.exe -f and reconfigure Certkiller -DB01.
- C. Reinstall SQL Server 2005 from the installation DVD.
- D. Restore SQL Server 2005 from backup.

Answer: B

Explanation: The sqlserver.exe -f command starts SQL Server with the minimum configuration and allows you to start an instance of SQL Server that you cannot start normally. Once the instance is started, you can reconfigure the server and undo the changes.

Incorrect

Answer:

- A: The sqlserver.exe command without any switches starts SQL Server normally. However, the SQL Server service does not start when SQL Server is started normally.
- C: Reinstalling SQL Server 2005 does not guarantee that you will be able to start the SQL Server service.
- D: You must be able to start the SQL Server service in order to restore SQL Server 2005 but the SQL Server service will not start.

---

**QUESTION 39:**

You work as the database administrator at Certkiller .com. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01 that runs on a Windows Server 2003 computer. Certkiller -DB01 hosts a database named CK\_Projects. The Simple Recovery Model is implemented for the CK\_Projects database.

You need to implement a disaster recovery plan for the CK\_Projects database. Your disaster recovery plan must ensure that data can be backed up as quickly as possible

and that data can be recovered as quickly as possible following a disaster. You must also ensure that no more than three hours data is at risk at any one time. You plan to perform a full backup every Saturday at 12:00 P.M. You must now plan the backup schedule that will run during the week.

What should you do?

- A. Schedule a transaction log backup every three hours, Monday through Friday.
- B. Schedule a differential backup at 12:00 P.M., Monday through Friday and schedule a transaction log backup every three hours between differential backups.
- C. Schedule a differential backup every three hours, Monday through Friday.
- D. Schedule a full backup at 12:00 P.M., Monday through Friday and schedule a differential backup every three hours between differential backups.

Answer: C

Explanation: To ensure backups can be performed quickly, you need to implement differential backups every three hours. With differential backup ups, only the data that changed since the last Full backup will be saved. This means that you only need the last full backup and the last differential backup to restore the data.

Incorrect

Answer:

A, B: The Simple Recovery Model does not transaction log the backups as it truncates the transaction logs before the transaction logs are backed up. You must change the Recovery Model to Full or Bulk-logged in order to backup the transaction logs.

D: Performing full backups every day would increase backup times.

---

#### **QUESTION 40:**

You work as the database administrator at Certkiller .com. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01 that runs on a Windows Server 2003 computer. Certkiller -DB01 hosts a database named CK\_Orders. Several data capturers enter data into the CK\_Orders database everyday.

Certkiller .com wants you to implement a disaster recovery plan for the CK\_Orders database. You need to ensure that data can be easily recovered. You plan to perform a full backup every Saturday at 2:00 P.M.

What should you do?

- A. Open the Windows Backup utility on Certkiller -DB01. Configure a Full backup to run weekly on Saturdays at 2:00 P.M.
- B. Run the BACKUP DATABASE Transact-SQL statement on the CK\_Orders database.
- C. Open the Database Backup dialog box fro the CK\_Orders database in the SQL Enterprise Manager console. Configure a Full backup to run weekly on Saturdays at 2:00 P.M.
- D. Open the Database Backup dialog box fro the CK\_Orders database in SQL Management Studio. Configure a Full backup to run weekly on Saturdays at 2:00 P.M.

Answer: D

Explanation: You configure a Full backup of a database in SQL Management Studio. You can accomplish this by right-clicking the appropriate database and selecting Tasks and then Back Up from the context menu.

Incorrect Answers:

A: The Windows Utility can be used to backup data on a computer. It cannot be used to backup a database.

B: The BACKUP DATABASE statement can be used to backup a database but it cannot be used to schedule a recurring backup job.

C: SQL Server 2005 does not support the SQL Enterprise Manager console. SQL Server 2005 uses the SQL Management Studio.

Reference:

Microsoft SQL Server 2005 Books Online (2006), Index: database backups [SQL Server]

Microsoft SQL Server 2005 Books Online (2006), Index: BACKUP DATABASE statement

---

#### **QUESTION 41:**

You work as the database administrator at Certkiller .com. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01 that runs on a Windows Server 2003 computer. Certkiller -DB01 hosts a database named CK\_Orders. Several data capturers enter data into the CK\_Orders database everyday. The Simple Recovery Model is implemented for the CK\_Orders database. A Full backup of the CK\_Orders database is performed every Saturday at 2:00 P.M.

You are concerned that data loss may occur should Certkiller -DB01 suffer a hard disk failure. You decide to implement additional backups of the CK\_Orders database on a daily basis. You want to minimize the amount of time required for the backups as well as the time required to restore the database.

What should you do?

- A. Perform differential backups of the CK\_Orders database on every week day.
- B. Switch the CK\_Orders database to the Full Recovery Model.
- C. Perform a Full backup of the CK\_Orders database on every week day.
- D. Perform incremental backups of the CK\_Orders database on every week day.

Answer: A

Explanation: To minimize the amount of time required to perform the backups, you need to perform differential backups on the week days. Differential backup ups only backs up the data that has changed since the last Full backup.

Incorrect Answers:

B: The recovery model will not affect the time required for the backup or the restore.

C: Restoring data from transaction log backups will not minimize restore times.

D: SQL Server 2005 does not support incremental backups.

Reference:

Microsoft SQL Server 2005 Books Online (2006), Index: database backups [SQL Server]

---

**QUESTION 42:**

You work as the database administrator at Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all database servers run SQL Server 2005. The Certkiller .com network contains a database server named Certkiller -DB01. Certkiller -DB01 hosts a database named CK\_Sales that stores sales and product data. The CK\_Sales database has three file groups named Primary, Secondary and Extra. Primary is the primary file group and contains the critical data from the database.

A Full backup of the CK\_Sales database is performed every Saturday at 12:00 P.M., and a backup of the transaction log is performed every two hours during the working day. Certkiller -DB01 suffers a catastrophic failure. You replace Certkiller -DB01 with a new SQL Server 2005 database server named Certkiller -DB02. You now need to restore the Primary filegroup from a backup named bak\_20060722 as quickly as possible. The Secondary and Extra file groups will be restored later. What should you do?

- A. Run RESTORE DATABASE CK\_Sales FILEGROUP='Primary' FROM bak\_20060722 WITH PARTIAL, NORECOVERY
- B. Run RESTORE DATABASE CK\_Sales FILEGROUP='Primary' FROM bak\_20060722 WITH PARTIAL
- C. Run RESTORE DATABASE CK\_Sales FILEGROUP='Primary' FROM bak\_20060722
- D. Run RESTORE DATABASE CK\_Sales FILEGROUP='Primary' FROM bak\_20060722 WITH NORECOVERY

Answer: A

Explanation: You need to perform a partial restore and then apply the transaction log backups. You must include the NORECOVERY option to be able to apply the transaction log backups.

Incorrect Answers:

B: You must include the NORECOVERY option to be able to apply the transaction log backups.

C: You need to perform a partial restore and then apply the transaction log backups. This means you must use the PARTIAL option and the NORECOVERY option to be able to apply the transaction log backups.

D: You must use the PARTIAL option to perform a partial backup.

---

**QUESTION 43:**

You work as the database administrator at Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all database servers run SQL Server 2005. The Certkiller .com network contains a database server named Certkiller -DB01. Certkiller -DB01 hosts a database named CK\_Sales that stores sales and product data.

Several data capturers enter data into the CK\_Sales database everyday. The Full Recovery Model is implemented for the CK\_Sales database. A Full backup of the CK\_Sales database is performed every Saturday at 12:00 P.M., a differential backup is performed every week night at 12:00 P.M., and a backup of the transaction log is performed every two hours during the working day.

On Thursday morning you discover that Certkiller -DB01 suffered a hard disk failure sometime before the previous day's differential backup was performed. You replace the failed hard disk and restore the operating system and application on Certkiller -DB01. You now need to restore the CK\_Sales database as quickly as possible.

What should you do?

- A. Restore the last Full backup.  
Restore the last differential backup.  
Restore all the transaction logs in order.
- B. Restore the last Full backup.  
Restore all the transaction logs in order.
- C. Restore the last Full backup.  
Restore the differential backup since the last Full backup.  
Restore all the transaction logs since the last differential backup.
- D. Restore the last Full backup.  
Restore the last differential backup.  
Restore all the transaction logs since the last differential backup.

Answer: D

Explanation:

The Full Recovery Model is implemented for the CK\_Sales database and you've performed a Full backup on Saturdays, daily differential backups and transaction log backups every two hours. In the Full Recovery Model, transactions in the transaction log are not cleared until they are backed up. Therefore you need to restore the last Full backup, restore the last differential backup, and restore all the transaction logs since the last differential backup.

Incorrect Answers:

- A: You do not need to restore all the transaction log backups, only the transaction log backups since the last differential backup.
- B: You could restore all the transaction log backups since the last Full backup but it would be quicker to restore the last differential backup performed since the last Full backup and then only the transaction log backups since the last differential backup.
- C: A differential backup will backup all data that has changed since the last Full backup. Therefore you only need to restore the last differential backup.

Reference:

Microsoft SQL Server 2005 Books Online (2006), Index: database backups [SQL Server]

---

**QUESTION 44:**

You work as the database administrator at Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all database servers run SQL Server 2005. The Certkiller .com network contains a database server named Certkiller -DB01 that has a single hard disk drive. Certkiller -DB01 hosts a database named CK\_Sales that stores sales and product data. Certkiller -DB01 is configured to use Integrated Windows Authentication and SQL Server Authentication.

Certkiller .com has a data capturer named Mia Hamm who regularly connects to Certkiller -DB01 to enter invoice data. Mia Hamm has an Active Directory user account. Certkiller .com hires an assistant data capturer named Amy Walsh. Amy Walsh uses connect to Certkiller -DB01 using SQL Server Authentication.

On Thursday morning you discover that Certkiller -DB01 suffered a hard disk failure. You replace the failed hard disk and restore the CK\_Sales database from backup. However, Mia Hamm and Amy Walsh report that they cannot connect to Certkiller -DB01.

You need to ensure that Mia Hamm and Amy Walsh can connect to Certkiller -DB01.

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

- A. Create a SQL Server login for Amy Walsh.
- B. Create a login for Mia Hamm and map it to her Windows user account.
- C. Run the sp\_change\_user\_login for the database user account mapped to Amy Walsh's login.
- D. Create a login for Amy Walsh and map it to her Windows user account.
- E. Run the sp\_change\_user\_login for the database user account mapped to Mia Hamm's login.
- F. Create a SQL Server login for Mia Hamm.

Answer: A, B, C

Explanation: The master database is used to store SQL Server logins. The logins used by Mia Hamm and Amy Walsh probably changed since the last backup of the master database. You will need to recreate the user logins. Amy Walsh uses SQL Server Authentication. You will need to use the sp\_change\_user\_login stored procedure to link Amy Walsh's database user account to her login. Mia Hamm uses a Windows user account. You will need to link her login to her Windows user account.

Incorrect Answers:

D: Amy Walsh does not have a Windows user account. She uses SQL Server Authentication.



E: Mia Hamm uses a Windows user account. You cannot use the sp\_change\_user\_login stored procedure to link a Windows user account to a login.

F: Mia Hamm uses a Windows user account. You do not need to create a SQL Server login for her.

---

**QUESTION 45:**

**DRAG DROP**

You work as the database administrator at Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003. The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01.

Certkiller -DB01 hosts a database named CK\_Sales that stores sales data for the company.

The CK\_Sales database has a primary filegroup named Primary and a secondary filegroup named Secondary. The Full Recovery Model is implemented for the CK\_Sales database. A Full backup of the CK\_Sales database is performed at 12:00 P.M. on the first Saturday of every month. You alternate Full back ups of a filegroup every week night at 12:00 P.M., and backup of the transaction log every two hours during the working day.

On day you open the suspect\_pages table and discover suspect pages from the Secondary filegroup. You retrieve the page IDs of the suspect pages. You now need to recover the suspect pages as quickly as possible. You must accomplish this without adversely affecting normal database usage.

What should you do? (To answer, select the appropriate performance counters that you should monitor in the left pane and drag them to the right pane.)

Steps, Select from these	Steps, place here
Restore the most recent Full backup.	Place first step here.
Restore the most recent primary file group backup.	Place second step here, if any.
Restore the additional transaction log backup.	Place third step here, if any.
Run an additional transaction log backup.	Place fourth step here, if any.
Restore the most recent Secondary filegroup backup	Place fifth step here, if any.
Restore each transaction log backup.	Place sixth here, if any.

Answer:

Steps, Select from these	Steps, place here
Restore the most recent Full backup.	Restore the most recent Secondary filegroup backup.
Restore the most recent primary file group backup.	Restore each transaction log backup.
	Run an additional transaction log backup.
	Restore the additional transaction log backup.
	Place fifth step here, if any.
	Place sixth here, if any.

**Explanation:**

To recover the suspect pages, you must run the RESTORE command with the PAGE option. You must then apply the differential and transaction log backups in the correct order. You must also run a backup of the transaction logs to capture the transaction that may have occurred since the last transaction log backup. Then restore the latest transaction log backup.

**QUESTION 46:**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all clients run Windows XP Professional.

The Certkiller .com network contains a SQL Server 2005 database server named Certkiller -DB01. Certkiller -DB01 contains a large database named CK\_Catalog which is updated every Monday and every Thursday. An online version of the CK\_Catalog database is available to customers on the Certkiller .com e-Commerce Web site. Clive Wilson, the Webmaster of the Certkiller .com e-Commerce Web site is responsible for updating the online version of the CK\_Catalog database. To optimize performance of the CK\_Catalog online database, you create database snapshots at 5:30 PM every Monday and every Thursday. Each time you create a new snapshot, you delete the snapshot from the previous week. The two snapshots are named CK\_catss\_monday and CK\_catss\_thursday. One Tuesday morning Clive Wilson informs you that he imported the wrong data into the CK\_Catalog online database. You need to revert the CK\_Catalog online database to the CK\_catss\_thursday snapshot and allow Clive Wilson to import the correct data.

What should you do?

- A. Restore the CK\_catss\_thursday snapshot in Replication Monitor.
- B. Run the Transact-SQL statement: DROP DATABASE CK\_catss\_monday.
- C. Run the Transact-SQL statement: RESTORE DATABASE CK\_Catalog FROM DATABASE\_SNAPSHOT = 'CK\_catss\_thursday'.
- D. Set the Restrict Access option for the online CK\_Catalog database to Single.

Answer: B

Explanation: When you want to revert a database back to a snapshot, you must drop any other snapshots of the database; therefore you need to drop the snapshot that you do not want to revert to.

Incorrect Answers:

A: You cannot revert a database to a snapshot in Replication Monitor. You can only revert a database to a snapshot using the RESTORE DATABASE Transact-SQL statement.

C: When you want to revert a database back to a snapshot, you must drop any other snapshots of the database; therefore you need to drop the CK\_catss\_monday snapshot first before you run the RESTORE DATABASE Transact-SQL statement.

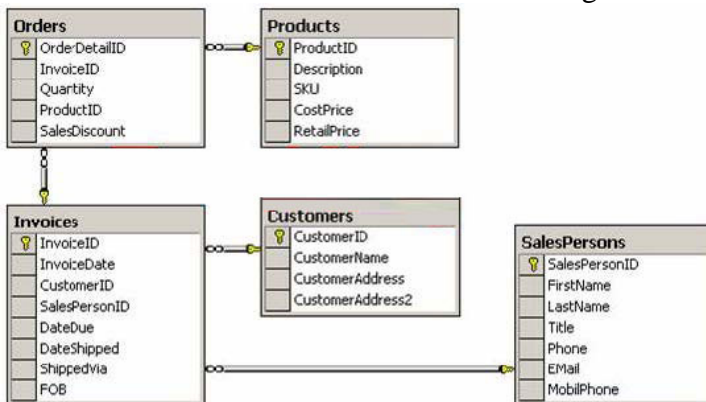
D: When you run the RESTORE DATABASE Transact-SQL statement with the FROM DATABASE\_SNAPSHOT clause, SQL marks the database as 'In restore'. When a database is marked 'In restore' you do not need to set the Restrict Access option to Single.

Reference:

Microsoft SQL Server 2005 Books Online (2006), Index: features [SQL Server]

#### QUESTION 47:

You work as the database administrator at Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all database servers run SQL Server 2005. The Certkiller .com network contains a database server named Certkiller -DB01 that has a single hard disk drive. Certkiller -DB01 hosts a database named CK\_Sales that stores sales and product data. The tables in the CK\_Sales database are shown in the following database diagram.



Certkiller -DB01 is configured to only use Windows Authentication and exposes several stored procedure as Web methods that are used to update the CK\_Sales database. You configure Data Definition Languages (DDL) and Data Manipulation Language (DML) triggers on Certkiller -DB01. The DDL triggers are used to log changes to users, application roles, and database roles while the DML triggers are used to log changes to the Products, Orders and Invoices tables.

You are concerned about possible data and configuration loss should the master database become corrupt and it cannot be restored from backup. You want to

create a script that can be used to recover SQL Server 2005 if the master database becomes corrupt. You need to configure which objects the script must create. What should you do? (Each correct answer presents part of the solution. Choose TWO.)

- A. DDL triggers.
- B. DML triggers.
- C. HTTP endpoints.
- D. Jobs.
- E. Logins.

Answer: C, E

Explanation: The server-level objects stored in the master database include logins, HTTP endpoints, and server-scope DDL triggers.

Incorrect Answers:

A: You need to create server-scope DDL triggers. However, the DDL triggers described in this scenario are database-scoped triggers. Database-scoped triggers are not stored in the master database.

B: DML triggers are not stored in the master database. They are stored in user databases.

D: Jobs are not stored in the master database. They are stored in the msdb database.

---

#### **QUESTION 48:**

You work as the database administrator at Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003. The Certkiller .com network contains a SQL Server 2005 Standard Edition database server named Certkiller -DB01 that has four hard disks. Certkiller -DB01 hosts a database named CK\_Sales that stores sales data for the company. The Full Recovery Model is implemented for the CK\_Sales database. A Full backup of the CK\_Sales database is performed at 12:00 P.M. every Saturday.

The CK\_Sales database has three filegroups named Primary, Secondary, and ExtraData. Primary is the primary filegroup and is stored on drive D:. It contains one file. Secondary is a read-only filegroup and is also stored on drive D:. It also contains one file. ExtraData is a read/write filegroup and is stored on drive E:. It contains two files. The transaction logs are stored on drive F:.

The Secondary filegroup was made read-only before the last Full backup was performed. A blackout causes Certkiller -DB01 to fail. You bring Certkiller -DB01 back online. You discover a few suspect pages in the suspect\_pages table. The suspect\_pages table indicates that the pages are suspect due to a torn write. You need to recover the suspect pages while minimizing downtime.

What should you do?

- A. Perform an offline file restore.
- B. Perform an online file restore.

- C. Perform an online page restore.
- D. Perform an offline page restore.

Answer: D

Explanation: You can perform a restore of the torn pages. This will have to be done offline as SQL Server 2005 Standard Edition does not support online restores.

Incorrect Answers:

- A: Restoring the suspect pages would be quicker than restoring the file.
- B, C: SQL Server 2005 Standard Edition does not support online restores.

---

#### **QUESTION 49:**

You work as the database administrator at Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003. The Certkiller .com network contains a SQL Server 2005 Enterprise Edition database server named Certkiller -DB01 that has four hard disks. Certkiller -DB01 hosts a database named CK\_Sales that stores sales data for the company. The Simple Recovery Model is implemented for the CK\_Sales database. A Full backup of the CK\_Sales database is performed at 1:00 A.M. every Saturday and a differential backup database is performed at 1:00 A.M. every Tuesday and Thursday night. The CK\_Sales database has three filegroups named Primary, Secondary, and ExtraData. Primary is the primary filegroup and is stored on drive D:. It contains one file. Secondary is a read-only filegroup and is also stored on drive D:. It also contains one file. ExtraData is a read/write filegroup and is stored on drive E:. It contains two files. The transaction logs are stored on drive F:. The Secondary filegroup was made read-only before the last Full backup was performed. At 10:00 A.M. on Friday morning drive E: on Certkiller -DB01 fails. You replace the failed hard disk. You now need to restore the data while minimizing downtime.

What should you do?

- A. Restore the last Full backup from Saturday night, restore the differential backup from Tuesday night, then restore the differential backup from Thursday night.
- B. Restore the last Full backup from Saturday night and the last differential backup from Thursday night.
- C. Restore the ExtraData filegroup from the last Full backup from Saturday night and then restore the ExtraData filegroup from the differential backup from Thursday night.
- D. Perform a tail-log backup. Restore the ExtraData filegroup from the last Full backup from Saturday night. Restore the ExtraData filegroup from the differential backup from Thursday night. Restore the tail-log backup.

Answer: B

Explanation: You can perform a restore of the torn pages. This will have to be done offline as SQL Server 2005 Standard Edition does not support online restores.

Incorrect Answers:

A: A differential backup will backup all data that has changed since the last Full backup. Therefore you only need to restore that last differential backup.

C:

A file restore is only supported for read-only filegroups when the Simple Recovery Model is used. However, the ExtraData filegroup is a read/write file group.

D: A file restore is only supported for read-only filegroups when the Simple Recovery Model is used. However, the ExtraData filegroup is a read/write file group. You also cannot perform tail-log backups because when the Simple Recovery Model is used, the transaction log is truncated when the transaction is committed.

---

### **QUESTION 50:**

You work as a data administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on Certkiller .com run Microsoft Windows Server 2003. The database server named Certkiller -DB01 is configured with Microsoft SQL Server 2005. Your job description includes the maintenance of Certkiller -DB01.

The Certkiller -DB01 specifications are as follows:

1. One processor
2. 1 gigabyte (GB) of memory
3. One physical hard drive

You are currently busy establishing the performance threshold for Certkiller -DB01. To this end you are monitoring Certkiller -DB01 for common bottleneck conditions. You now need to identify the potential bottleneck conditions. You thus need to make a choice in the appropriate counters and the appropriate settings.

What should you do?

- A. The PhysicalDisk: %Disk Time counter should be monitored and set the threshold not to fall below 90 percent.
- B. The Processor: %Privileged Time counter should be monitored and set the threshold not to fall below 20 percent.
- C. The PhysicalDisk: Avg. Disk Queue Length counter should be monitored and set the threshold not to exceed 1.
- D. The Processor: %Processor Time counter should be monitored and set the threshold to not exceed 80 percent.

Answer: D

Explanation: In the scenario you should only consider using the option in the answer because the counter monitors the amount of time that the CPU spends executing non-idle threads.

Incorrect Answers:

A: In the scenario you should always remember that when looking for bottlenecks that a lower value is better for usage.



B: This option should not be used in the scenario because this should only be used if you identified that the CPU is the bottleneck.

C: You should not make this configuration in the scenario because a bottleneck can be indicated by a value higher than 1.5 if you have only one hard disk.

---

**QUESTION 51:**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 database server named Certkiller -DB01 which you administer. You are in the process of collecting information that will be required for ongoing server management which includes hardware performance statistics. You are required to collect the statistics during average use and peak periods. You want to collect the hardware baseline performance statistics.

What should you do?

- A. A Windows counter log should be created.
- B. A Windows Alerts should be created.
- C. A Windows trace log should be created.
- D. A SQL Server Profiler trace should be created.

Answer: A

Explanation: In the scenario you should consider creating a Windows counter log as this lets you specify the hardware resource performance counters that you want included in the baseline performance statistics.

Incorrect Answers:

B: This option should not be used in the scenario because alerts are created to trigger when counters fall above or below a specified threshold value.

C: This option should not be used in the scenario because the trace log is used to collect specific performance information and does not let you specify performance counters to monitor.

D: This option should not be used in the scenario as the counter itself does not collect hardware performance statistics.

---

**QUESTION 52:**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 server named Certkiller -DB01. Certkiller -DB01 hosts an inventory database named

CK\_Inventory. Your user account is configured as a SQL Server Agent operator. You discover that the CK\_Inventory database is increasing in size rapidly and the server currently has a 100 GB hard disk. You want to add an additional hard disk to Certkiller -DB01. You will need to shutdown the database to install and configure the hard disk to provide additional storage. However, the Certkiller .com CEO feels that this action is not justified until the disk space requirement becomes critical.

You want to configure Certkiller -DB01 to notify you when the hard disk has less than 5 percent disk space free. You want to accomplish this task using the least amount of administrative effort.

What should you do?

- A. A new job should be created that runs the sp\_spaceused statement daily.
- B. The SQL Server Agent must be configured to send you an e-mail message if the database file for the inventory exceeds 95 GB.
- C. The Performance utility should be used to create an alert that runs Disk Cleanup when free space falls under 5GB.
- D. The Performance utility should be used to create an alert that sends you a network message and writes an entry to the application log when free disk space falls under 5 GB and check the Application log daily.

Answer: D

Explanation: In the scenario you should make use of the Performance utility to create and send the alert to you as a network message and notifies you.

Incorrect Answers:

- A: This option should not be used in the scenario because the option reports space used by the database and that is all that it displays.
- B: This option should not be used in the scenario as the server has one hard disk and does not take into account the space used by the operating system.
- C: This option should not be used in the scenario as you will remain uninformed of the disk space status in the scenario.

---

### **QUESTION 53:**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 database server named Certkiller -DB01 which you administer. You are required to analyze the effect of SQL Server queries and stored procedures on system resource utilization. You are also required to save the necessary information to perform your analysis. Your solution should require as few resources as possible. What should you do? (Choose two)

- A. A trace file based on the SP\_Counts template should be created and save it to the table
- B. A trace file based on the Tuning template should be created and save it to the table
- C. A log files should be created to monitor performance counters on Certkiller -DB01
- D. A trace file based on the TSQL-Relay template should be created and save it to the table
- E. A log file should be created to monitor performance counters on Certkiller -DB01 on a different computer

Answer: D, E

Explanation: In the scenario you should always remember that when you are creating the log it consumes fewer resources on Certkiller -DB01 as saving a trace file consumes much less resources.

Incorrect Answers:

- A: This option should not be used in the scenario because the option will not give you the required information as required in the scenario.
- B: This option should only be used in the scenario when you are creating a trace to use with the Database Engine Tuning Advisor.
- C: This option should not be used in the scenario as this will skew performance as the performance monitor will also use resources.

---

#### **QUESTION 54:**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 database server named Certkiller -DB01 which you administer. Certkiller -DB01 hosts a database named CK\_Manufacturing that is responsible for driving the manufacturing process and monitoring of equipment. The monitoring of equipment is accomplished through stored procedures.

You are required to ensure that only the on-duty manager is paged if the temperature of equipment reaches a specific point. You create a trigger on the table to raise an error by msgid if the value is exceeded. You are required to choose the additional steps to take.

What should you do? (Choose all that apply)

- A. Configure SQL Server Agent Mail
- B. A Windows Performance alert should be created
- C. An Event Notification should be created
- D. Operators should be created for each manager
- E. A SQL Server Agent alert should be created
- F. sp\_messages should be run to add the error messages to the sys.messages table

Answer: D, E, F

Explanation: You should remember in the scenario that you can use the SQL Server Agent to configure alerts that page the operator in response to SQL Server object counter values, errors logged to the Windows event log or the Windows Management Instrumentation (WMI) events.

Incorrect Answer:

A: This option should not be considered for creation in the scenario because the SQL Server Mail Agent is not required to send a message using e-mail.

B: This option should not be considered for creation in the scenario because the alert type is not used to respond to errors raised in SQL Server triggers.

C: This option should not be considered for creation in the scenario because the option could be used in the scenario but this option requires too much administration effort.

---

### QUESTION 55:

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network has several locations which contain several Microsoft SQL 2005 servers. You are required to create a job on each server to perform daily backup to a tape device. You need to ensure that the network administrator is notified by e-mail when the backup has completed successfully. You must write a script that will perform the necessary tasks.

Which stored procedures should the script call?

A. sp\_add\_operator

sp\_add\_job

B. sp\_add\_job

sp\_add\_operator

sp\_add\_notification

C. sp\_add\_proxy

sp\_add\_job

D. sp\_add\_job

sp\_add\_operator

sp\_add\_alert

Answer: A

Explanation: In the scenario you should remember that you are required to create the operator before the job and this is done using the statement in the answer.

Incorrect Answers:

B: This statement should not be used in the scenario because the statement does not have a alert send when the backup successfully completes.

C: This statement should not be used in the scenario because the statement is used to create a proxy that can be used as a security context for running a job.

D: This statement should not be used in the scenario because the statement is used to add an operator to an alert notification.

---

**QUESTION 56:**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 server which you administer. You discovered recently that the database server is experiencing performance problems. You suspect that the bottleneck is disk access you run the performance utility and the log indicates the values below:

1. PhysicalDisk: %Disk Time = 94%
2. PhysicalDisk: Avg. Disk Queue Length = 3

You are required to eliminate the lack of physical memory as the bottleneck. What should you do?

- A. Monitor the Memory: Pages/sec counter.
- B. Monitor the SQL Server: Buffer Manager: Page reads/sec counter.
- C. Monitor the Memory: Cache faults/sec counter.
- D. Monitor the SQL Server: Buffer Manager: Total Pages counter.

Answer: A

Explanation: In the scenario you should remember in order to monitor the lack of physical memory that you should use the Memory: Pages/sec counter as this will determine how many hard page faults occur.

Incorrect Answers:

B: This option should not be used in the scenario as it will only tell you the amount of the disk access performed by the instance of SQL server.

C: This option is used to report only the number of hard faults and soft faults in a combination and should not be used in the scenario.

D: This option should not be used in the scenario because it only displays the number of pages in the buffer pool.

---

**QUESTION 57:**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 database server named Certkiller -DB01 which you administer, the Microsoft SQL Server 2005 computer has two hard disk configurations shown below:

1. Disk 0, logical drive C: with 10 GB free

2. Disk 0, logical drive D: with 4 GB free

3. Disk1, logical drive E: with 20 GB free

Certkiller -DB01's drive C: contains the operating system and SQL Server files; drive D: contains the transaction log and some data files; and drive E: contains the remaining data files. You are concerned about drive D: running out of disk space. You want to take two actions if free space falls below 1 GB:

1. Run Windows Disk Cleanup

2. Log the condition on the Windows Application log

This task should be accomplished using the least amount of administrative effort.

What should you do?

A. A SQL Server Agent alert should be used.

B. A Windows Counter log should be used.

C. A Windows Trace log should be used.

D. A Windows Alert should be used.

Answer: D

Explanation: In the scenario you should consider making use of a Windows alert because the Windows alert can be configured to write to the application log and run a scheduled program.

Incorrect Answers:

A: This option should not be considered in the scenario as this option only supports SQL Server performance objects.

B: This option should not be used in the scenario because the option can be used to collect data for analysis but cannot trigger events.

C: This option should not be used in the scenario because the option cannot specify performance counters in a Trace log.

---

### **QUESTION 58:**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 server named Certkiller -DB01 that hosts a database named CK\_Sales. The CK\_Sales database has been running in the production environment for several months. Certkiller .com users start complaining that response time for query run against the CK\_Sales database is slow. You discover that this is due to timeouts.

You monitor the PhysicalDisk, Processor and Memory performance counters and compare them with the baseline values collected shortly after the CK\_Sales database was installed. You now suspect that the performance is weak due to excessive paging caused by the server and want to verify this.

What should you do? (Choose all that apply)



- A. Monitor SQL Server: Buffer Manager: Buffer Cache Hit Ratio
- B. Monitor Process: % User Time
- C. Monitor Memory: Page Faults/sec
- D. Monitor Memory: Pages/sec
- E. Monitor PhysicalDisk: Avg. Disk Queue Length
- F. Monitor SQL Server: Buffer Manager: Page Reads/sec
- G. Monitor SQL Server: Buffer Manager: Page Writes/sec

Answer: E, F, G

Explanation: In the scenario you should consider making use of the counters used in the answer as the counters can be used in the scenario for achieving the scenario objective as required.

Incorrect

Answer:

- A: This option should not be used as it indicates the number of data requests serviced from the cache.
- B: You are required to get information about the activity resulting from paging and this option does not comply with this.
- C, D: These options should not be used in the scenario because the counters provide information about paging and page faults and this is not what the scenario objective requires.

---

### **QUESTION 59:**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a database server hosting four databases in a single instance of SQL Server 2005. The Certkiller .com network SQL server has recently started exhibiting poor performance. You are considering moving the database that supports the most transactions to a different server. You are required to monitor the number of transactions per second for each database.

What should you do?

- A. A performance log must be created and monitor SQL Server: SQL Statistics object counters.
- B. A performance log must be created and monitor SQL Server: Transaction object counters.
- C. A performance log must be created and monitor SQL Server: General Statistics objects counters.
- D. A performance log must be created and monitor SQL Server: Databases object counters.

Answer: D

Explanation: In the scenario you should consider using the Transaction/sec counter of the SQL Server: Database object because the counter gives you the required data about the transactions/sec for each database.

Incorrect Answers:

A: The information you are required to retrieve can not be retrieved using this particular counters in the scenario as they are all for different purposes and have different functions. The counter reports the information about SQL compilation and batch requests.

B: The information you are required to retrieve can not be retrieved using this particular counters in the scenario as they are all for different purposes and have different functions. The counter reports the information about the transaction issued on the instance of SQL.

C: The information you are required to retrieve can not be retrieved using this particular counters in the scenario as they are all for different purposes and have different functions. The counter reports the total number of transactions for the instance of SQL Server.

---

### QUESTION 60:

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 database server named Certkiller -DB01 which you administer. You are in the process of configuring a periodic maintenance schedule. You are busy designing a maintenance plan and developing a job dependency diagram which includes decision points identifying actions to take depending on conditions detected.

The corrective action should be minimally invasive and require minimal system resources. You need to identify the maintenance job to run if a clustered index with fragmented leaf nodes is detected during database checks.

What should you do?

- A. Specify an Index rebuild.
- B. Specify a Statistics update.
- C. Specify a database consistency check.
- D. Specify an Index reorganization.

Answer: D

Explanation: In the scenario you should remember that Index reorganization is used to reorganize the stored pages for leaf nodes of a clustered index.

Incorrect Answers:

A: You should not consider having the index rebuild as this will not help you achieve your scenario objective at hand.

B: This option should not be used in the scenario because the option is used to update the distribution statistics manually.

C: This option should not be used in the scenario because the option is used to check for errors but not correct the errors detected.

---

**QUESTION 61:**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 server which you administer. You are creating a job that will perform several maintenance tasks whilst you ensure that another administrator is notified if the task fails. If the notified administrator cannot be reached you must ensure that you are paged and need to configure the notification.

What should you do?

A. An operator must be created for you and the other administrator

The job must be configured to notify first the operator than you

B. A Proxy should be created for the other administrator

An operator should be created for your account

The job steps must be configured to run under the proxy account

SQL Server Agent must be configured by enabling a fail-safe operator and adding your account

C. An operator should be created for the other administrator

A proxy must be created for your account

The job must be configured to notify the other administrator

The job steps must be configured to run using the proxy account

D. An operator should be created for you and the other administrator

The job must be configured to notify the other administrator

SQL Server Agent should be configured by enabling a fail-safe operator and adding your account

Answer: D

Explanation: In the scenario you should consider creating an operator for the other administrator and configure the notification operator using the SQL Server Agent to use your operator as the fail-safe.

Incorrect Answers:

A, B: You should not consider this configuration in the scenario because a proxy is used as a security context for executing a job outside of SQL server.

C: This should not be done in the scenario because you are unable to configure multiple operators for a single job this action is not allowed.

---

**QUESTION 62:**

You work as the database administrator at Certkiller .com. The Certkiller .com

network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 database server named Certkiller -DB01 which you administer. Certkiller -DB01 is a very busy server with several large tables that supports an e-commerce site and must be available 24 hours a day through the week. You are required to create a Maintenance Plan doing the following:

1. Check all indexes and tables for integrity
2. Check the consistency of the metadata

You have received instruction from the CIO to create a job to perform the task whilst your solution must minimize the possibility of locking issues while running the job.

What should you do?

- A. The DBCC CHECKDB command with the TABLOCK option should be run.
- B. The DBCC CHECKTABLE command with the TABLOCK option should be run.
- C. The DBCC CHECKCATALOG command should be run.
- D. The DBCC CHECKDB command should be run.

Answer: D

Explanation: In the scenario you should make use of the command used in the answer as this command will check all the information required in the scenario, this method uses a internal database snapshot instead of placing locks on the database and tables.

Incorrect Answers:

- A: This command should not be used in the scenario because this command will cause locks to be held on the database and on the tables.
- B: This command should not be run in the scenario because the command checks the consistency of tables and indexes but does not verify metadata consistency.
- C: This command should not be considered because the command will only check metadata consistency but not the indexes and tables.

---

### **QUESTION 63:**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 database server named Certkiller -DB01. Certkiller -DB01 hosts a busy Online Transaction Processing (OLTP) database. You are about to perform a monthly archive of the data in several databases. All data older than two months should be archived. You need to ensure that the database recovers the space left by the deleted records after the data is archived. You are required to ensure that data is not deleted until after it

is archived and that the database is not shrunk until after the data has been deleted using the least administrative effort.  
What should you do?

- A. Three separate jobs should be created: one to archive the data, one to delete the data and one to shrink the database which you must schedule to run an hour apart.
- B. A batch file should be created for each operation and run each operation manually.
- C. Two jobs should be created: one to archive and delete the data and one to shrink the database which you must schedule to run an hour apart.
- D. A Maintenance Plan should be created that includes all necessary steps and define precedence constraints.

Answer: D

Explanation: In the scenario you should consider creating the Maintenance Plan and configuring it to use precedence constraints as the Maintenance Plan provides an easy way to design maintenance routines.

Incorrect Answers:

- A, C: You should not create three nor should you create two separate jobs to run an hour apart as this will not ensure that the task first waits for the others to complete.
- B: This option should not be used in the scenario because you would be making too much administrative effort.

---

#### **QUESTION 64:**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 server named Certkiller -DB01 which you administer. Certkiller -DB01 hosts two databases named CKCustomerData and CKEmployeeData. You recently created several indexes for the tables and database views. All tables receive new data and are updated on a regular basis.

You are required to avoid index and table fragmentation. You also want to periodically reset the free space left in the index and table structure to help optimize performance. You must accomplish this task using the least amount of administrative effort.

What should you do?

- A. The Maintenance Plan Wizard should be used to schedule the Rebuild Index task and schedule to execute monthly.
- B. A Transact-SQL job should be created that performs the shrink Database task and schedule the task to run on a monthly basis.
- C. A Maintenance Plan should be created that executes the shrink Database task and schedule the task to run monthly.

D. The ALTER INDEX REBUILD statement should be executed on the tables once a month.

Answer: A

Explanation: In the scenario you should consider using the Maintenance Plan Wizard as this will ensure that the indexes, tables and views are automatically rebuild on a regular basis.

Incorrect Answers:

B: The Transact-SQL statement should not be considered in the scenario because the statement will only have the database size and logs shrunk to a user-defined size.

C: This task should not be considered in the scenario because the task is used to shrink the size of the database and logs to a user-defined size.

D: This option can be used to achieve the scenario objective but there is too much administrative effort involved.

---

### **QUESTION 65:**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 database server named Certkiller -DB01 which you administer. You are busy designing a daily maintenance plan. The plan should send you an e-mail by using Database Mail should any planned task fail. The maintenance plan will be required to ensure database reliability and consistency whilst having a minimal impact on user operations. You are required to identify the tasks which are appropriate to include in the plan.

What should you do? (Choose two)

- A. The Rebuild Index task should be included.
- B. The History Cleanup task should be included.
- C. The Reorganize Index task should be included.
- D. The Shrink Database task should be included.
- E. The Back Up Database task should be included.
- F. The Execute T-SQL Statement task should be included.

Answer: E, F

Explanation: In the scenario you should keep in mind that the surest way to provide reliability and consistency is to perform regular database back up and the T-SQL statement should then be used to send the e-mail message.

Incorrect Answers:

A, C: This option should not be used in the scenario as the option in the task is very resource intensive.



B: This option should not be used in the scenario as this task is used for the purpose of deleting historical data in the scenario

D: This option should not be used in the scenario as this is an option which you should seldom use in the scenario.

---

**QUESTION 66:**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains several Microsoft SQL Server 2005 servers which you administer. The servers of Certkiller .com are configured for merge replication with the Publisher/Distributor located in Chicago. You later during the course of the day discover that there is a problem that the Expense table in the Financial database receives duplicate records over time.

You are required to design a Maintenance Plan that can correct the problem whilst you remove the duplicate records. Your solution should have minimal impact on database operation and should require the least administrative effort.

What should you do?

- A. A custom maintenance task that runs a SQL Server Integration Services package to scrub the Financial.Expense table and have the task run on the Publisher/Distributor only.
- B. A custom maintenance task that runs a Transact-SQL stored procedure to scrub the Financial.Expense and have the task run on all database servers.
- C. A custom maintenance task that runs a SQL Server Integration Services package to scrub the Financial.Expense table and have the task run on all database servers.
- D. A custom maintenance task that runs a Transact-SQL stored procedure to scrub the Financial.Expense table and have the task run on the Publisher/Distributor only.

Answer: A

Explanation: In the scenario you are required to have minimal impact on database operations and making the custom maintenance task this way ensures you use the least administrative effort whilst having the least impact on database operations.

Incorrect Answers:

B, C: There is no need for the task to run on all the database servers this will take effort to setup and maintain and puts additional load on the servers.

D: You do not require making this configuration because you should have used functionality provided with the SQL Server Integration Services including fuzzy logic-based comparisons.

---

**QUESTION 67:**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All

servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 database server named Certkiller -DB01 which you administer. Certkiller -DB01 hosts a database named CK\_Data. One of the SQL administrators has created a maintenance plan that executes the task below daily:

1. A BULK INSERT job imports data at 10:00 P.M.
2. Indexes are rebuilt at 10:15 P.M.
3. A differential back up is performed at 10:45 P.M.

You have received instruction from the CIO to check the integrity of the database after the backup is complete. You decide to edit the maintenance plan to execute the DBCC CHECKDB task at 11:00 P.M. but you discover the next day the task failed. You are required to check the database integrity every night. What should you do?

- A. The length of time between the start of the differential backup and the execution of the DBCC CHECKDB task should be increased.
- B. The Indexes should be scheduled to be rebuilt after the backup but before the DBCC CHECKDB task.
- C. A separate maintenance plan should be created that executes the DBCC CHECKDB task.
- D. The DBCC CHECKDB task should be scheduled to execute at 10:30 P.M.

Answer: A

Explanation: In the scenario you should consider increasing the time when the DBCC CHECKDB task executes as the task is executing too soon after a differential backup has been scheduled that is why the task fails the next morning when you check.

Incorrect Answers:

B: There is no need to have the indexes rebuilt in the scenario that is totally irrelevant to what is required of you.

C: This option should not be used in the scenario because the problem is that the DBCC CHECKDB task is executing too soon after the differential backup.

D: This option should not be used in the scenario because this task should be run after the differential backup has completed.

---

### **QUESTION 68:**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 server which you administer. The Certkiller .com network recently deployed SQL Server Reporting Services. You imported several reports into a folder called FinanceReports. You are

required to give the members of the Finance department group the ability to manage these published reports. Members of the Sales group should be able to view the reports within the folder. You must implement the correct role-based security. What should you do? (Choose two)

- A. The Finance group should be assigned the Content Manager role
- B. The Sales group should be assigned the Browser role
- C. The Finance group should be assigned the My Reports role
- D. The Sales group should be assigned the Report Builder role
- E. The Finance group should be assigned the My Reports role
- F. The Sales group should be assigned the Publisher role

Answer: A, B

Explanation: In the scenario you should remember that you should assign the Finance group the Content Manager role and the Sales group will be allowed to browse the reports but not make any changes.

Incorrect Answers:

C, D, E, F:

In the scenario the roles in question in the options here should not be used in the scenario because these options will not help you achieve the required results.

---

#### **[QUESTION 69:](#)**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 database server named Certkiller -DB01 deployed as a domain member configured to support Windows authentication which you administer. The Certkiller .com network has extensive reporting requirements. You deploy a report server that supports the Report Server Web Service. The Report Server Windows Service and all the data sources are located on Certkiller -DB01. You are required to ensure that the SQL Server Agent is configured correctly on the report server.

What should you do?

- A. A local user should be used on the report server as the SQL Server Agent Service account.
- B. The SQL Server Agent service should be configured to require manual startup.
- C. The SQL Server Agent service should be disabled on the report server.
- D. A domain user should be used as the SQL Server Agent service account.

Answer: D

Explanation: In the scenario you should remember that a domain user account

should be used since the Certkiller -DB01 SQL server is a member of the domain and is required for connection with the database server.

Incorrect Answers:

A: This option should not be used in the scenario because the report server will be unable to connect to Certkiller -DB01 in the scenario.

B, C: These options should not be considered for use in the scenario because the service is requires in the configuration and should start automatically.

---

### **QUESTION 70:**

You work as the database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 database server named Certkiller -DB01 and a Report server named Certkiller -DB02. Both servers are members of the Active Directory domain. The Report Server Windows service is configured to use a local system account. You are required to change the Report Server Windows service account to use a domain user account with limited permissions. You want to accomplish this task using the least administrative effort. What should you do?

- A. The service account must be changed by using the Report Services Configuration tool.
- B. The service account must be changed by using the Services Control Panel utility.
- C. The service account must be changed by using the SQL Server Configuration tool.
- D. The service account must be changed by using the rs.exe.
- E. The service account must be changed by using the Surface Area Configuration tool.

Answer: A

Explanation: You should remember in the scenario that in order to change the service account used by the Reporting Service is to make use of the Reporting Services Configuration tool which ensures that the necessary changes are made.

Incorrect Answers:

B, C: These options should not be used in the scenario because the Control Panel utility can not be used to make the required changes and the SQL Server Configuration tool will not help you either.

D: This option should not be used in the scenario because it is used to run scripts and to manage the Report Services service.

E: This option could be used in the scenario but you will be unable to change the service account and that is what you are required to do.

---

### **QUESTION 71:**

You work as a database administrator for Certkiller .com. All servers on the Certkiller .com network runs Microsoft Windows Server 2003 and the database

server are configured with Microsoft SQL Server 2005. Although Certkiller .com is a book distributor that operates from twenty different locations, its network consists of a single Active Directory domain named Certkiller .com. Each of these locations tracks new accounts in a Microsoft Excel spreadsheet. Agents are assigned to a specific office and only operate in that office. Agents are responsible for sales of Certkiller .com merchandise to book stores world wide.

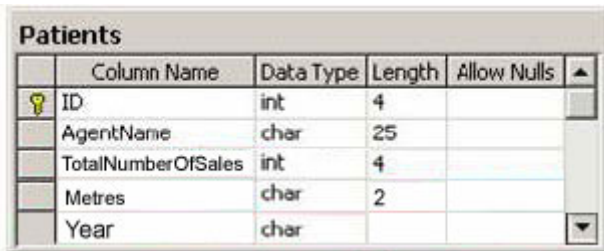
Following are the column in use an Excel Spreadsheet.

1. Agent name
2. Publisher name
3. Bookstore name
4. Date

You work from the Certkiller .com head office where the database server is located.

You were instructed to perform a monthly import of data from the Excel Spreadsheets into the table that is illustrated in the exhibit.

Exhibit:



The screenshot shows a table named 'Patients' in a SQL Server database. The table has five columns: ID, AgentName, TotalNumberOfSales, Metres, and Year. The data types and lengths are as follows:

Column Name	Data Type	Length	Allow Nulls
ID	int	4	
AgentName	char	25	
TotalNumberOfSales	int	4	
Metres	char	2	
Year	char		

You decided to make use of a SQL Server Integration Services (SSIS) package. Now you need to identify the transformations that you intend to use for the monthly import of data.

What should you do?

- A. Use a Conditional Split transformation and an Aggregate transformation.
- B. Use a Derived Column transformation and a Data Conversion transformation.
- C. Use a Derived Column transformation and an Aggregate transformation.
- D. Use a Derived Column transformation and a Row Count transformation.

Answer: C

Explanation: A Derived Column transformation allows one to apply an expression to the data in a field. In this scenario you can use the DatePart function to extract the month end and year. Thus you should use the Derived Column transformation to populate the Year and Month Column.

Further you could also make use of the Aggregate transformation to populate the Total number of Sales column. This transformation will allow you to apply an aggregate function to a column. Use this transformation, in conjunction with the Count function to get the number of sales per agent.

Incorrect answers:

A: The latter part of the option is correct, but you cannot use a Conditional Split transformation because it is used to add data to different fields depending on its value. This is not feasible in this scenario.

B: The first part of this option is correct, but you cannot use a Data Conversion

transformation because it will only convert the data type. You cannot use it to extract a part of the date or to perform an aggregate calculation.

D: This option is partly correct, however, you cannot use a Row Count transformation because it is used to count the total number of rows, it does not count the number of rows in a group.

---

### QUESTION 72:

You work as a database administrator for Certkiller .com which operates as a book distributor. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. There are several databases. These databases are located on a server that is configured with Microsoft SQL Server 2005. This server is named Certkiller -DB01.

Certkiller -DB01 contains an Integration Services package. This package queries multiple databases and then writes the results to a text file. You normally make use of a Microsoft Windows batch file to run this package. The Microsoft Windows batch file makes use of the dtexec utility to execute the package.

You need to ensure that the connection properties like login names and passwords for this package are secure. No users, besides you, must be able to read or modify the connection properties because this package is the only one that should be safeguarded against disclosure. Furthermore you want to ensure that you are the only one able to open the package.

What should you do?

- A. The protection level should be set to Rely on server storage for encryption.
- B. The protection level should be set to Encrypt sensitive with password.
- C. The protection level should be set to Encrypt all with password.
- D. The protection level should be set to Encrypt all with a user key.

Answer: B

Explanation: When one makes use of the Encrypt sensitive with password protection level it will encrypt all the sensitive information within the package using a password. And to be able to open the packages, the user must have the correct password.

Incorrect answers:

A : The Rely on server storage for encryption protection level will result in the whole package being secured with the use of database roles. This option will not achieve the desired results because only certain information has to be secured.

C: The Encrypt all with password protection level will result in the entire package to be encrypted with a password. In the question it is stated pertinently that only specific information in the package should be protected.

D: The Encrypt all with user key will result in the encryption of the entire package by using a key based on the user's profile. The scenario states clearly that only specific information within the package should be safeguarded.



**QUESTION 73:**

You work as a database administrator for Certkiller .com. Certkiller .com is a book distributor and its network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Microsoft Windows Server 2003 and the database server runs Microsoft SQL Server 2005. Your job description at Certkiller .com includes the administration of the database server named Certkiller -DB01.

Certkiller -DB01 is configured with Microsoft SQL Server Integration Services (SSIS). You are currently busy configuring a package that must perform a number of tasks. There are some requirements that you need to keep in mind with the configuration of this package. These are:

1. Ensure that a task is not rerun if it succeeds.
2. Ensure that a task is not rerun after it fails.
3. Ensure that the package rerun all tasks in the case of a non-existent checkpoint.

You need to meet all these requirements.

What should you do?

- A. Set the CheckpointUsage property to IfExists on the package.  
Set the FailPackageOnFailure property to True on the container that should not be rerun.  
Set the SaveCheckpoints property to True on the package.
- B. Set the CheckpointUsage property to IfExists on the package.  
Set the FailPackageOnFailure property to False on the container that should not be rerun.  
Set the SaveCheckpoints property to True on the package.
- C. Set the CheckpointUsage property to Always on the package.  
Set the FailPackageOnFailure property to True on the container that should not be rerun.  
Set the SaveCheckpoints property to False on the package.
- D. Set the CheckpointUsage property to Never on the package.  
Set the FailPackageOnFailure property to True on the container that should not be rerun.  
Set the SaveCheckpoints property to True on the package.

Answer: A

Explanation: In this scenario you should set the CheckpointUsage property to IfExists on the package to result in a checkpoint file to be used if it exists and the package to be restarted and all tasks run if it does not exist. You should also set the FailPackageOnFailure property to True on the container that should act as a checkpoint and therefore, not be rerun. Further you must also set the SaveCheckpoints property to True on the package to cause a checkpoint to be created.

Incorrect answers:

B: This option is partly correct. However, you should not set the FailPackageOnFailure property to False because it will result in the container's tasks to be rerun when the package is restarted because no checkpoint will be saved.

C: Only one part of this option is correct. The CheckpointUsage property should not be set to Always on the package because it will result in the prevention of the package from

restarting if a checkpoint does not exist.

And the SaveCheckpoints property should not be set to False on the package because it will prevent checkpoints from being saved.

D: The part that states set CheckpointUsage to Never on the package is incorrect. The Never setting will prevent the checkpoint from being used and all tasks will be rerun.

---

**QUESTION 74:**

You work as a database administrator for Certkiller .com. Certkiller .com is a book distributor and its network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Microsoft Windows Server 2003 and the database server runs Microsoft SQL Server 2005. Your job description at Certkiller .com includes the administration of the database server named Certkiller -DB01.

Certkiller -DB01 is configured with Microsoft SQL Server Integration Services (SSIS). You are currently busy configuring a package that is destined to perform a number of tasks. There are some requirements that you need to keep in mind with the configuration of this package. These are:

1. You must be able to view completed tasks.
2. You must be able to view tasks that fail.
3. In the case of a problem, you must be able to set breakpoints.

You need to adhere to one of the Certkiller .com policies that states that all packages should be tested before deployment to the production server. To this end you want to test the package to ensure that it runs successfully before deploying it to the production server.

What should you do?

- A. You need to use the dtutil utility.
- B. You need to use the dtexec utility.
- C. You need to use the Execute Package Utility.
- D. You need to use the SSIS Designer.

Answer: D

Explanation: The SSIS Designer allows one to set breakpoints. It is a fully functional design and debugging tool that is used for creating SSIS packages.

Incorrect answers:

A: You cannot run a package in dtutil because this utility allows you to copy, move, and delete packages, and even verifying that a package does exist; not to run the package.

B: One cannot run a package in dtexec using breakpoints. The dtexec utility is a command that is used to execute packages. While it does allow one to interface with a logging provider to obtain some information about success and failure, but it does not make allowance for you to set breakpoints.

C: One cannot set breakpoints when one runs a package in the Execute Package Utility. This is a command that is used to execute packages, it does allow one to interface with a

logging provider to obtain some information about success and failure, but it does not make allowance for you to set breakpoints.

---

**QUESTION 75:**

You work as a database developer for Certkiller .com. Certkiller .com is a book distributor and its network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Microsoft Windows Server 2003 and the database server runs Microsoft SQL Server 2005. Your job description at Certkiller .com includes the development of databases and the administration of the database server named Certkiller -DB01.

Certkiller -DB01 is configured with Microsoft SQL Server Integration Services (SSIS). You just completed creating a new Integration Services package with default settings. This particular package is stored as a local package on the Certkiller -DB01. The package will be used to export data from an online transaction processing (OLTP) database system to the local database on Certkiller -DB01. Certkiller .com makes use of Microsoft Operations Manager (MOM) to monitor all servers.

There is a requirement that should be met. This requirement is that you need the ability to set up alerts by using MOM in the event of a package execution failing. You now need to decide on the appropriate type of SSIS log provider to meet this requirement.

What should you do?

- A. Use the SQL Profiler Log Provider.
- B. Use the SQL Server Log Provider
- C. Use the Windows Event Log Provider
- D. Use the XML Log File Provider.
- E. Use the Text File Log Provider.

Answer: C

Explanation: The Windows Event Log Provider logs entries into the Application log. This will allow one to make use of MOM to create alerts and set up actions based on the log entries from the packages. This is the only log provider that can be used in conjunction with MOM.

Incorrect answers:

A: The SQL Profiler Log Provider is used to create logs that can be opened using SQL Server Profiler. This can be combined with the logs of system monitor to analyze the effect of package execution on the server. However, you cannot use it with MOM.

B: The SQL Server Log Provider captures and stores package data in a database table called the sysdtslog90. This would work if you want to store information in a central location.

D: The XML Log File Provider logs entries to an XML file and unfortunately cannot be used in conjunction with MOM.

E: The Text File Log Provider logs entries to an ASCII text file using a comma-separated value (csv) format. But it cannot be used in conjunction with MOM.

---

**QUESTION 76:**

You work as a database developer for Certkiller .com. Certkiller .com is a book distributor and its network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Microsoft Windows Server 2003 and the database server runs Microsoft SQL Server 2005. Your job description at Certkiller .com includes the development of databases and the administration of the database server named Certkiller -DB01.

Certkiller -DB01 is configured with Microsoft SQL Server Integration Services (SSIS). You just completed creating a new Integration Services package with default settings. This particular package is stored as a local package on the Certkiller -DB01. The package will be used to export data from an online transaction processing (OLTP) database system to the local database on Certkiller -DB01. There is a new Certkiller .com directive that states that all information is to be stored in a central location.

You now need to decide on the appropriate type of SSIS log provider to comply with the new Certkiller .com directive.

What should you do?

- A. Use the Windows Event Log Provider
- B. Use the SQL Profiler Log Provider.
- C. Use the SQL Server Log Provider
- D. Use the XML Log File Provider.
- E. Use the Text File Log Provider.

Answer: C

Explanation: The SQL Server Log Provider captures and stored package data in a database table called the sysdtslog90. This would work if you want to store information in a central location.

Incorrect answers:

A: The Windows Event Log Provider logs entries into the Application log. This will allow one to make use of MOM to create alerts and set up actions based on the log entries from the packages. This is the only log provider that can be used in conjunction with MOM.

B: The SQL Profiler Log Provider is used to create logs that can be opened using SQL Server Profiler. This can be combined with the logs of system monitor to analyze the effect of package execution on the server. However, you cannot use it with MOM.

D: The XML Log File Provider logs entries to an XML file and unfortunately cannot be used in conjunction with MOM.

E: The Text File Log Provider logs entries to an ASCII text file using a comma-separated value (csv) format. But it cannot be used in conjunction with MOM.

---

**QUESTION 77:**

You work as a database administrator for Certkiller .com. Certkiller .com is a book distributor and its network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Microsoft Windows Server 2003 and the database servers run Microsoft SQL Server 2005. Your job description at Certkiller .com includes the administration of the database server named Certkiller -DB01.

Certkiller -DB01 is configured with Microsoft SQL Server Integration Services (SSIS). You are currently busy configuring a package that must perform a number of tasks. The package is stored in the msdb database. You now need to copy the package from the msdb database to the SSIS Package Store and thus need to decide on the appropriate tool.

What should you do?

- A. Make use of the SQL Server Management Studio.
- B. Make use of the dtutil utility.
- C. Make use of the dtexec utility.
- D. Make use of the Data Transformation Services.

Answer: B

Explanation: You should use dtutil because this utility allows you to copy, move, and delete packages, and even verifying that a package does exist.

Incorrect answers:

A: The SSMS is the primary management tool for SQL Server 2005, but you cannot use it to move SSIS packages.

C: One cannot copy a package using dtexec. The dtexec utility is a command that is used to execute packages. While it does allow one to interface with a logging provider to obtain some information about success and failure, but it does not make allowance for copying or tuning a workload.

D: The Data Transformation Services (DTS) component is use in SQL server 2000. It was replaced by SSIS. There is limited support for existing DTS packages imported during an upgrade to SQL server 2005. And you also cannot make use of Data Transformation Services to create or manage packages.

---

**QUESTION 78:**

You work as a Microsoft SQL developer for Certkiller .com. Certkiller .com is a book distributor and its network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Microsoft Windows Server 2003 and the database servers run Microsoft SQL Server 2005. Your job description at Certkiller .com includes the administration of the database server named Certkiller -DB01.

You received instruction to create a SQL Server Integration Services (SSIS) package. This package is destined to transform data in an XML file. This XML file

is stored on a separate file server named Certkiller -FS01. There are a number of requirements that should be met when creating this package. These are:

1. You should ensure that the package will write this data to the SQL server named Certkiller -DB01.
  2. This package should execute on the Certkiller -FS01, and not on Certkiller -DB01.
  3. A network administrator should have control over when the job executes. The network administrator is not a SQL Server user.
- You need to configure the job for periodic execution.  
What should you do?

- A. A Windows job that makes use of the dtexecui command should be created.
- B. A Windows job that makes use of the dtexec command should be created.
- C. A SQL Server Agent job that makes use of the dtexec command must be created.
- D. A SQL Server Agent job that makes use of the dtexecui command must be created.

Answer: B

Explanation: The dtexec command is used to execute an SSIS job from an operating system command line. This will allow one to run the job on a file server that is not running SQL Server. And furthermore because you create the job as a Windows job, you can allow a network administrator to control the job schedule.

Incorrect answers:

- A: The dtexecui command opens a graphic interface and is used for interactive job execution. The non-SQL server network administrator will then not be catered for.
- C: You should not use SQL Server Agent job to execute the package. If you want the job to run on Certkiller -FS01 and not on Certkiller -DB01, and that a non-SQL Server administrator must have control over the scheduling of the job, then this option is way out of line.
- D: Making use of the SQL Server Agent job to execute the job, regardless of which command is used, will not cater for a non-SQL Server administrator.

---

#### **QUESTION 79:**

You work as a database administrator for Certkiller .com. Certkiller .com is a book distributor and its network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Microsoft Windows Server 2003 and the database servers run Microsoft SQL Server 2005. Your job description at Certkiller .com includes the administration of the database servers named Certkiller -DB01 and Certkiller -DB02 respectively. Certkiller -DB01 is on the internal network and Certkiller -DB02 is on the perimeter network. Both these servers are configured to make use of transactional replication with immediate -updating subscribers to replicate the BookTitle table and the InStock table of the Inventory database. You have a suspicion that the replicas are non-convergent. Now you need to check which of the rows are different.  
What should you do?



- A. You should run sp\_publication\_validation utility.
- B. You need to run tablediff utility.
- C. You need to enable the replication: Subscriber has failed data validation alert.
- D. You need to enable the Validate Subscriptions option on the publication.

Answer: B

Explanation: Running the Tablediff utility will allow you to determine which of the rows are not convergent. This command will return detailed information regarding the non-convergent rows and it can also be used to make the tables convergent.

Incorrect answers:

A: Running the sp\_publication\_validation command will not yield the proper information for this scenario. The sp\_publication\_validation system stored procedure only returns whether validation failed or succeeded. It will not return the rows that failed for validation.

C: The Replication: Subscriber has failed data validation alert will notify an operator is validation fails, but it does not report which rows failed the validation.

D: If you enable the Validate Subscriptions option on the publication then you will cause validation to occur when the next synchronization takes place. In this case only a success or failure will be reported and not information about which rows failed the validation.

Thus this option is not helpful in this scenario,


---

### QUESTION 80:

You work as a database administrator for Certkiller .com. Certkiller .com is a book distributor and its network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Microsoft Windows Server 2003 and the database servers run Microsoft SQL Server 2005. You have been assigned as the database administrator of the Certkiller .com online-book sales department. Your job description at Certkiller .com includes the administration of the database server named Certkiller -DB01. Certkiller -DB01 runs both Microsoft SQL Server 2005 and Microsoft Windows Server 2003.

The Inventory database has a table named Books. The exhibit below illustrates the table schema:

Exhibit:

Books	
	BookID
	Author ID
	It s
	PublisherID
	Genre
	Price

At some stage it was discovered that Certkiller -DB01 fell victim to hackers and the book prices have been changed in this hacking episode. Fortunately for Certkiller .com the shipping department picked up the price discrepancy early. Due

to this hacking episode, a new Certkiller .com directive was issued. This directive states that any unauthorized price changes should be caught within the hour. You thus need to comply with this new directive.

To this end you need to create a job that must be scheduled to run every hour and notify the operator in case any discrepancy appears in the Price Column of the Books table.

What should you do?

- A. CHECKPOINT should be executed.
- B. COLUMNS\_UPDATED should be executed.
- C. A SELECT statement should be executed with the CHECKSUM\_AGG function.
- D. BACKUP should be executed with the CHECKSUM option.

Answer: C

Explanation: The CHECKSUM\_AGG function is used to calculate the checksum of a specific column. In the event of the checksum of the column being different than the known checksum, you will know that at least one price has changed. In this scenario you should thus execute a SELECT statement with the CHECKSUM\_AGG function and compare it to the known CHECKSUM value for the Price column.

Incorrect answers:

A: Executing CHECKPOINT will cause all dirty pages in the cache to be written to disk it is thus not used to validate data which is required in this scenario.

B: The COLUMNS\_UPDATED function will allow you to check if one or more of the first eight rows has changed, but unfortunately it can only be called with a trigger.

D: If you execute BACKUP with the CHECKSUM option then you will validate the integrity of the backup, but it will not allow you to determine whether data in a column has been changed.

---

## **QUESTION 81:**

### **DRAG DROP**

You work as a database administrator for Certkiller .com. Certkiller .com is a book distributor and its network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Microsoft Windows Server 2003 and the database servers run Microsoft SQL Server 2005. You have been assigned as the database administrator of the Certkiller .com online-book sales department. Your job description at Certkiller .com includes the administration of the database server named Certkiller -DB01. Certkiller -DB01 runs both Microsoft SQL Server 2005 and Microsoft Windows Server 2003.

The Certkiller .com database has a BookTitles table and a BookReviews table. Reviews for the books are obtained from fifty different sources. Since there are so many sources providing the book reviews, it stands to reason that these reviews come in different formats. These formats are Microsoft Excel spreadsheets and Extensible Markup Language (XML) files. Very often the book titles are not always identical across all book reviews; however, there is always a column or element in

the file that contains the product name.

You have received instruction to create a SQL Server Integration Services (SSIS) package that must import the book reviews into the BookReviews table. You need to ensure that each book title matches a book in the BookTitles table. To this end you need to identify the transformations that you need to use to determine the book title.

In your solution you need to provide the best possible performance.

What should you do? (To answer, choose the correct options in the pane on the left and place them in the correct order of execution in the pane on the right.)

Transformations, select from these	Transformations, place here
Fuzzy Look Up	Place first transformation here.
Fuzzy Grouping	Place second transformation here, if any.
Lookup	Place third transformation here, if any.
Term Extraction	Place fourth transformation here, if any.

Answer:

Transformations, select from these	Transformations, place here
	Lookup
Fuzzy Grouping	Fuzzy Lookup
	Place third transformation here, if any.
Term Extraction	Place fourth transformation here, if any.

Explanation:

A Lookup will match a reference table to find an exact match and does not consume as much resources as a fuzzy lookup. In the event of lookup not finding a match then you should perform a Fuzzy Lookup to look for a near match. You should first use Lookup and then Fuzzy Lookup in this scenario.

Incorrect answers:

Performing Fuzzy Grouping would be superfluous because Fuzzy Grouping is used when data contain non-exact duplicate values, but there is no reference to use for a lookup. A Fuzzy Grouping is furthermore resource intensive and will not guarantee that the book title matches an existing one, only the names in the source file map are considered the same as the book name.

With Term Extraction the product name is contained in a field or element by itself. A term extraction is used when you need to extract a word from a block of text. It is not appropriate in this scenario.

---

## QUESTION 82:

You work as a database administrator for Certkiller .com. Certkiller .com is a book distributor and its network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Microsoft Windows Server 2003 and the database servers run Microsoft SQL Server 2005. However,

there are some standalone departmental servers that use different database applications or no database at all.

A new Certkiller .com management directive states that all customer and contact information of these customers that are stored on departmental records should be consolidated and stored in the data warehouse. Whenever possible, duplicate customers should be identified and consolidated. You received instruction to carry out the new company directive.

The data sources include older versions of Microsoft SQL Server, Microsoft Access databases as well as Excel spreadsheets. This makes for quite a diverse group of data sources that will be involved in the consolidation process. To this end you plan to use SQL Server Integration Services (SSIS) to complete the data imports. You thus need to identify the most efficient way to clean, transform and combine the data sources. You now need to take a decision as to which action you can take to carry out this task with the least amount of administrative effort.

What should you do?

- A. In the SSIS designer create a SSIS package that writes all questionable or potentially duplicate records to a separate table for manual resolution.
- B. In the SSIS designer create a SSIS package that uses fuzzy lookup operations and fuzzy grouping transformations to clean and transform records.
- C. In the SSIS designer create a SSIS package that uses fuzzy grouping transformations to clean and transform records.
- D. In the SQL Server Import and Export Wizard create separate SSIS package for each source to import the records from each of the sources.

Answer: B

Explanation: Fuzzy Lookup operations can be used to clean data and it performs tasks like standardizing data, correcting data as well as provides missing values. You thus have control over how exhaustive SQL Server should be in a lookup operation. Fuzzy grouping transformations allow you to identify the duplicate data so it can be handled appropriately. This option represents the least administrative effort to complete the job.

Incorrect answers:

A: The question states pertinently that you need to do this task with the least amount of administrative effort. Although this option will also work, it does not represent the solution with the least amount of administrative effort.

C: You cannot use a solution that relies entirely on fuzzy groupings alone to clean and transform records. This would be incomplete because you need to clean, transform and manage duplicate records.

D: The Import and Export Wizard does not support the required level of functionality to complete the operation.

---

### **QUESTION 83:**

You work as a database administrator for Certkiller .com. Certkiller .com is a book distributor that has many offices all around the country. All servers on the

Certkiller .com network run Microsoft Windows Server 2003 and the database servers run Microsoft SQL Server 2005. There are database servers at each location and the head office (where you are located) has a database server named Certkiller -DB01. Your job description at Certkiller .com includes the administration of the database server named Certkiller -DB01.

You use transactional replication with queued updating subscribers to synchronize data between offices. Following are the publications that are defined at Certkiller -DB01.

1. CustomerData
2. CustomerStatusData

All the offices on the Certkiller .com network subscribes to both publications.

Certkiller .com customers are also allowed to borrow books as in a public library. As part of the Certkiller .com Customer Care services, customers are allowed to change their personal data. This data includes address changes, telephone number changes, etc. These changes can be done at any of the Certkiller .com offices or by contacting the Certkiller .com head office. Changes that are made at the country-wide offices should override any change made at the head office. Customer status is noted at the country-wide offices, but can be overridden by changes made at the head office.

There are also the cases where a certain customer might have a good status record at one of the country-wide offices and perhaps neglected to return books in a timely manner at another office. The head office must be able to reconcile differences and update the customer status. To this end you should configure a conflict resolver for each publication. You now need to take a decision as to which action you can take to carry out this task to ensure that you provide optimal performance.

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

- A. Select the Publisher wins conflict resolver setting on the CustomerStatusData publication.
- B. Select the Publisher wins conflict resolver setting on the CustomerData publication.
- C. Select the Subscriber wins conflict resolver setting on the CustomerStatusData publication.
- D. Select the Subscriber wins conflict resolver setting on the CustomerData publication.
- E. Select the Subscriber is reinitialized conflict resolver setting on the CustomerStatusData publication.
- F. Select the Subscriber is reinitialized conflict resolver setting on the CustomerData publication.

Answer: A, D

Explanation: The Customer data changes made at each of the country-wide stored should override those made at the head office. Thus you should configure the CustomerData publication so that the subscriber wins.

Further customer data made at the head office should override changes that are made at each subscriber.

Incorrect answers:

B, C: These options will necessitate that you use strict transactional consistency at the subscriber. This is not the case in this scenario.

E, F: The Subscriber is reinitialized setting will impact on performance because it requires that a snapshot be reapplied at the subscriber. Also any updates in the queue after the conflicting update is discarded when using this setting.

---

**QUESTION 84:**

You work as a database administrator for Certkiller .com. Certkiller .com is an online training provider and its network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Microsoft Windows Server 2003 and the database servers run Microsoft SQL Server 2005. Your job description at Certkiller .com includes the administration of the database server named Certkiller -DB01.

Each student is provided with a unique student ID value. This value is used in the Students, StudentAddress, StudentAccounts, and StudentCourse tables.

1. This value is used as the primary key in the Students and StudentAddress tables.
2. A separate account number table is used as the primary key in the StudentAccounts table.
3. The column named StudentID is used in each table.
4. The account number column in StudentAccounts is named StAcct.

The StudentAccounts table was added to the database only recently. Account information is being added manually. There must be a one-to-one relationship between the Students and StudentAccounts tables. In the StudentAccounts table, each student ID should be used and each ID must appear only once in the table.

You need to ensure that these requirements are met so as to avoid potential conflicts in the tables. You now need to take a decision as to which action you can take to carry out this task with the least amount of processing overhead.

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

- A. Modify the StudentAccounts primary key to include both StudentID and StAcct as key columns.
- B. In both tables, create a foreign key in StudentAccounts that references the Students table using the StudentID as the key column.
- C. In Students, create a stored procedure to enter student accounts that verify the StudentID value and verify that the value does not already exist in StudentAccounts.
- D. In the StudentAccounts table, create a unique constraint with the StudentID as the key column.
- E. Add an additional table to manage the relationship between Students and StudentID with three columns; the StudentID from Students, the StudentID from StudentAccounts, and StAcct from StudentAccounts.

Answer: B, D

Explanation: You will need to create a unique constraint in the StudentAccounts table



with StudentID as the key column. And you should use the foreign key constraint to ensure that the StudentID value in StudentAccounts exists in Students. This unique constraint will ensure that each StudentID value in StudentAccounts is unique.

Incorrect answers:

A: Modifying the StudentAccounts primary key to include both StudentID and StAcct as key columns will not meet the requirements. With this option you can have duplicate StudentID values, as long as each is associated with a different StAcct value.

C: Creating a stored procedure in Students to enter student accounts that verify the StudentID value and verify that the value does not already exist in StudentAccounts will meet the stated requirements, but this solution has a higher processing overhead than using a foreign key and unique constraints.

E: Adding an additional table to manage the relationship between Students and StudentID with three columns; the StudentID from Students, the StudentID from StudentAccounts, and StAcct from StudentAccounts; does nothing to meet her requirements and just adds unnecessary overhead to the database. You would use this type of solution if you need to support a many-to-many relationship.

---

### **QUESTION 85:**

You work as a Microsoft SQL developer for Certkiller .com. Certkiller .com is a book distributor. All servers on the Certkiller .com network run Microsoft Windows Server 2003 and the database servers run Microsoft SQL Server 2005. Your job description at Certkiller .com includes the administration of the database server named Certkiller -DB01.

You are in the process of developing a database for Certkiller .com. The database has two tables named EmployeeData and ShippingData respectively. All the Certkiller .com employees' data is contained in the EmployeeData table. In this table there is a column named Salary. The normal salary range that a Certkiller .com employee can earn ranges from \$35,000 to \$110,000. You need to limit users from entering any values in this column that are outside the normal salary range. You now need to take a decision as to which action you can take to carry out this task with the least amount of administrative effort.

What should you do?

- A. A UNIQUE constraint should be created.
- B. A CHECK constraint should be created.
- C. A FOREIGN KEY constraint should be created.
- D. A PRIMARY KEY constraint should be created.

Answer: B

Explanation: A CHECK constraint is used to enforce domain integrity. It specifically limits the datatype, format, and range of values that can be entered into a column. By creating a CHECK constraint, you can prevent users from entering any salaries that do not fall in the normal salary range.

Incorrect answers:

A: A UNIQUE constraint is used to enforce uniqueness of values in a set of columns. This is also used to enforce entity integrity and as the referenced key in a foreign key relationship. This will prevent users from entering other values.

C: A FOREIGN KEY constraint is used to establish and enforce links between data in two tables. A foreign key in one table points to a column that has a primary key constraint or a unique constraint in another table. The foreign key constraint prevents the link between the tables from being destroyed, but it does not prevent users from entering other values.

D: A PRIMARY KEY constraint is a unique identifier for a row within a database table. This is used to enforce entity integrity, but will not prevent users from entering any other values.

---

**QUESTION 86:**

You work as a database administrator for Certkiller .com. Certkiller .com is a book distributor. All servers on the Certkiller .com network run Microsoft Windows Server 2003 and the database servers run Microsoft SQL Server 2005. Your job description at Certkiller .com includes the administration of the database server named Certkiller -DB01.

Certkiller -DB01 currently hosts a database named Genres. The plan is to have each genre have its own database. Most genres require a weight data whether they are fiction, non fiction, or subject-specific books. The company wants to standardize the precision and scale for the weight data across all projects.

You need to ensure that all the Certkiller .com requirements regarding weight data are met for the new database and for all existing databases.

What should you do?

- A. A Common Language Runtime (CLR) user defined function should be created and used in a trigger associated with each column that contains a weight.
- B. A Weight alias should be created in the Genre database. A Weight alias should be created in the model database.
- C. A Weight alias should be created in the master database.
- D. A Weight Common language Runtime (CLR) user defined type in the Genre database.

Answer: B

Explanation: An alias is a user-defined type based on a single system data type. It is the most appropriate choice when you need to specify the precision, scale, or nullability for a data type. By creating it in a model database, you make it available for all the future databases. However, you will also need to create it in the Genre database to make it available there.

Incorrect answers:

A: A CLR user-defined type should be used when you need to create a multi-valued data type, a data type that includes programmatic logic, or a datatype that must perform internationalization. It should not be used to set a specific scale or precision. Furthermore, you also should not modify the Genre database directly.

C: A CLR user-defined function should be used to perform an action not well-suited to Transact-SQL. It should not be used to limit the scale or precision of a data type.

D: If you create a Weight alias in the master database you will make it available to the master database, but not to any user databases. You should usually not make modifications directly to the master database. This is not recommended practice.

---

**QUESTION 87:**

You work as the network SQL developer at Certkiller .com. All servers on the Certkiller .com network run Microsoft Windows Server 2003 and the database servers run Microsoft SQL Server 2005. The Certkiller .com network contains two servers which hosts the FinancialData database. The second server runs Oracle Relational Database Management System (RDBMS) and hosts the Certkiller Inventory database. The Inventory database is updated frequently by members of the Finance department.

The Certkiller .com network users in the Marketing department need to be able to create daily reports that combine information from both the FinancialData and Certkiller Inventory databases to be run hourly. You have received instruction from the CIO to have your solution minimize the effort required for the database developers to run ad hoc queries no data on both SQL servers to test development requirements.

The Certkiller .com network users are required to create reports on the SQL server and you want to minimize the disk space used on the SQL Server whilst using the least administrative effort.

What should you do?

- A. Replication must be configured between the servers and replicate the data from the Oracle to the SQL server
- B. A job must be created that performs the restore function and back up the Oracle server logged changes and restore the database changes from the Oracle to the SQL server every hour
- C. A SQL Server Integration Services (SSIS) should be created to import the data from the Oracle server and schedule the package to be delivered every hour
- D. The Oracle server should be configured as a linked server and join the information in the databases using a view

Answer: D

Explanation: You should consider configuring the Oracle server as a linked server because when you create a linked server queries can be executed against heterogeneous data across different servers. This is when you should create the view that joins the required data in the two databases.

Incorrect Answers:

A: There is no need for you to configure replication in the scenario because this will consume more disk space and you are also required to gain some disk space after the process.

B: There is no need for you to configure SSIS in the scenario because this will not help you gain some additional disk space instead you will be consuming more on the SQL server.

C: This solution should not be used in the scenario because the solution is inefficient and will consume more disk space on the SQL server.

---

### **QUESTION 88:**

You work as the network database administrator at Certkiller .com. All servers on the Certkiller .com network run Microsoft Windows Server 2003 and the database servers run Microsoft SQL Server 2005. The Certkiller .com network has its headquarters in Chicago and a branch office in Miami.

The Certkiller .com network contains two database servers named Certkiller -SR01 in the main office and Certkiller -SR02 in the branch office. The connection used to link the offices is sometimes slow. During the course of the day you decided to configure Certkiller -SR02 as a linked server on Certkiller -SR01. The linked server uses the SQL Native Client (SQLNCLI) OLE DB provider and the network users access Certkiller -SR02 through stored procedures created on Certkiller -SR01.

The Certkiller .com network users started reporting that the connection often times out. You have received instruction from the CIO to change the connection timeout for the linked server and the changes should not affect connections to other remote servers.

What should you do?

- A. You should execute sp\_serveroption
- B. You should execute sp\_linkedservers
- C. You should configure the SQLNCLI OLE DB provider
- D. You should execute sp\_configure

Answer: A

Explanation: You should execute the sp\_serveroption in the scenario because the sp\_serveroption system stored procedure allows you to change a number of settings related to the linked server.

Incorrect Answers:

B: This option cannot be used for the purpose intended in the scenario because the procedure allows you to retrieve information about the linked servers.

C: It is impossible to configure connection timeout on the OLE DB provider you are capable of configuring things like whether the provider supports LIKEB queries.

D: This setting could be used in the scenario but you would be making modifications to all the remote connections which are not required.

---

### **QUESTION 89:**

You work as the network SQL developer at Certkiller .com. All servers on the

Certkiller .com network run Microsoft Windows Server 2003 and the database server runs Microsoft SQL Server 2005.

You are currently busy configuring the CertK ign.com database server named Certkiller -DB01. You will be required to perform distributed queries against a database that is stored on a SQL server named Certkiller -SR02 which hosts four databases each using a different collation.

You have received instruction from the CIO to add Certkiller -SR02 as a linked server on Certkiller -SR01 and you need to make sure the distributed queries are evaluated correctly using the least amount of administrative effort.

What should you do? (Choose two)

- A. You should set the Use Remote Collation option to True
- B. You should not specify a collation name
- C. You should use OPENROWSET to retrieve data from Certkiller -SR02
- D. You should specify a collation name
- E. You should set the Use Remote Collation option to False

Answer: A, B

Explanation: In the scenario you should consider setting the Use Remote Collation option to True because Certkiller -SR02 uses multiple collations. You should additionally not use a collation name. The settings in the option are configured using the sp\_serveroption Transact-SQL statement.

Incorrect Answers:

C: This option should not be considered in the scenario as it is usually used to retrieve data from non-linked servers and should not be used.

D: There is no need to specify a collation name because this is only required for data sources other than SQL Server.

E: This option should not be used in the scenario because this will force the server to use the default collation for distributed queries.

---

### **QUESTION 90:**

You work as the network database administrator at Certkiller .com. All servers on the Certkiller .com network run Microsoft Windows Server 2003 and the database server runs Microsoft SQL Server 2005.

The two Certkiller .com database servers named Certkiller -SR01 and Certkiller -SR02 respectively are administered by you. The network SQL Servers are configured to support Windows authentication and are both domain members configured to use the same domain account as the service account.

A stored procedure on Certkiller -SR01 requires to access data stored on Certkiller -SR02 and you want to use self-mapping to allow the user to be authenticated on Certkiller -SR02.

What should you do? (Choose all that apply)

- A. A login mapping should be added for each Windows account on Certkiller -SR01

- B. Cross-database ownership chaining should be enabled
- C. A linked server should be created on Certkiller -SR02
- D. Self-mapping should be enabled
- E. A linked server should be configured on Certkiller -SR01
- F. The domain account used as a service account must be configured to be trusted for delegation

Answer: D, E, F

Explanation: In the scenario by configuring the domain account this way you ensure access to the linked server on behalf of the user logging in. The Self-mapping option can be enabled through the linked server properties.

Incorrect Answers:

- A: There is no need to have this configured in the scenario because self-mapping does not require specific login mappings.
- B: This option should not be used in the scenario because the cross-database ownership chaining causes permissions across databases to be respected.
- C: There is no need for the linked server to be created on Certkiller -SR02 as a stored procedure on Certkiller -SR01 requires access to data in a database on Certkiller -SR02.

---

### **QUESTION 91:**

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. The Certkiller .com network has its headquarters in Chicago and branch offices in Miami and Dallas. The Certkiller .com network uses a database called Billventory.

The network branch offices are connected to the main office via a high speed Wide Area Network (WAN) connection. The Certkiller .com network contains a Microsoft SQL Server 2005 server in each branch office. The changes on each database in the branch offices should be replicated to the database in the main office and all the tables used in replication have a unique primary key.

During the course of the day you implement transactional replication between the SQL servers in the branch offices and the main office. You are required to be notified when the amount of time for a transaction to be committed as the publisher and committed at the Subscriber exceeds a timeout specified in the design document that has been provided.

What should you do? (Choose two)

- A. A replication alert must be configured to generate an e-mail message
- B. A warning should be enabled on the Publisher and specify the appropriate latency threshold based on the design document value
- C. The Replication: agent success predefined replication alert should be enabled on the Publisher
- D. A warning should be enabled on the Publisher and set the appropriate threshold for

synchronization time based on the design document value

E. A warning should be enabled on the Publisher and specify the appropriate subscription expiration threshold based on the design document value

Answer: A, B

Explanation: In the scenario you should remember that latency is the amount of time that elapses between a transaction being committed and the publisher and committed at the Subscriber.

Incorrect Answers:

C: This option should not be used because this alert is fired when the agent successfully shuts down.

D: This option should not be used in the scenario as this is meant to be used with merge replication.

E: This option should not be used in the scenario because it will not alert you about the information that you require.

---

### QUESTION 92:

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. The Certkiller .com network has its headquarters in Chicago and a branch office in Miami.

The Certkiller .com network contains two Microsoft SQL Server servers named Certkiller -SR01 in the main office running SQL Server 2005 configured as the Publisher and Certkiller -SR02 at the branch office running SQL 2000 configured as the Distributor. The exhibit below shows the configuration of the database servers in each store.

EXHIBIT:

Server name	SQL Server version	Subscription type
CERTKILLER-SR03	SQL Server 2005	Pull
CERTKILLER-SR04	SQL Server 2005	Push
CERTKILLER-SR05	SQL Server 2000	Pull
CERTKILLER-SR06	SQL Server 2000	Push

The Certkiller .com network uses transactional replication with queued updating subscribers to synchronize data between locations. You define the following publications on Certkiller -SR01:

1. FinancialData
2. FinancialStatusData



Since Certkiller -SR02 acts as the distributor most subscriptions are implemented as push subscriptions. Two of the stores have intermittent connections and implement the subscriptions as pull subscriptions and each store subscribes to both publications. You are required to measure latency using tracer tokens whilst your solution involves the fewest upgrades.  
What should you do? (Choose two)

- A. Certkiller -SR05 should be upgraded to SQL Server 2005
- B. Certkiller -SR02 should be upgraded to SQL Server 2005
- C. The subscription on Certkiller -SR03 must be reinitialized
- D. The subscription on Certkiller -SR04 must be reinitialized
- E. The subscription on Certkiller -SR05 must be reinitialized
- F. The subscription on Certkiller -SR06 must be reinitialized

Answer: A, B

Explanation: In the scenario you should remember that we are using tracer tokens which require either SQL Server 2005 or Oracle and a distributor which is running Microsoft SQL Server 2005.

Incorrect Answers:

C, D, E, F: There is no need for you to reinitialize the subscription on the servers because as long as the subscriptions are active there is no need to reinitialize them for using tracer tokens in the scenario.

---

### **QUESTION 93:**

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. The Certkiller .com network has its headquarters in Chicago and four branch offices.

The Certkiller .com network contains a Microsoft SQL Server 2005 server in the main office and one in each branch office. The main office SQL server is configured to act as the Publisher and Distributor for transactional replication. The network branch offices are all configured as subscribers and all subscriptions are configured as push subscriptions. The Data is treated as read-only at the remote offices.

You are required to validate connections between the Distributor and the Subscribers and measure the replication latency whilst you collect statistics about latency that is accurate as possible.

What should you do?

- A. The Replication Monitor must be used to insert tracer tokens and gather token statistics from the Publisher/Distributor and all subscribers
- B. The Replication Monitor should be used to set a latency threshold and generate an alert if latency exceeds the threshold
- C. The Replication Monitor should be used to view the Queue Reader agent history

statistics

D. The Replication Monitor should be used to view Current Average Performance and Current Worst Performance statistics

Answer: A

Explanation: In the scenario you should remember that latency is the amount of time that elapses between a transaction being committed and the publisher and committed at the Subscriber. This configuration can also be used to view Total Latency (publisher to Subscriber).

Incorrect Answers:

B: In the scenario you should not use this option because latency is the amount of time that elapses between a transaction being committed and the publisher and committed at the Subscriber

C: This option should not be used in the scenario because it does not provide detailed statistics and it is used with queued updates only.

D: This option should not be used in the scenario even though they do relate to transactional replication performance but they do not provide detailed information.

---

#### **QUESTION 94:**

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. The Certkiller .com network has its headquarters in Chicago and branch offices in Miami, Dallas and Detroit.

The Certkiller .com network contains a Microsoft SQL Server 2005 server in each office. The database server in the main office is the Publisher and Distributor for merge replication. The network database server in the branch offices are configured as Subscribers and the Subscriptions are configured as pull subscriptions.

During the course of the day you configure merge replication because the connection between the offices is intermittent and the data at the Subscribers rarely changes. You want to resolve conflicts manually when they occur. You are required to ensure that the SQL Server does not automatically resolve conflicts whilst you identify how you would resolve the conflicts that occur.

What should you do? (Choose two)

- A. The Interactive Resolver should be used to resolve replication conflicts
- B. Merge replication should be configured for interactive conflict resolution
- C. The Conflict Viewer should be used to resolve replication conflicts
- D. All subscriptions should be configured as push subscriptions
- E. The conflict tracking level should be configured for row level

Answer: A, B

Explanation: SQL Server by default always automatically handles conflicts itself but by making the configuration changes in the answers provided you will be

allowed to resolve replication conflicts manually as required in the scenario.

Incorrect Answers:

C: This option can not be used to manually resolve replication conflicts as you will only be allowed to view the conflicts.

D: This option can not be used to help in the scenario because the subscription type has nothing to do with replication conflict resolution.

E: This option should not be used in the scenario because this option sets the level at which conflicts are tracked.

---

### **QUESTION 95:**

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. The Certkiller .com network has its headquarters in Chicago and branch offices in five cities.

The Certkiller .com network contains a Microsoft SQL Server 2005 server at the main office and a SQL Server at each of the cities. The main office database server will be configured as the Publisher and Distributor whilst the remaining servers are configured as Subscribers who are rarely updated. You ensure that when updates of the subscribers conflicts with the Publisher the Publisher always takes precedence. The connections between the Publisher/Distributor and the Subscribers are periodic and are configured to occur after business hours only.

You are required to design a replication configuration that meets the update and conflicts resolution requirements whilst you use the least amount of administrative effort. The Publisher and Subscribers are required to remain synchronized with identical data.

What should you do?

- A. Transactional replication must be configured with queued-updating Subscribers
- B. Merge replication must be configured with a custom managed code resolver
- C. Merge replication should be configured for manual resolution
- D. The Transactional replication should be configured with immediate-updating Subscribers

Answer: A

Explanation: In the scenario you should configure Transactional replication with queued-updating Subscribers as this will let you specify how the conflicts are to be resolved.

Incorrect Answers:

B: This option could be used in the scenario but would require extra administrative effort which is what you should avoid.

C: This option should not be used in the scenario even though this would minimize administrative effort but does not meet the resolution and synchronization requirements.

D: This option should not be used in the scenario as this would require well connected servers all the time connected via high speed connections.

---

**QUESTION 96:**

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. The Certkiller .com network has its headquarters in Chicago and a branch office in Miami

The Certkiller .com network contains two Microsoft SQL Server servers named Certkiller -SR01 in the main office running SQL Server 2005 configured as the Publisher and Certkiller -SR02 at the branch office running SQL 2000 configured as the Distributor. The Certkiller .com network uses transactional replication with queued updating subscribers to synchronize data between locations. You define the following publications on Certkiller -SR01:

1. FinancialData
2. FinancialStatusData

Since Certkiller -SR02 acts as the distributor most subscriptions are implemented as push subscriptions. You monitor the replication and discover that changes are not always replicated to the stores because of connection timeouts and you need to resolve the problem.

What should you do?

- A. The QueryTimeout value should be increased in the Log Reader Agent profile
- B. The PollingInterval should be decreased for each Distribution Agent
- C. The PollingInterval value should be decreased in the Queue Reader Agent profile
- D. The LoginTimeout value should be increased in the Distribution Agent profile

Answer: D

Explanation: You should always remember in SQL Server that the LoginTimeout value controls how long SQL Server will wait for an agent's login to succeed.

Increasing this value should decrease the number of failed replications.

Incorrect Answers:

A: This option can not be used in the scenario because the Agent reads the transaction log of the publisher and makes the changes in the distribution database.

B: This option can not be used in the scenario because this option is used to configure how regularly the Agent synchronizes the changes.

C: This option can not be used in the scenario because this Agent reads the queue of each queued updating subscriber and sends the data to the publisher.

---

**QUESTION 97:**

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Microsoft Windows Server 2003 and the database server runs Microsoft SQL Server 2005. The Certkiller .com network users use a database called Billventory.

You need to replicate the BillInventory database across all the servers and you are concerned with the distribution database growing very large. You are required to minimize the size of the distribution database and you want to increase the frequency that delivered transactions from the distribution database are deleted. You must accomplish your goal using the least amount of administrative effort. What should you do?

- A. A new job should be created that automatically delete the replicated Agent history
- B. The Replication agents cleanup job should be configured to run more frequently
- C. The Expired subscriptions cleanup job must be configured to run twice a day
- D. The frequency that the Agent History clean up job runs should be increased

Answer: D

Explanation: In the scenario you should configure the Agent history clean up maintenance job to run more frequently as this will remove the agent history from the distribution database.

Incorrect Answers:

- A: This option should not be used in the scenario because this will require more additional administrative effort.
- B: This option should not be used in the scenario because the option detects replication agents that are not actively logging history and writes an event in the Windows Event log.
- C: This option should not be used in the scenario because this only detects and removes expired subscriptions from the publication database.

---

### **QUESTION 98:**

You work as the network lead SQL developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Microsoft Windows Server 2003 and the database servers run Microsoft SQL Server 2005. The network has several Microsoft SQL Server and C# developers who all report to you.

The Certkiller .com network has development and production servers. The Certkiller .com management has recently released internal design guidelines specifying that Transact-SQL scripts are used for creating and modifying database objects. The network has suffered from lack of change control problems during the development process.

There have been critical scripts that have been modified and you have no way of determining when the change was made and who it was made too. You additionally have no way of retrieving the previous versions of the script. You are required to be able to track changes back to their source and recover earlier script versions. You are required to choose which Transact-SQL source control to implement. What should you do?

- A. The WITH ENCRYPTION must be specified in the object creation scripts

- B. A class library project should be created in Visual Studio and use the Solution Explorer to add the solution to source control
- C. A separate database must be created for tracking Transact-SQL scripts and store the scripts as varchar(max) types
- D. A project should be created that contains the scripts in SQL Server Management Studio and use the Solution Explorer to add the solution to source control

Answer: D

Explanation: In the scenario you should always remember that the Microsoft Visual SourceSafe can be used to enforce source control on Transact-SQL scripts and taking the actions in the answer will achieve the scenario objective.

Incorrect Answers:

- A: This option should not be considered for use in the scenario because it does not provide source control with change management.
- B: This option cannot be used in the scenario because you cannot use a Visual Studio class library project to create and manage Transact-SQL scripts.
- C: This option could be used in the scenario but would be entirely manual but can not be used to achieve the scenario objective.

---

#### **[QUESTION 99:](#)**

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Microsoft Windows Server 2003 and the database servers run Microsoft SQL Server 2005. The Certkiller .com network has its headquarters in Chicago and branch offices in Dallas and Miami.

The Certkiller .com network contains a Microsoft SQL Server 2005 server in the main office and two servers in each branch office. The database servers in the branch offices run Windows 2000 Server. The findFinancial stored procedure uses the CONTAINS clause to locate records in the Financial table that match the search criteria. The Financial table additionally has a clustered index named CK\_FinancialName and two non clustered indexes.

During the course of the week you create a transactional publication article that includes the Financial table and the findFinancial stored procedure and you configure each database server at the branch offices to subscribe to the publication. The network users started complaining that an error occurs when they execute the findFinancial stored procedure against the database at one branch office. You test the stored procedure in the main office and it runs fine. You are required to ensure that the network users can run the findFinancial stored procedure against all database servers.

What should you do?

- A. The publication should be modified and set the Copy nonclustered index property to True

- B. The branch office server should be upgraded to Windows Server 2003
- C. The publication should be modified and change the replication property of the stored procedure to execution of the stored procedure
- D. The publication should be modified and set the Copy full text indexes article property to True

Answer: D

Explanation: You should remember that in the scenario you are required to set the Copy full text indexes article property to True and that Full-text indexes are not included in a publication by default.

Incorrect Answers:

- A: This option should not be used in the scenario even though it might improve performance but it does not help the stored procedure execute.
- B: Remember that full text searches can be done on Windows 2000 Server so there is no need to upgrade the servers to Windows Server 2003.
- C: This option should not be used in the scenario because this will only replicate the final results of the stored procedure instead of replicating each changed row.

---

#### **[QUESTION 100:](#)**

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 database server named Certkiller -DB01 which you administer. A new Certkiller .com security policy requires that you maximize physical server and data security. You are busy making the required configurations to ensure all the network servers adhere to the security policy.

The Certkiller .com management has the servers contained in a locked room where access is limited to authorized personnel only. The Certkiller .com network has backups maintained both in-house and in a secure offsite facility. You are required to identify the next step that should be taken as part of physical security.

What should you do?

- A. All monitors and keyboards should be removed from the server room.
- B. All physical cables in the network cable plant should be replaced with wireless network hardware.
- C. A second database server should be installed to create a Windows cluster.
- D. A computer-safe fire protection system should be installed.

Answer: D

Explanation: In the scenario you should consider installing the computer-safe fire protection system as this will add to the physical security helping to protect the



hardware in case of fire. Additionally it is suggested by Microsoft that you also install flood and fire detection systems in secure server locations.

Incorrect Answers:

A: This option should not be considered for use in the scenario because this will only add difficulty for access to the authorized users.

B: This option should not be used in the scenario because this option is inherently less secure than a wired network.

C: There is no need for the second SQL server as this feature only ensures access to a database in case a server fails.

---

### **QUESTION 101:**

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains three Microsoft SQL Server 2005 servers which you administer. The Certkiller .com network includes a mix of databases configured for Full Recovery model and Simple Recover Model. A new Certkiller .com security policy specifies that database servers:

1. All database server should be secured against logon and local access
2. Database servers must be backed up on a predefined schedule
3. Any database should be recoverable to no more than six hours lost
4. The backups must be protected against unauthorized access
5. A copy of the data no more than a week old must be maintained offsite

The Certkiller .com network servers are locked in a room with file servers used as the backup destination for all database servers. The Full backups run monthly and the differential backups run nightly. You are required to ensure that all security policy guidelines are met.

What should you do?

- A. A second file server should be deployed in the locked room and run mirror backups.
- B. Transaction log backups must be run every six hours.
- C. Mirrored backups should be run to another file server located in a different physical location in the network.
- D. The differential backup frequency should be changed to every six hours.
- E. The file server should be back up to removable media and store a copy in a secure offsite location.

Answer: D, E

Explanation: In the scenario you should remember that by backing up the file servers to removable media and storing a copy offsite you meet the offsite secure location objective and by increasing the differential back up frequency you meet the minimum backup requirement.

Incorrect Answers:

A: This option should not be used in the scenario because the additional server will not help toward the scenario objective.

B: This option should not be used in the scenario since some of the servers are configured for Simple Recovery Model.

C: This option should not be used in the scenario because you are also required to have the back up physically secure depending on the server location.

---

**QUESTION 102:**

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains ten Microsoft SQL Server 2005 servers which you administer. Certkiller .com management has recently decided to tighten network security. A new Certkiller .com security policy requires that only network users with security clearance can manage security principals and roles. You additionally need to audit the users who are currently making such changes on the database servers whilst your solution does not impact performance more than required. What should you do?

- A. Enable object access event auditing in Audit Policy.
- B. Enable auditing for account management events in Audit Policy.
- C. C2 audit mode for the SQL Server instance must be enabled.
- D. A SQL Server Profiler trace should be created.

Answer: D

Explanation: In the scenario you should consider making use of the SQL Server Profiler trace as the Security Audit Event Category includes the events necessary for the information required. You can further more tune the trace template so that only the events you require are logged to keep trace from impacting performance.

Incorrect Answers:

A, B: The Audit Policy should not be used in the scenario because the Windows policy setting controls auditing for the management of Windows accounts not SQL Server accounts.

C: The C2 auditing mode should not be used in the scenario because the mode logs more than just the required information taking up more resources than required.

Reference:

---

**QUESTION 103:**

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains three Microsoft SQL Server 2005 servers

which you administer. Certkiller .com management has recently decided to tighten network security. A new Certkiller .com security policy guideline was released. Another network administrator has prepared the new security template and applied all the security changes. Each department is required to test the changes made to network servers and report potential problems.

The Certkiller .com network has applied a custom security template to the SQL Server servers through a GPO linked to the OU where the servers are contained. You are required to test the changes that will be made to see if they adversely impact database operations. Testing should have a minimal impact on database operations and must complete as quickly as possible. You must identify the new security template has policy settings more restrictive than those applied to the SQL Server servers.

What should you do?

- A. The Security Configuration and Analysis must be used to compare the new template against the current settings.
- B. The new template should be added and the custom database server template to the Security Templates console.
- C. The Security Configuration and Analysis should be used to import the new template into each database server.
- D. The new security policy should be applied through GPO linked to the OU containing the database servers.

Answer: A

Explanation: In the scenario you should use the Security Configuration and Analysis tool as the tool compares the new template against the current settings and displays the differences between the templates.

Incorrect Answers:

B: This option should not be used in the scenario because the templates will not be compared to each other which are what you require.

C, D: There is no need for these configurations because these options would apply the changes without testing what the results might be.

---

#### **[QUESTION 104:](#)**

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains ten Microsoft SQL Server 2005 servers which you administer. Certkiller .com management has recently decided to tighten network security. A new Certkiller .com security policy requires that database servers adhere to requirements regarding the services that are enabled and the rights assigned to various users as well as permissions granted to some folders. You are required to identify whether all the database servers adhere to the security guidelines defined in

the template.

What should you do?

- A. Run the rsconfig command.
- B. Run the sac command.
- C. Run the SQLdiag command.
- D. Run the secedit command.

Answer: D

Explanation:

In the scenario you should consider running the secedit command as the utility allows you to analyze a computer's security configuration against one or more security templates.

Incorrect Answers:

A: This utility should not be used in the scenario as the utility is used to configure a Report Server.

B: This utility should not be used in the scenario because the utility allows you to import and export the Surface Area Configuration settings for a SQL Server instance.

C: This command should not be used in the scenario because the command gathers information from the Windows event logs, performance logs, SQL Profiler traces and SQL Server configuration information.

---

### **QUESTION 105:**

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 database server named Certkiller -DB01 which you administer. Certkiller -DB01 is configured for Windows Authentication. You are busy configuring user access and permissions. Most of the Certkiller .com users have the same access requirements at the server and database level but there are some exceptions. The Certkiller .com network users will access the database through a custom application, stored procedures and ad hoc queries.

A new Certkiller .com security policy requires that access to the Certkiller Data must be limited to Active Directory user accounts only. User accounts who are not members of the Domain Admins group are not configured as database administrators. You are required to configure user access to minimize the effort required to assign and audit user access permissions.

What should you do? (Choose two)

- A. Access permissions should be assigned to Active Directory groups.
- B. Logins and database users should be created based on Active Directory groups.
- C. Access permissions should be assigned based on application roles.

- D. Access permissions should be assigned based on user accounts.
- E. Logins and database users should be created based on Active Directory user accounts.

Answer: A, B

Explanation: In the scenario they mentions most of the users require the same level of access meaning that you should use Active Directory groups and create logins and database users based on these groups as login and database users are based on groups access permissions will also be based on groups.

Incorrect Answers:

- C: This option should not be used in the scenario because these roles have no members instead they are invoked every time you execute an application.
- D, E: This option could be used in the scenario but it would require you to manage by user means more security principals adding to administrative effort.

---

### **QUESTION 106:**

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 database server named Certkiller -DB01 which you administer. Certkiller -DB01 is used to store confidential company information. You established a domain security policy which requires every action to change permission on the database server to be logged. Certkiller -DB01 can only be running when logging is enabled. You are required to enforce the security policy on the database server.

What should you do?

- A. By using the sp\_configure statement c2 audit mode should be enabled.
- B. From the Security page of Certkiller -DB01's Properties windows auditing should be enabled.
- C. Through a Group Policy Object (GPO) an audit policy must be enabled.
- D. Through the Local Security Policy auditing must be enabled.

Answer: A

Explanation: In the scenario you should remember that when the c2 audit mode option is enabled that Certkiller -DB01 will log the failed and successful attempts to access statements and objects.

Incorrect Answers:

- B: This option should not be used in the scenario because you would only be logging the login attempts.
- C: This option should not be used in the scenario because this option essentially does the same as an audit policy configured through Local Security Policy which cannot track SQL server access to statements and objects.

D: This option can not be used in the scenario because the Windows audit policy does not track access to SQL server statements and objects.

### QUESTION 107:

#### DRAG DROP

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 database server named Certkiller -DB01 which you administer. You are required to assign the necessary permissions to members of the Finance and members of the Sales Windows groups. The Finance users must be able to resolve blocking issues and create logins while the Sales group must be able to create databases and configure linked servers.

You decide to configure a login named Finance mapped to the Finance group and a login named Sales mapped to the Sales group. You are required to assign the appropriate roles. You want to use fixed server roles to assign permissions. What should you do? (To answer, choose the correct options in the pane on the left and place them in the correct order of execution in the pane on the right.)

Roles, Select from these	Login Roles, place here
sysadmin	Sales: Place here.
processadmin	Place here, if any.
securityadmin	Place here, if any.
dbcreator	Finance: Place here.
setupadmin	Place here, if any.
serveradmin	Place here, if any.

#### Answer:

Roles, Select from these	Login Roles, place here
sysadmin	Sales: dbcreator
processadmin	setupadmin
securityadmin	Place here, if any.
dbcreator	Finance: processadmin
setupadmin	securityadmin
serveradmin	Place here, if any.

#### Explanation:

In the scenario you should always remember to grant the least amount of permissions when assigning permissions.

There is no need to make the users members of the serveradmin role nor should you

make the users members of the sysadmin role as the permission controlled here are not the minimum required

---

**QUESTION 108:**

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 database server named Certkiller -DB01 which you administer. A new Certkiller .com security policy requires that all data in the Bill database be encrypted using a symmetric key for data encryption and encrypt the symmetric key with a certificate.

You have received instruction from the CIO to ensure that you provide the highest level possible of encryption for security for the data. You need to determine the best symmetric encryption key type to create.

What should you do?

- A. Create an AES\_256 symmetric key.
- B. Create an RC2 symmetric key.
- C. Create an RC4 symmetric key.
- D. Create a 3DES symmetric key.

Answer: A

Explanation: In the scenario you should consider creating an AES\_256 symmetric key which uses a 256-bit encryption algorithm and it is recommended by Microsoft that you use this key when encrypting large amounts of data as it is suited for the job.

Incorrect Answers:

B: This encryption should not be used in the scenario because the RC2 uses a 128-bit encryption algorithm.

C: This encryption should not even be considered in the scenario as it is the least secure of all the options providing only a 40-bit encryption algorithm.

D: This encryption should not be used in the scenario because 3DES uses a 128-bit encryption algorithm.

---

**QUESTION 109:**

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains three Microsoft SQL Server 2005 database server named Certkiller -DB01, Certkiller -DB02 and Certkiller -DB03.

Certkiller -DB01 and Certkiller -DB02 are production servers



while Certkiller -DB03 is a development server. The Certkiller .com production servers run custom applications. You are concerned that maintenance and security updates released by Microsoft might introduce incompatibilities and other problems. You are required to create a plan for managing updates to help you achieve the following:

1. Ensure the required security updates are applied.
2. Identify potential compatibility problems.
3. Apply updates after business hours.
4. Minimize administrative effort to maintain the solution.
5. Provide ongoing support.

What should you do?

- A. The database servers should be configured to manually download updates and only download updates to production server after testing.
- B. The database servers should be configured to download and install updates automatically.
- C. A Software Update Services (SUS) server should be installed.
- D. A Windows Update Services (WUS) server should be installed.

Answer: D

Explanation: In the scenario you should remember that the WUS server downloads the updates and from there you can apply the updates to the development server for testing and then apply the updates to the appropriate production servers.

Incorrect Answers:

A: This option will let you download and test on the development server but involves too much administrative effort from you.

B: This option should not be used in the scenario as you will not have the opportunity to test the updates on the development server first.

C: This particular product will not be available for download after July 2006 so you cannot provide ongoing support as required in the scenario.

---

### **QUESTION 110:**

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 database server named Certkiller -DB01 which you administer. You have received instruction from the CIO to install and configure an additional database server named Certkiller -DB02 which will be maintained using scheduled Maintenance Plans. You configure the settings so that if a Maintenance Plan fails the server will send you an e-mail. You are required to configure the surface area of Certkiller -DB02 to support the required functionality whilst keeping your solution as secure as possible.

What should you do? (Choose two)

- A. Service Broker endpoints should be enabled.
- B. The SQL Server Browser service must be configured to start automatically.
- C. SQL Mail should be enabled.
- D. The SQL Server Agent service must be configured to start automatically.
- E. Database Mail should be enabled.

Answer: D, E

Explanation: You should remember that Maintenance Plans are run by the SQL Server Agent service therefore it should be configured to start automatically and in order to support e-mail notification you should enable Database Mail or SQL Mail as this is a more secure solution.

Incorrect Answers:

- A: This option does not need to be enabled in the scenario because the Service Broker endpoints are used to support asynchronous queue-based solutions.
- B: The SQL Server Browser service should not be configured in this way in the scenario because the service is used to allow connections to other instances of SQL server using the management tools.
- C: There is no need to have SQL Mail enabled in the scenario because SQL mail can be used to send the notification but it is a less secure method.

---

#### **QUESTION 111:**

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 database server named Certkiller -DB01 which you administer. The Certkiller .com network uses a database called Bill EmployeeData which is used to create monthly reports. All of the network employees have a SQL Server login to access the server. A new Certkiller .com security policy requires that all the SQL logins use the same complexity and password expiration policies used by Microsoft Windows Server 2003.

The network's Windows Server 2003 computers are configured to require complex passwords and periodic password changes. The security policy additionally states that all users must change their password the first time when login onto Certkiller -DB01. Certkiller .com has recently hired a new employee who requires access to the database server using the account named RoryA. You are required to create a SQL Server login account for the user that adheres to all the appropriate requirements.

What should you do?

- A. You should execute `CREATE LOGIN RoryA WITH PASSWORD = Moles4M4`

MUST\_CHANGE CHECK\_EXPIRATION = ON, CHECK\_POLICY = ON

B. You should execute CREATE LOGIN RoryA WITH PASSWORD = Moles4M4

MUST\_CHANGE CHECK\_POLICY = OFF

C. You should execute CREATE LOGIN RoryA WITH PASSWORD = Moles4M4

MUST\_CHANGE CHECK\_POLICY = ON

D. You should execute CREATE LOGIN RoryA WITH PASSWORD = Moles4M4

CHECK\_EXPIRATION = OFF, CHECK\_POLICY = OFF

Answer: A

Explanation: In the scenario you should remember that by running the statement in the answer you will meet all of the requirements for the SQL Server account and are enforcing password expiration and policy as required.

Incorrect Answers:

B, C: These commands should not be used in the scenario because the commands are incomplete and will fail if you tried executing them.

D: This option should not be used in the scenario as it will do the opposite of what is required in the scenario.

---

#### **QUESTION 112:**

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 database server named Certkiller -DB01 which you administer. The Certkiller .com network management has recently informed you that you should have a password policy enabled on Certkiller -DB01. You enabled a password policy on Certkiller -DB01. All passwords are required to meet complexity requirements.

You created a SQL login using the following command:

1. CREATE LOGIN RoryA WITH PASSWORD = Rory3M4 MUST\_CHANGE CHECK\_EXPIRATION = ON, CHECK\_POLICY = ON

When Rory Allen attempts to log onto the SQL server the first time and attempts to change the password to RoryAll23\$\_a he receives an error message indicating that he cannot use the new password. You need to find out what is causing the problem. What should you do?

A. Part of the user name is in the password.

B. At least one invalid character is in the password.

C. There are no uppercase letters in the password.

D. The minimum number of characters is not used in the password.

Answer: A

Explanation: In the scenario you should remember the password has part of the

username and complex passwords must meet three requirements. The first which states the password cannot contain all or part of the username, the second states the password must be eight characters in length and the third states at least three of the four categories of characters should be used.

Incorrect Answers:

B: There are no invalid characters in Rory Allen's new password.

C: This is not the case in the scenario the user's password only contains part of the username.

D: There is nothing wrong with the password length in the options this is correct.

---

### **QUESTION 113:**

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 database server named Certkiller -DB01 configured to support both Windows authentication and SQL Server authentication. You have received instruction from the CIO to audit the passwords for the SQL Server logins. You are required to determine which logins require strong passwords and which require password expiration.

What should you do?

- A. Query the sys.syslogins.
- B. Query the sys.login\_token.
- C. Query the sys.server\_principals.
- D. Query the sys.sql\_logins.

Answer: D

Explanation: In the scenario you should always remember that the sys.sql\_logins catalog view returns the same information for SQL Server login as those returned by sys.server\_principals , additionally the answers method indicates whether the login is subject to password policy and password expiration policy.

Incorrect Answers:

A: This method will return information about all the logins but does not include information specific to Microsoft SQL Server 2005.

B: This method will return information about the security principals associated with the current login itself but do not return information specific to SQL Server logins.

C: This method will return information about all the logins including the SID but it does not return information specific to SQL Server logins.

---

### **QUESTION 114:**

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named

Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 database server named Certkiller -DB01 configured to support Windows authentication and SQL Server authentication. You have received instruction from the CIO to audit permissions granted to several sensitive tables. You are required to write a stored procedure to retrieve information on the permissions granted the principal to which it was granted and the principal to who granted them. The stored procedure is required to support the server even if you upgrade the SQL server to a newer version.

What should you do?

- A. The sys.syspermissions should be queried.
- B. The sys.fn\_builtin\_permissions should be queried.
- C. The sys.server\_permissions should be queried.
- D. The sys.database\_permissions should be queried.

Answer: D

Explanation: In the scenario you should consider using the sys.database\_permissions catalog view as the view will return the permissions assigned for each object in the database including the user who granted them.

Incorrect Answers:

A: This option could be used in the scenario but it will not support the upgrade of a newer version of SQL server should that be the move.

B: This option will return the information about the permissions supported for various object classes and will not help in the scenario.

C: This option will return the permissions assigned to server-level objects not database-level objects there for this option should not be used in the scenario.

---

### **[QUESTION 115:](#)**

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 database server named Certkiller -DB01 which you administer. Certkiller -DB01 hosts three databases which support different business requirements. The network uses the BillAcct database which supports internal operations including accounting. The network users make use of stored procedures for data values that need insertion into the accounting tables. The stored procedures used in the network are designed to access sql variant type parameters and then use the values to build and execute ad hoc query statements.

During a routine network check you discover that there are several odd occurrences in the database which you cannot identify the cause off. The odd occurrences

include data deleted from tables and other unauthorized activity. You suspect a user is executing unauthorized statements through the stored procedures. You are required to prevent the unauthorized changes whilst having minimal impact on the stored procedures in use. Your solution must use the least administrative effort. What should you do?

- A. The stored procedure should be modified to use a type-specific and length -restricted parameters.
- B. All data manipulation activity on the accounting table should be audited and record.
- C. The input parameters should be parsed to watch for and block any input including single quotes.
- D. The stored procedures used for the accounting should be replaced with ad hoc queries.

Answer: A

Explanation: In the scenario you should consider modifying the stored procedures to use a type-specific and length-restricted parameters as you are suffering from a SQL Injection attack in the scenario where the malicious code is inserted in a query for execution on the server.

Incorrect Answers:

- B: This option could be used in the scenario for identifying the culprit but it will not help stop the attacks in the scenario.
- C: This option could be used in the s scenario but as the solution is incomplete you should not consider using this solution.
- D: In the scenario you should not consider this solution as it is even less secure and more prone to SQL injection attack.

---

### **QUESTION 116:**

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 database server named Certkiller -DB01 which you administer. Certkiller -DB01 uses a database called Inventory to store finance and expense information. The financial customers can query the backend database server through a Web server but they are required to log in first.

You created a form that requires the financial customers to enter their usernames and passwords. You are now concerned about users accessing the system without a valid username and password. You are required to prevent the users from gaining access to the system by entering invalid usernames and passwords.

What should you do?

- A. The problematic characters should be identified and disallowed.
- B. Statements should be used based on dynamic SQL.

- C. The sa account should be used for connection strings.
- D. Characters identified as allowable should only be permitted.

Answer: D

Explanation: In the scenario you should always remember that by configuring the SQL Server only to accept allowable characters you are minimizing the chance of SQL injection attacks on the server.

Incorrect Answers:

A: This option should not be used in the scenario even though it may help prevent SQL injection attacks, it is recommended that you identify allowable characters and only allow them.

B: This should not be considered in the scenario because dynamic SQL uses statements whose construction depends on user-entered values.

C: In the scenario this option should not be used because you would not be adhering to the principle of least privileged.

---

#### **QUESTION 117:**

You work as the network database SQL developer at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional

The Certkiller .com network contains a Microsoft SQL Server 2005 database server named Certkiller -DB01. Certkiller -DB01 is configured to run SQL Server Reporting Services (SDBS) in the perimeter network to support reporting requirements for remote clients. The Certkiller .com management instructed another database administrator to reconfigure SDBS, after the reconfiguration the server experiences denial-of service attacks. You are required to identify the configuration settings that could be allowing the attacks.

What should you do?

- A. The RSWebApplication configuration file ReportServerVirtualDirectory option was reconfigured and set to a shared folder on Certkiller -DB01.
- B. The RDBreportServer configuration file IsWebServiceEnabled option was reconfigured and set to True.
- C. The RDBreportServer configuration file SecureConnectionLevel option was reconfigured and set to 3.
- D. The RSWebApplication configuration file MaxActiveReqForOneUser option is reconfigure and set to 0.

Answer: D

Explanation: In the scenario you should remember that if the MaxActiveReqForOneUser option is set to 0 that the server is vulnerable to denial-of service attacks. The maximum value for the option in question is 20 and is



appropriate for most applications and the value 0 means unlimited concurrent connections.

Incorrect Answers:

A: This does not represent a problem in the scenario because this is a normal configuration and should be expected.

B: In the scenario this configuration does not present a potential security hole as this configuration should be expected when you enable SDBS to support Web-based applications.

C: There is no potential security problem in the scenario with this option as this level is the highest security level available.

---

### **QUESTION 118:**

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 database server named Certkiller -DB01 which you administer. Certkiller-DB01 includes a default instance and two named instances of SQL Server 2005. The Certkiller-DB01 will only be accessed by users in the Finance department. All computers in the Finance department are located in the same subnet.

The Certkiller .com network financial application uses instance names to connect to Certkiller -DB01. The application is not configurable. During the course of the day you are informed about a worm attack that accesses a computer using port 1434.

You are required to protect Certkiller -DB01 from the worm.

What should you do? (Choose two)

- A. The HideInstance flag should be set on all instances of SQL Server.
- B. The Windows Firewall on Certkiller -DB01 should be configured to block port 1434.
- C. The SQL Server Browser service should be disabled.
- D. An Internet Protocol Security (IPSec) policy should be enabled on the database server.
- E. Each named instance should be configured to use a static port.

Answer: D, E

Explanation: In the scenario you should configure all the instances to use a static port then by using a IPSec policy that block all ports except the required ports you ensure that the worm is unable to affect Certkiller -DB01 .

Incorrect Answers:

A: This option should not be set in the scenario because then you will only be able to access the instance locally not remotely.

B: This option should not be used in the scenario because the SQL Server Browser service listens on this port and it is required for accessing the named instances without a port number.

C: This move should not be considered in the scenario because the service is required to resolve the names of instances.

---

**QUESTION 119:**

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and all client computers run Windows XP Professional.

The Certkiller .com network contains a Microsoft SQL Server 2005 database server named Certkiller -DB01 which you administer. Recently the Certkiller .com network users started complaining that server response has degraded rapidly. You decided to monitor the following counters:

1. Processor: % Processor Time

You discover that the performance counter is consistently over 90 percent. The Baseline values for this counter are typically in the 40 to 60 percent range. During the course of the day you determine that the SQL Server process accounts for less than 50% of the processor time. You are required to identify and correct the problem as quickly as possible.

What should you do?

- A. The server should be scanned for missing updates.
- B. The server should be rebooted.
- C. The SQL Server service should be stopped.
- D. The server should be scanned using anti-virus software.

Answer: D

Explanation: In the scenario you should remember when a server suddenly starts to behave oddly the first thing you should do is make use of your anti-virus software and scan the server, this is the fastest way to verify or rule out virus infection.

Incorrect Answers:

A: This could be possible in the scenario but it is unlikely that a missing update could cause such a sudden change in server activity.

B: This option could be used in the scenario to solve the problem with a sluggish computer but does not solve the underlying problem.

C: There is no need for you to do this as you already determined that the SQL Server service is running at acceptable performance in the scenario.

---

**QUESTION 120:**

You work as the network database administrator at Certkiller .com. The Certkiller .com network consists of a single Active Directory domain named Certkiller .com. All servers on the Certkiller .com network run Windows Server 2003 and Windows 200 Server while all client computers run Windows XP Professional. The Certkiller .com network contains a Microsoft SQL Server 2000 database server

named Certkiller -DB01 which you administer. You recently upgraded Certkiller -DB01 to Microsoft SQL Server 2005 and configured Certkiller -DB01 for Windows authentication and SQL Server authentication.

A new Certkiller .com security policy requires that all the domain accounts have complex passwords. During your last routine security audit you discovered some managers have a blank password on their SQL Server accounts. You want to ensure that all logins to SQL Server adhere to the security requirements. You additionally need to mitigate the risk of managers using blank or weak passwords whilst your solution must not require unnecessary upgrades.

What should you do?

- A. A Group Policy Object (GPO) should be created that requires complex passwords. It should be linked to the Organizational Unit (OU) that contains Certkiller -DB01. Password policy checks should be enabled on all manager SQL Server logins.
- B. All the applications should be upgraded so that they can use Windows authentication. The SQL Server authentication should be disabled.
- C. Password policy checks should be enabled on all manager SQL Server logins.
- D. Certkiller -DB01 should be upgraded to Microsoft Windows Server 2003. Password policy checks should be enabled on all manager SQL Server logins.

Answer: D

Explanation: In the scenario you should consider upgrading Certkiller -DB01 to Microsoft Windows Server 2003 and enable the password policy security check on all manager SQL Server logins and for the complex password solution your computer must have Microsoft Windows Server 2003 installed.

Incorrect Answers:

- A: This option should not be used in the scenario because Microsoft SQL Server 2005 has its own idea of a complex password and does not make use of the password policy definition applied to the local computer.
- B: In the scenario we are required by one of the scenario objectives to keep upgrades to a minimum and using this option involves too much upgrades.
- C: This should not be done on a server running Microsoft Windows 2000 Server as the requirement for the complex passwords will not be met in the scenario.