Exam : 070-447

Title : UPGRADE: MCDBA Skills to MCITP Database Administrator by Using Microsoft SQL Server 2005

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Topic 1, MainQuestions (120 Questions)

QUESTION 1
You work as DBA at Certkiller .com. You administer two Windows Server 2003 computers named Certkiller A and Certkiller B. You install SQL Server 2005 on both Certkiller A and Certkiller B to host a new company database. Certkiller A hosts a read-write copy of the company database in which all changes are made. Certkiller B subscribes to a publication on Certkiller A and is only used for reporting. A Windows domain administrator provides you with a domain user account named SQLSRV to use as the security context for the SQL Server services. A password policy of 42 days exists in the Default Domain Group Policy object (GPO). You install the database on Certkiller A and Certkiller B and configure replication. Everything works fine for six weeks, but then all SQL Server services fail. You need to correct the problem. What should you do?

A. Ask the Windows domain administrator to grant the Log on as service right to the SQLSRV domain user account.
B. Configure the SQLSRV domain user account with a new strong password. Configure the new password in the properties of each SQL Server service that failed.
C. Create a local user account on Certkiller A named Certkiller A and a local user account on Certkiller B named Certkiller B. Configure Certkiller A and Certkiller B to run under the context of the appropriate local user account.
D. Ask the Windows domain administrator to grant the SQLSRV domain user account membership in the Domain Admins group.

Answer: B

Explanation: The Default Domain Group Policy object requires that passwords are changed every 42 days. In order to correct this problem you have to change the password in the Active Directory AND configure the new password on both you SQL Servers to the newly changed password.

QUESTION 2
You are a database administrator of two SQL Server 2005 computers named Certkiller A and Certkiller B. You have a Microsoft .NET application that has been modified so that it now accesses a database on Certkiller B in addition to Certkiller
A. You do not want the
user application to connect directly to Certkiller B. You need to enable the data retrieval from Certkiller B while maintaining the ability to assign different permissions to different users who use the .NET application. What should you do?

A. Change the .NET application to define a new server connection to Certkiller B.
B. Configure a linked server on Certkiller A to point to Certkiller B.
C. Change the stored procedures called by the .NET application to include the OPENXML command.
D. Configure a linked server on Certkiller B to point to Certkiller A.

Answer: B

Explanation: SQL Server lets you access external data sources from your local Transact-SQL code. You need to define a linked server for each external data source you want to access and then configure the security context under which your distributed queries will run. After you create a linked server, you can use the Transact-SQL OPENQUERY function to execute your distributed queries.

QUESTION 3
You are a database administrator for Certkiller .com. Your company uses a different company's application that is based on SQL Server 2005 Standard Edition. The application executes a query that uses an index query hint. The index query hint is not suitable for your environment, but you cannot modify the query. You need to force the application to use a different query execution plan. What should you do?

A. Create a plan guide for the query.
B. Clear the procedure cache.
C. Create a new covering index on the columns that the query uses.
D. Update the statistics for all of the indexes that the query uses.

Answer: A

Explanation:
Over the past few years, Microsoft SQL Server has increased its presence in the industry and has reduced its TCO. This reduced TCO is a direct result, primarily, of the numerous self-tuning mechanisms built into Microsoft(r) SQL Server. These mechanisms automatically perform tasks that would otherwise have to be performed by experienced database administrators. One such mechanism is the cost-based optimizer (CBO) that is used to dynamically generate query execution plans. The CBO probes several system-wide resource states and employs many complex, heuristical algorithms to generate the best possible plan for a given query and the underlying table and index structures. This mechanism works well for the vast majority of user queries, but there are times when experienced users need to force a particular query plan, based on some prior knowledge or insights into future uses.

QUESTION 4
You are a database administrator for Certkiller .com. Your SQL Server 2005 computer contains one user database that holds sales transaction information. Users report that the queries and stored procedures that they use every day are taking progressively longer to execute. You also notice that the amount of free disk space on the SQL Server computer is decreasing. You need to create a maintenance plan to correct the performance and storage problems. What are two possible ways to achieve this goal? (Each correct answer presents a complete solution. Choose two.)

A. In the SQL Server Maintenance Plan Wizard, use the Check Database Integrity option.

B. In the SQL Server Maintenance Plan Wizard, use the Reorganize Index option.
C. In the SQL Server Maintenance Plan Wizard, use the Shrink Database option.
D. In the SQL Server Maintenance Plan Wizard, use the Clean Up History option.
E. In the SQL Server Maintenance Plan Wizard, use the Execute SQL Server Agent Job option.

Answer: B,C

Explanation: When you indexes are not heavily fragmented you can reorganize indexes, which uses few system resources and runs automatically online. In SQL Server 2005, certain operations such as large delete operations or -one-time data loads might leave database files larger than they need to be. SQL Server 2005 enables a DBA to shrink each file within a database to remove unused pages and regain disk space.

QUESTION 5
You are a database administrator for Certkiller .com. You are responsible for a SQL Server 2005 database that has several indexes. You need to write a stored procedure that checks the indexes for fragmentation. Which Transact-SQL statement should you use?

A. DBCC INDEXDEFRAG
B. SELECT * FROM sys.dm_db_index_physical_stats
C. SELECT * FROM sys.indexes
D. DBCC DBREINDEX

Answer: B

Explanation: The index_physical_stats function takes five parameters: database_id, object_id, index_id, partition_id, and mode. This function returns row size and fragmentation information.

QUESTION 6
You work as DBA at Certkiller .com. You administer two SQL Server 2005 computers named Certkiller A and Certkiller B. Certkiller A and Certkiller B contain a copy of a database named Sales. The database is replicated between Certkiller A and Certkiller B by using transactional replication. A full backup of each database is performed every night. Transaction log backups are performed every hour. Replication latency is typically less than two minutes. One afternoon, the Sales database on Certkiller A becomes corrupted. You are unable to repair the database. The Sales database on Certkiller B is unaffected. You need to return the Sales database on Certkiller A to normal operation as quickly as possible. You must ensure a minimum loss of data and minimal impact to users of either server. What should you do?

A. Perform a full database backup on Certkiller B. Restore the backup to Certkiller A.
B. Restore the most recent full database backup and all transaction logs made since the full backup was made.

C. Restore only the most recent transaction log backup.
D. Detach the Sales database on Certkiller B. Copy the database file to Certkiller A, and attach the database on both servers.

Answer: A

Explanation: Detaching the database will not apply to the minimal impact on users as it will be offline during copy. Restoring only the latest transaction log will not give you a working database and restoring last full backup and all transaction logs after that will not apply to the restore normal operations as quickly as possible part of the requirements.

QUESTION 7
You are a database administrator for Certkiller .com. The company runs a popular database-driven Web site against a SQL Server 2005 computer named Certkiller B. You need to ensure a quick response time and appropriate audit trail in the event that Certkiller B experiences excessive traffic due to denial-of-service (DoS) attacks. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Configure the new performance alert to start a SQL Server Profiler trace.
B. Create a new performance alert to monitor the Current Bandwidth counter.
C. Configure the new performance alert to start a Network Monitor capture.
D. Create a new performance alert to monitor the Bytes Total/sec counter.

Answer: C,D

Explanation: Using alerts, System Monitor tracks specific events and notifies you of these events as requested. An alert log can monitor the current performance of selected counters and instances for objects in SQL Server. When a counter exceeds a given value, the log records the date and time of the event. An event can also generate a network alert. Characteristic for a typical DoS attack is a large number of Bytes/sec. Characteristic for a DDoS attack is also a large number of Bytes/sec but also a large number of connections made from a large number of hosts.

QUESTION 8
You are a database administrator for Certkiller .com. One of the databases on a SQL Server 2005 computer contains a stored procedure. Users run this stored procedure to import data into a table. The stored procedure needs to use the TRUNCATE TABLE command before importing new data into the table. However, the users who run the stored procedure do not have permission to truncate the table. You need to provide a way for the stored procedure to truncate the table before it imports new data. What should you do?

A. Configure the stored procedure to use the EXECUTE AS command.
B. Configure the stored procedure to be owned by the same database user as the table.

C. Assign the users DELETE permission in the table.
D. Add the users to the db_datawriter fixed database role.

Answer: A

Explanation: In SQL Server 2005 you can implicitly define the execution context of the following user-defined modules: functions (except inline table-valued functions), procedures, queues, and triggers. By specifying the context in which the module is executed, you can control which user account the SQL Server 2005 Database Engine uses to validate permissions on objects that are referenced by the module. This provides additional flexibility and control in managing permissions across the object chain that exists between user-defined modules and the objects referenced by those modules. Permissions must be granted to users only on the module itself, without having to grant them explicit permissions on the referenced objects. Only the user that the module is running as must have permissions on the objects accessed by the module.
Syntax:
Functions (except inline table-valued functions), Stored Procedures, and DML Triggers
{ EXEC | EXECUTE } AS { CALLER | SELF | OWNER | 'user_name' }

QUESTION 9
You are a database administrator for Certkiller .com. You have separate SQL Server 2005 development and production environments. You use the Business Intelligence Development Studio to create a SQL Server Integration Services (SSIS) package in your development environment. Then, you use the SSIS package to import data into your development environment from one of your company's trading partners. You need to deploy the SSIS package to your production environment. Your production environment uses different table names than your development environment. What should you do?

A. Save the SQL Server Integration Services (SSIS) package to a file. Copy the file to the production server. Configure the SSIS package on the production server to use the new file.
B. Back up the master database and restore it to the production server. Rename the appropriate tables inside the master database.
C. Create a SQL Server Integration Services (SSIS) package configuration. Build a deployment utility. Copy the deployment folder for your SSIS project to your production server. Execute the manifest file.
D. Back up the msdb database and restore it to the production server. Rename the appropriate tables inside the msdb database.

Answer: C

Explanation: You have to use a SSIS package to accomplish this but you can not use the package built for your development environment as the table names differ.

QUESTION 10
You are a database administrator for Certkiller .com. You notice that one of the data files on a SQL Server 2005 computer is corrupted. You need to restore the database from the most recent set of backups. You want to perform this task as quickly as possible, with a minimum loss of data. What should you do first?

A. Restore the most recent transaction log backup.
B. Restore the most recent full database backup.
C. Perform a full database backup.
D. Perform a transaction log backup.

Answer: D

Explanation: In order to restore from the most recent set of backups, you have to first ensure that you can restore all transactions that have occurred between the time of the backup and the time when the database went corrupt. In order to accomplish this you should backup the transaction log.

QUESTION 11
You are a database administrator for Certkiller .com. A SQL Server 2005 computer named Certkiller A has a database named Inventory. Certkiller A is responsible for aggregating manufacturing part numbers from your company's trading partners. The manufacturing part numbers are stored in the Product table in the Inventory database. Every night, data is sent as text files from each trading partner to Certkiller
A. You need to import data and
ensure that no duplicate manufacturing part numbers exist in the data imported from the text files that are stored in the Inventory database on Certkiller
A. You want to achieve
this goal with the minimum amount of impact on your company's trading partners and your IT department. What should you do?

A. Ensure that each of your company's trading partners uses unique key values for manufacturing part numbers. Then, import the text files into the Product table.
B. Ensure that each text file is stored in an Extensible Markup Language (XML) file. Use Extensible Stylesheet Language Transformations (XSLT) to automatically remove duplicates before data is imported into the Product table.
C. Import the data from each text file into a staging table. Write a query to include a HAVING clause to remove duplicate values before inserting results into the Product table.
D. Place a unique index on the PartNum column.

Answer: C

Explanation: In this particular case a staging table that removes all duplicates with a T-SQL query including the HAVING clause would solve the problem with least impact on your company's trading partners. HAVING specifies a search condition

for a group or an aggregate. HAVING can be used only with the SELECT statement. HAVING is typically used in a GROUP BY clause.

QUESTION 12
You are a database administrator for Certkiller .com. The company has a SQL Server 2005 computer named Certkiller
A. A database on Certkiller A stores sales history data for the company's Web-based order system. Twenty of the business analysts in the company create ad hoc queries against the database. The performance of Certkiller A is routinely slow. You need to find out which business analyst is causing the problem. What are two possible ways to achieve this goal? (Each correct answer presents a complete solution. Choose two.)

A. Run the sp_who system stored procedure.
B. Use the Activity Monitor to view the activity of specific business analysts.
C. Run SQL Trace system stored procedures to gather database activity.
D. Create a trace that uses a predefined template by using SQL Server Profiler.

Answer: C,D

QUESTION 13
You are a database administrator for Certkiller .com. Your company owns a chain of 10 retail stores. Each retail store maintains point-of-sale transactions on its own SQL Server 2005 computer, in a database table named Sales. The Sales table also contains sales data from other stores to enable customer returns to any of the 10 retail stores. The sales data is refreshed from the main office to each retail store hourly. A trigger named trg_Coupon on the Sales table is used to generate sales coupons based on customer sales and buying patterns. You need to configure replication between the server in each retail store and a central server in the main office by using the fewest number of steps. Replication does not have to be in real time. What should you do?

A. Use transactional replication between the server in each retail store and the central server in the main office.
B. Set up multiple merge publications, one at each retail store and one on the central server in the main office.
C. Use snapshot replication. Configure the trg_Coupon trigger on the server in each retail store to use the NOT FOR REPLICATION option.
D. Use merge replication. Configure the trg_Coupon trigger on the server in each retail store to use the NOT FOR REPLICATION option.

Answer: D

Explanation: Merge replication, like transactional replication, typically starts with a snapshot of the publication database objects and data. Subsequent data changes and schema modifications made at the Publisher and Subscribers are tracked with triggers. The Subscriber synchronizes with the Publisher when connected to the

network and exchanges all rows that have changed between the Publisher and Subscriber since the last time synchronization occurred. Merge replication is typically used in server-to-client environments. Merge replication is appropriate if Multiple Subscribers might update the same data at various times and propagate those changes to the Publisher and to other Subscribers. In some cases, it is desirable for user activity in a replication topology to be treated differently from agent activity. For example, if a row is inserted by a user at the Publisher and that insert satisfies a check constraint on the table, it might not be required to enforce the same constraint when the row is inserted by a replication agent at the Subscriber. The NOT FOR REPLICATION option allows you to specify that some database objects are treated differently when a replication agent performs an operation:

QUESTION 14
You are a database administrator for Certkiller .com. The company hosts SQL Server 2005 databases for subscription-based customers. New customer databases are created frequently. Databases are removed when customers subscriptions end. Company managers want to track who creates each database and when each database is created. To store this information, you create a SQL Server database named Logging. You need to ensure that the appropriate information is written to the Logging database. What should you do?

A. Use the SQL Trace stored procedures to log database creation activity.
B. Create a stored procedure. Configure the stored procedure to write the appropriate information to the Logging database.
C. Create a DDL trigger that runs when a new customer database is created. Configure the DDL trigger to write the appropriate information to the Logging database.
D. Configure Service Broker to run a stored procedure that writes the appropriate information to the Logging database.

Answer: C

Explanation: DDL triggers can fire in response to a Transact-SQL event processed in the current database, or on the current server. The scope of the trigger depends on the event. For example, a DDL trigger created to fire in response to a CREATE TABLE event will do so whenever a CREATE TABLE event occurs in the database. A DDL trigger created to fire in response to a CREATE LOGIN event will do so whenever a CREATE LOGIN event occurs in the server. You can use the CREATE_DATABASE DDL statement to create a trigger that fires when a database is created.

QUESTION 15
You are a database administrator for Certkiller .com. You are responsible for managing 10 SQL Server 2005 computers that run Microsoft Windows Server 2003, Enterprise Edition. The company's Microsoft Active Directory administrators handle all Group Policy object (GPO) deployments. The Active Directory administrators have deployed a

security template named SQL05_Security.inf that has the appropriate settings to meet the company's security policy. You need to identify the existing configuration of each SQL Server 2005 computer to ensure that it meets the company's security policy. What should you do?

A. Use Network Monitor on each SQL Server 2005 computer to capture a detailed report of the types of network traffic on the local network adapter.
B. Use the Performance Logs and Alerts snap-in to create counter logs for the Network Interface performance object.
C. Use the Security Template snap-in to analyze the SQL05_Security.inf security template.
D. Use the Security Configuration and Analysis tool on each SQL Server 2005 computer to identify discrepancies between system settings and database settings.

Answer: D

Explanation: To simplify security configuration and give administrators a means to monitor security settings, Microsoft developed the Security Configuration and Analysis tool for the Microsoft Management Console (MMC) and a corresponding set of security templates for specific scenarios. Using these tools, you can analyze a server against a known previously saved configuration, or you can analyze it against a recommended security configuration template.

QUESTION 16
You are a database administrator for Certkiller .com. A software developer in the company is running the following query against a SQL Server 2005 database. SELECT Surname FROM Employees WHERE UPPER(Surname) LIKE 'COR%' The software developer reports that the query runs quickly on a test database that has a small number of rows. However, the query runs very slowly on the production database that has millions of rows. The Surname column stores data in mixed case, by using case-sensitive collation. But the query needs to perform a case-insensitive search. You need to improve the performance of this query. However, you do not have permission to change the collation orders. And you cannot modify the application code that adds rows to the database. Which three actions should you perform? (Each correct answer presents part of the solution. Choose three.)

A. Create an index on the Surname column.
B. Modify the query to include the following Transact-SQL statement.
SELECT Surname FROM Employees WHERE Surname LIKE UPPER('cor%')
C. Execute the following Transact-SQL statement.
ALTER TABLE Employees
ADD UpperSurname AS UPPER(Surname)
D. Execute the following Transact-SQL statement.
ALTER TABLE Employees
ADD UpperSurname AS CAST(Surname AS nvarchar)
E. Create an index on the UpperSurname column.

F. Modify the query to include the following Transact-SQL statement.
SELECT Surname FROM Employees WHERE UpperSurname LIKE 'COR%'

Answer: C,E,F

Explanation: As the database uses case-sensitive collation, the easiest way to speed up the query is to create a new column in the database that stores the surnames in uppercase, index the column you just created and the run the SELECT T-SQL query against the new column.

QUESTION 17
You are a database administrator for Certkiller .com. Your SQL Server 2005 database contains a table named Customer with a column named PostalCode in it. New PostalCode values are added regularly. You need to ensure that values contained in the PostalCode column are verified. You need to retrieve, from the Postal Service in each country in which you have customers, the domain of values for the PostalCode column. Rapid response time for data access is of primary concern. What should you do?

A. Implement a database trigger that looks up the postal code data from a server maintained by the Postal Service.
B. Import the Postal Service data on a nightly basis into a PostalCode table. Then, configure a foreign key on the Customer table to the PostalCode table.
C. Configure a CHECK constraint on the PostalCode field of the Customer table to allow only valid values.
D. Implement a CLR trigger that looks up the postal code data by using a Web service offered by the Postal Service.
E. Configure a new PostalCode data type and ensure that it conforms to the Postal Service specifications for the format for each country.

Answer: B

Explanation: A foreign key (FK) is a column or combination of columns that is used to establish and enforce a link between the data in two tables. You can create a foreign key by defining a FOREIGN KEY constraint when you create or modify a table. In a foreign key reference, a link is created between two tables when the column or columns that hold the primary key value for one table are referenced by the column or columns in another table. This column becomes a foreign key in the second table. A FK on the PostalCode column in the Customer table that points to a PostalCode table would enforce the use of correct postal codes.

QUESTION 18
You are a database administrator for Certkiller .com. A user named Certkiller belongs to the Windows SalesManagers group. Certkiller needs a Reporting Services report to display annual sales information by territory. A user named Joe reports to Certkiller and belongs to the Windows Sales group. He needs a report that is limited to his sales territory, but still displays the same detailed sales data that is on Certkiller's report. You

need to design a secure solution that meets the reporting needs of the users and that consumes the minimal amount of server resources. What should you do?

A. Design a report for Certkiller that includes two data regions. One data region is used for summary sales data. The other data region is used for the detailed sales data for each sales representative. Then, design a report for Joe that displays the detailed sales data.
B. Design two reports for Certkiller. One report includes the territory information, and one report includes the detailed sales data. Then, design a report for Joe that displays the detailed sales data for his territories.
C. Design a report for Certkiller that includes the territory information. Then, design a report for Joe that includes detailed sales data for his territories. Finally, configure Certkiiler report so that it includes the data in Joes report.
D. Design a parameterized report for Certkiller that includes all territory information. Then, design a linked report for Joe that links to Certkillers report.

Answer: D

Explanation: Parameterized filters allow different partitions of data to be sent to different Subscribers without requiring multiple publications to be created (parameterized filters were referred to as dynamic filters in previous versions of SQL Server). A partition is simply a subset of the rows in a table; depending on the settings chosen when creating a parameterized filter, each row in a published table can belong to one partition only (which produces nonoverlapping partitions) or to two or more partitions (which produces overlapping partitions). A linked report is a report with settings and properties of its own, but links to the report definition of another report. Linked reports are useful when you have a base report that you want to vary for specific groups or users; for example, a regional report that returns different data based on a regional code. A linked report is typically created from a parameterized report when you want to vary and then save different parameter values with each report instance.

QUESTION 19
You are a database administrator for Certkiller .com. You receive alerts reporting that several transactions on your SQL Server 2005 database have terminated due to a deadlock error. You need to find out the causes of the deadlocks. What should you do?

A. Use System Monitor to trace the Application instance of the Number of Deadlocks/sec counter in the SQL Locks object.
B. Use the sys.dm_tran_locks dynamic management view (DMV).
C. Run the Database Engine Tuning Advisor (DTA) and implement the recommendations.
D. Run SQL Server Profiler and create a trace with the Deadlock graph event group, and extract deadlock events.

Answer: D

Explanation: To trace deadlock events, add the Deadlock graph event class to a trace. This event class populates the TextData data column in the trace with XML data about the process and objects that are involved in the deadlock. SQL Server Profiler can extract the XML document to a deadlock XML (.xdl) file which you can view later in SQL Server Management Studio. You can configure SQL Server Profiler to extract Deadlock graph events to a single file that contains all Deadlock graph events, or to separate files.

QUESTION 20
You are a database administrator for Certkiller .com. You are configuring a new SQL Server 2005 computer named Certkiller
A. Certkiller A will run Reporting Services. It will
also be configured to automatically perform database backups and other maintenance tasks. There are no other SQL Server computers in the network environment. All access to Certkiller A will be made by using Certkiller As DNS name. You need to disable any unnecessary services on Certkiller
A. Which service or services should you disable?
(Choose all that apply.)

A. Microsoft Distributed Transaction Coordinator
B. Internet Information Services
C. SQL Server Agent
D. SQL Server Browser

Answer: A,D

Explanation: IIS 5.0 or later is required for Microsoft SQL Server 2005 Reporting Services (SSRS) installations. SQL Server Agent is a Microsoft Windows service that allows you to automate some administrative tasks like backups and maintenance tasks. SQL Server Agent runs jobs, monitors SQL Server, and processes alerts. The SQL Server Agent service must be running before local or multiserver administrative jobs can run automatically. Microsoft Distributed Transaction Coordinator is used mainly for clustering SQL Servers. SQL Server Browser is needed when you use named pipes to connect to a specific instance on the SQL Server.

QUESTION 21
You work as DBA at Certkiller .com. You administer a SQL Server 2005 computer named Certkiller
A. Certkiller A is a member of a Microsoft Active Directory domain. You do not have any rights or privileges to perform domain administration. However, you have been granted membership in the local Administrators group on Certkiller
A. You perform most
of the management of Certkiller A from your administrative workstation. However, for security reasons, you want to track all attempts for interactive logons and network connections to Certkiller

A. What should you do?

A. Configure the SQL Server service on Certkiller A to audit all successful and failed logon attempts.
B. Run the SQL Server Profiler and use a standard default template.
C. Edit the local security policy of Certkiller
A. Then, configure success and failure
auditing on the Audit logon events setting.
D. Create a Group Policy object (GPO) that is configured for success and failure auditing of the Audit account logon events setting. Ask the domain administrator to link the GPO to the object containing Certkiller A.

Answer: C

Explanation: Auditing interactive logons is a Operating System feature, it is not performed through SQL. Pushing the settings to the SQL Server through a GPO is not possible as you do not have any rights or privileges to perform domain administration. The only way to configure audit of interactive logons is, in this scenario, through a local security policy on Certkiller A.

QUESTION 22
You work as DBA at Certkiller .com. You administer a SQL Server 2005 computer named Certkiller
A. Certkiller A is configured to automatically perform transaction log backups, database integrity checks, and other maintenance tasks on a regular basis. Another administrator uses the SQL Server Surface Area Configuration tool to reconfigure Certkiller
A. You notice that Certkiller A no longer performs the automated maintenance tasks. You need to ensure that the maintenance tasks on Certkiller A are completed automatically. What should you do?

A. Manually perform a full backup of the msdb database.
B. Reconfigure the server so that the SQL Server Agent service starts automatically.
C. Reconfigure Certkiller A to use Windows Integrated authentication.
D. Reconfigure the SQL Server service to log on by using an administrative user account.

Answer: B

Explanation: SQL Server Agent is a Microsoft Windows service that allows you to automate some administrative tasks. SQL Server Agent runs jobs, monitors SQL Server, and processes alerts. The SQL Server Agent service must be running before local or multiserver administrative jobs can run automatically. The other administrator has probably disabled the start SQL Server Agent automatically feature.

QUESTION 23

You work as DBA at Certkiller .com. You administer a SQL Server 2005 computer named Certkiller

A. Certkiller A replicates with other SQL Server computers and manages multiserver automation jobs. It also exports data to staging databases for export to a data warehouse. After a few months without incident, Certkiller A fails to start after a reboot. You review the security log, which returns the results that the Security Log Results exhibit shows.

You then review an individual audit entry, which the Individual Audit Entry exhibit shows.

The Default Domain Group Policy object (GPO) is configured with a Password Policy and Account Lockout Policy as shown in the following table.

Enforce password history:	24 passwords remembered
Maximum password age:	42 days
Minimum password age:	1 days
Minimum password length:	7 characters
Password must meet complesity requirements:	Enabled
Store passwords using reversible encryption:	Disabled
Account lockout duration:	0
Account lockout threshold:	5
Reset account lockout counter after:	60 minutes

You need to ensure that Certkiller A runs properly. What should you do?

A. Unlock the Certkiller \sqlsrvc account. Then, configure the account with a strong password. Configure the SQL Server services to use the new account password.
B. Delete the current Certkiller \sqlsrvc account. Then, create a new Certkiller \sqlsrvc account and ensure a strong password. Finally, configure the account so that users cannot change the password. Configure the SQL Server services to use the new account password.
C. Configure the Certkiller \sqlsrvc account as a member of the local administrators group on Certkiller
A. Configure the SQL Server services to use the new account password.
D. Enable the Certkiller \sqlsrvc account. Then, change the password to a strong one. Finally, configure the account so that users cannot change the password. Configure the SQL Server services to use the new account password.

Answer: A

Explanation: The Active Directory is configured with a Password Policy that states a maximum password age of 42 days. The password created and provided to SQL when the server was installed has been disabled because it is to old and therefore a new password has to be provided.

QUESTION 24
You are a database administrator for Certkiller .com. The SQL 2005 Server computer has been in operation for more than one month. This past week, query performance problems have led you to investigate locking contention. The sys.dm_os_wait_stats dynamic management view (DMV) is showing a high value in the max_wait_time_ms column. You need to find out if this value is a factor in the current performance problems. You also must minimize the impact on database users. What should you do?

A. Reset the statistics in the dynamic management view (DMV).
B. Restart the SQL Server computer.
C. Execute the UPDATE STATISTICS command.
D. Restart the SQL Server Service.

Answer: A

Explanation: Restarting the SQL Server or the SQL Server service will have an unnecessary high impact on the database users. The Update Statistics task updates information about the distribution of key values for one or more statistics groups (collections) in the specified table or indexed view.

QUESTION 25
You are a database administrator for Certkiller .com. You manage a database named Invoicing. The Invoicing database is backed up with a full backup nightly and transaction log backups once every two hours from 08:00 to 17:00. You implement database snapshots for the Invoicing database. A database snapshot is created each day at 07:00. At 09:30 today, a user inadvertently deleted all of the invoices that were entered into the CurrentInvoice table yesterday. None of these invoices had been changed today prior to the deletion. It is now 11:45 and many other changes have occurred in the database. You need to recover the lost rows with as few administrative steps as possible while minimizing data loss. What should you do?

A. Use the SELECT subquery in the INSERT statement to move the deleted rows from yesterday mornings database snapshot to the CurrentInvoice table.
B. Restore last nights Full Backup and all transaction log backups until the 10:00 backup. Use the STOP AT statement on all restores to stop the restores at 09:29.
C. Use the SELECT subquery in the INSERT statement to move the deleted rows from this mornings database snapshot to the CurrentInvoice table.
D. Restore last nights Full Backup and all transaction log backups until the 10:00 backup. Use the STOP AT statement on the last restore to stop the restore at 09:29.

Answer: C

Explanation: Restoring a full backup and transaction log backups to the point in time when the invoices where deleted will loose all modifications made after 09:29. Fetching the data from yesterdays snapshot will not restore the invoices created yesterday.

QUESTION 26
You work as DBA at Certkiller .com. You administer a Microsoft Windows Server 2003 computer named Server1. SQL Server 2005 is installed on Server1 to host a database named MedDB. The MedDB database serves as the backend database for a new client/server application named MedDAT
A. Installation of the MedDATA application
creates the database schema, application roles, and administrative accounts. It also sets all of the default permissions. You need to establish a permissions baseline for all objects in the MedDB database. What should you do?

A. Use the SQL Server 2005 Management Studio to review the permissions of the default database objects.
B. Query the sys.server_permissions table on Server1.
C. Query the sys.database_permissions and sys.database_principals tables in the MedDB database.
D. Execute the sp_helplogins system stored procedure for each of the default users that the MedDATA application creates.

Answer: C

Explanation:
sys.database_permissions - Returns a row for every permission or column-exception permission in the database. For columns, there is a row for every permission that is different from the corresponding object-level permission. If the column-permission is the same as the corresponding object-permission, there will be no row for it and the actual permission used will be that of the object.
Sys.database_principals - Returns a row for each principal in a database.

QUESTION 27
You are a database administrator for an electronics distribution company. You are documenting your company's requirements for data quality. You need this information so that you can store part numbers, components, and stock levels from your company's trading partners in your SQL Server 2005 environment. You need to determine the standards for data quality. You need to consult with the business analysts and other database administrators (DBAs) in your organization to do so. What are three possible ways to achieve this goal? (Each correct answer presents a complete solution. Choose three.)

A. Establish metrics for measuring data quality.

B. Identify how to keep data as small as possible.
C. Identify how to standardize data elements.
D. Identify how to monitor the quality of your data.
E. Have your company's trading partners be responsible for their own data quality.

Answer: A,C,D

QUESTION 28
You are a database administrator for Certkiller .com. Developers need access to create, alter, and drop tables in your SQL Server 2005 database. A list of production tables is maintained in a table named Valid_Production_Tables in the database. You need to be able to automatically roll back any commands that drop or alter current production tables. You need to do this while minimizing the processor resources being used. What should you do?

A. Use a DML trigger to execute the FOR UPDATE, DELETE command on the Valid_Production_Tables table.
B. Use Event Notification to execute the FOR DDL_TABLE_EVENTS command.
C. Use Event Notification to execute the FOR ALTER_TABLE, DROP_TABLE command.
D. Use a DDL trigger to execute the FOR DROP_TABLE, ALTER_TABLE command.

Answer: D

Explanation: A DML trigger fires when a user manipulates data, not when the user manipulates tales. DDL triggers execute in response to a variety of data definition language (DDL) events. These are primarily CREATE, ALTER, and DROP statements. Event notifications execute in response to DDL and data manipulation (DML) statements and also trace events, but do not execute stored procedures. Instead, event notifications send information about a server event to a service broker, and are used to log and review changes or activity occurring on the database.

QUESTION 29
You are the database administrator for Certkiller .com. You have a single processor in your SQL Server 2005 computer. You run System Monitor and discover that your total processor utilization is averaging 95 percent. You need to use System Monitor to find out which application or service is causing the problem. What should you do?

A. Add each instance for Processor: % Privileged Time.
B. Add the _total instance for Process: % Processor Time.
C. Add each instance for Process: % Processor Time.
D. Add the _total instance for Processor: % Privileged Time.
E. Add the _total instance for Processor: % Processor Time.

Answer: C

Explanation: The _total instance will show you how much resources the application and resources are using together. The % Privileged Time corresponds to the percentage of time the processor spends on execution of Microsoft Windows kernel commands, such as processing of SQL Server I/O requests. If this counter is consistently high when the Physical Disk counters are high, consider installing a faster or more efficient disk subsystem. The each instance, % Processor Time will give you the information needed for the troubleshooting.

QUESTION 30
You are a database administrator for Certkiller .com. The company uses a SQL Server 2005 database that includes a table named Customers. The table includes a column named EmailAddress that contains string data. Company policy specifies a required format for data in the EmailAddress column. Changes to the EmailAddress column are made several ways, including by using ad hoc queries. You need to ensure that the data in the EmailAddress column is properly formatted. Your solution must provide the best possible performance when thousands of rows are added to the database. What should you do?

A. On the EmailAddress column, create a default constraint that specifies a string in the proper format.
B. Write a stored procedure that disallows changes to the EmailAddress column that violate company policy.
C. On the EmailAddress column, create a check constraint that uses a user-defined function to validate the format of the data.
D. Write a trigger that rolls back changes to the EmailAddress column that violate company policy.

Answer: C

Explanation: A default constraint is a property defined for a table column that specifies a constant to be used as the default value for the column. If any subsequent INSERT or UPDATE statements specifies a value of NULL for the column, or does not specify a value for the column, the constant value defined in the DEFAUL CONSTRAINT is placed in the column. A CHECK constraint prevents you from inserting a value that does not match a search condition.

QUESTION 31
You are a database administrator for Certkiller .com. The company uses a vendor company's application that is based on a proprietary database. You query data from the application database and import the data into a SQL Server 2005 database. The application vendor provides you with a new OLE DB driver to be used when querying the application database. Company policy prohibits connections between the SQL Server database and the application database, except when querying this data. You need to provide a way to query data from the application database. What should you?

A. Configure a Linked Server connection to the application database.
B. Configure a Remote Server connection to the application database.
C. Write a query that uses an OPENQUERY command.
D. Write a query that uses an OPENDATASOURCE command.

Answer: D

Explanation: OPENDATASOURCE provides connection information as part of a four-part object name. This function supports only OLE DB providers that expose multiple rowsets by using the catalog.schema.object notation.
OPENDATASOURCE can be used in the same locations in Transact-SQL syntax that a linked server name can be used. OPENDATASOURCE is specified with the following:
- The name registered as the PROGID of the OLE DB provider that is used to access the data source.
- A connection string that specifies the various connection properties to be passed to the OLE DB provider. The syntax of the connection string is a sequence of keyword-value pairs. The basic syntax is defined in the Microsoft Data Access Software Development Kit, and each provider documents the specific keyword-value pairs it supports.

QUESTION 32
You are a database administrator for Certkiller .com. You review the error log for a SQL Server 2005 Enterprise Edition computer. You notice torn page errors for one database. You need to resolve the torn page problem as quickly as possible. What should you do?

A. Use the latest database backup to restore only the torn page. Then restore any transaction logs that have been made since the full backup.
B. Run DBCC CHECKDB.
C. Restore the latest full database backup and then restore any transaction logs that have been made since the full backup.
D. Restore the database from the most recent database snapshot.

Answer: A

Explanation: In page restore, the goal is to restore one or more damaged pages without restoring the entire database. Typically, pages that are candidates for restore have been marked as "suspect" due to an error encountered when accessing the page. Suspect pages are identified in the suspect_pages table. For the restore to succeed, the restored pages must be recovered to a state consistent with the database. An unbroken chain of log backups must be available up to the current log file, and all the log backups must be applied to bring the pages up to date with the current log file.

QUESTION 33
You are a database administrator for Certkiller .com. The company has a SQL Server 2005 computer that contains a single user database named DB1. All company employees

connect to DB1. Company policy requires that the database be fault-tolerant and that failovers require no administrative effort. You need to provide fault tolerance for the database. Your solution must ensure that client computers can connect to the database, even if the SQL Server 2005 computer experiences a complete hardware failure, including a failure of all disks. What should you do?

A. Implement transactional replication to another SQL Server 2005 computer.
B. Implement database mirroring to another SQL Server 2005 computer.
C. Implement a two-node server cluster that contains the database.
D. Implement log shipping to another SQL Server 2005 computer.

Answer: B

Explanation: Database mirroringis a primarily software solution for increasing the probability that a database is available. Mirroring is implemented on a per database basis and works only with databases that use the full recovery model. Database mirroring offers a substantive increase in availability over the level previously possible using Microsoft SQL Server and provides an easy-to-manage alternative or supplement to failover clustering or log shipping. Database mirroring works by maintaining a hot standby server. During a typical mirroring session, after a production server fails, client applications can recover quickly by reconnecting to the standby server.

QUESTION 34
You work as DBA at Certkiller .com. You administer a SQL Server 2005 computer named Certkiller
A. All databases on Certkiller A have been created with the default auto file growth properties on one RAID 10 volume. All transaction logs on Certkiller A have been created without file growth enabled on a second RAID 10 volume. You need to ensure that you are notified when the databases are approaching disk capacity. You also need to prevent errors caused when any transaction log runs out of space. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Create a performance alert on the SQLServer:Databases:Data File(s) Size (KB) counter.Have the alert notify you of the problem.
B. Create SQL Server performance condition alerts on the SQLServer:Databases:Log Growths counter for each database.Define a response to automatically backup the transaction log and notify you about the problem.
C. Create a SQL Server performance condition alert on the SQLServer:Databases:PercentLogUsed counter on each transaction log. Define a response to automatically backup the transaction log and notify you about the problem.
D. Create SQL Server performance condition alerts on the SQLServer:Databases:Data File(s) Size (KB) counter for each database.Define a response to add 100 MB to the existing data file size and notify you about the problem.
E. Create a performance alert on the SQLServer:SQL Errors:Errors/sec counter. Have the alert notify you of the problem.

F. Create a performance alert on the LogicalDisk:% Free Space counter. Have the alert notify you of the problem.

Answer: C,F

Explanation: You can specify an alert to occur in response to a particular performance condition. In this case, you specify the performance counter to monitor, a threshold for the alert, and the behaviour that the counter must show if the alert is to occur. Performance data is sampled periodically, which can lead to a small delay (a few seconds) between the threshold being reached and the occurrence of the performance alert. You need to monitor the PercentLogUsed and define the counter to backup the transaction log. On the partition containing the databases the problem is not that a database gets full as they grow automatically, instead the problem is that you may run out of free space on the disks, and therefore you want to monitor the LogicalDisk: %Free counter.

QUESTION 35
You work as DBA at Certkiller .com. You administer a SQL Server 2005 computer named Certkiller
A. Users regularly report that they receive error messages stating that the transaction log is full. When they get this message, their data changes fail. You notice that disk space on Certkiller A is limited. You need to configure Certkiller A to automatically prevent users' data changes from failing due to full transaction logs. What should you do?

A. Configure event notification at the database level for the LOG_FILE_AUTO_GROW event. Configure the Service Broker to automatically notify database administrators of the event.
B. Double the maximum size of all of the transaction logs. Set the transaction logs to automatically grow by 30 percent.
C. Create SQL Server performance condition alerts to run a job that backs up the transaction log and sends an e-mail message to database administrators by using Database Mail when the transaction log exceeds the counter.
D. Configure event notification at the server level for the LOG_FILE_AUTO_GROW event. Configure the Service Broker to automatically notify database administrators of the event.

Answer: C

Explanation: You can specify an alert to occur in response to a particular performance condition. In this case, you specify the performance counter to monitor, a threshold for the alert, and the behaviour that the counter must show if the alert is to occur. Performance data is sampled periodically, which can lead to a small delay (a few seconds) between the threshold being reached and the occurrence of the performance alert. You need to monitor the PercentLogUsed and define the

counter to backup the transaction log in order to free space for additional transactions..

QUESTION 36
You work as DBA at Certkiller .com. You administer a SQL Server 2005 computer named Certkiller
A. Every Sunday, Certkiller A executes a job that performs a full backup of a database named HR. Each weeknight, Certkiller A executes a job that performs differential backups. All jobs have the option enabled to verify data in the backup. The HR database is often not able to be restored after a failure, because of errors with the data stored on the tape. You need to design a restore process that ensures that as much data as possible is restored, even when errors occur. What should you do?

A. Create a database restore process by using Transact-SQL. Include the CONTINUE_AFTER_ERROR option.
B. Create a database restore process by using SQL Distributed Management Objects (SQL-DMO). Set the ReplaceDatabase property to True.
C. Create a database restore process by using SQL Server Management Studio. Enable the option to Prompt before restoring each backup.
D. Create a database restore process by using Transact-SQL. Include the CHECKSUM option.

Answer: A

Explanation: CONTINUE_AFTER_ERROR instructs BACKUP to continue despite encountering errors such as invalid checksums. This option can be using in place of NO_TRUNCATE to attempt log backup when the database is damaged.

QUESTION 37
You work as DBA at Certkiller .com. You administer a SQL Server 2005 computer named Certkiller
A. The master database on Certkiller A becomes corrupted. Certkiller A contains several SQL Server Agent jobs. All databases are backed up regularly. You rebuild and restore the master database. You need to ensure that Certkiller A functions as it did before the database failure. What should you do?

A. Re-create all SQL Server Agent jobs.
B. Restore all user databases.
C. Re-create all SQL Server logins.
D. Restore the model and msdb databases.

Answer: D

Explanation: The model database is used as the template for all databases created on an instance of SQL Server. Because tempdb is created every time SQL Server is

started, the model database must always exist on a SQL Server system. The msdb database is used by SQL Server Agent for scheduling alerts and jobs.

QUESTION 38
You are an administrator of 12 SQL Server 2005 computers. Users report that one of the SQL Server computers named Certkiller F is unavailable for almost an hour starting at 16:00. One of the other SQL Server administrators reports that during this time, he performed a quick routine maintenance task that included a restart. You view the SQL Server logs on Certkiller F for the time period in question, as shown in the exhibit.
You need to ensure that this unavailability does not happen again. What should you do?

List file summary: No filter applied

Date	Source	Message
9/26/2005 4:01:36 PM	Server	Database Mirroring Transport is disabled in the endpoint configuratic
9/26/2005 4:01:36 PM	Server	Attempting to recover in-doubt distributed transactions involving Mic
9/26/2005 4:01:35 PM	Server	Attempting to initialize Microsoft Distributed Transaction Coordinator
9/26/2005 4:01:35 PM	Server	Using dynamic lock allocation. Initial allocation of 2500 Lock block:
9/26/2005 4:01:35 PM	Server	Detected 1 CPUs. This is an informational message; no user action
9/26/2005 4:01:35 PM	Server	SQL Server is starting at normal priority base (=7). This is an informat
9/26/2005 4:01:35 PM	Server	-m
9/26/2005 4:01:35 PM	Server	Command Line Startup Parameters:
9/26/2005 4:01:35 PM	Server	-l C:\Program Files\Microsoft SQL Server\MSSQL.1\MSSQL\DATA
9/26/2005 4:01:35 PM	Server	-e C:\Program Files\Microsoft SQL Server\MSSQL.1\MSSQL\LOG'
9/26/2005 4:01:35 PM	Server	-d C:\Program Files\Microsoft SQL Server\MSSQL.1\MSSQL\DAT
9/26/2005 4:01:35 PM	Server	Registry startup parameters:
9/26/2005 4:01:35 PM	Server	This instance of SQL Server last reported using a process ID of 341
9/26/2005 4:01:35 PM	Server	Logging SQL Server messages in file 'C:\Program Files\Microsoft SC

A. Instruct the other SQL Server administrators to use a Windows domain user account to start the SQL Server service.
B. Instruct the other SQL Server administrators not to use the net start mssqlserver command to start the SQL Server service.
C. Instruct the other SQL Server administrators not to start the SQL Server service in single user mode for routine maintenance .
D. Instruct the other SQL Server administrators not to use the net start sqlserveragent command to start the SQL Server Agent service.

Answer: C

Explanation: The startup option -m specifies that the SQL Server should start in single user mode. Single user mode is used to change some SQL Server configuration options or to recover a corrupt system database. During single user mode only one user can connect to the database.

QUESTION 39
You are a database administrator for Certkiller .com. A database named OLTP_Report

makes data available to Reporting Services reports. You use Reporting Services to create a report named SalesDeviation, which displays sales goals and sales representatives' actual sales. You need to manage report subscriptions. All sales representatives located in the Windows Sales group who do not meet sales goals must automatically receive a SalesDeviation report every Monday morning. What should you do?

A. Create two new roles: GoalMet for sales representatives who have met their goals, and GoalMissed for sales representatives who have missed their goals. Then, assign the Windows Sales group to the GoalMissed role to allow those sales representatives to run reports.
B. Create a data-driven subscription to the SalesDeviation report. Then, for the subscription's recipients, specify a Transact-SQL query that returns the names of sales representatives who have fallen short of their goals.
C. Create a data-driven subscription to the SalesDeviation report. Then, assign the Windows Sales group to the predefined Browser role. Finally, specify the Windows Sales group in the parameter of the subscription.
D. Assign the Windows Sales group to the predefined Browser role. Then, ask all sales representatives in the Windows Sales group to create user-defined subscriptions to the SalesDeviation report by using My Subscriptions.

Answer: B

Explanation: You can use data-driven subscriptions to distribute reports to a subscriber list that varies between subscription runs, to customize report output based on input values specified through the query, and to preload a report cache with a large number of parameterized report instances. Use a query to specify the values of the sales representatives that has to get the report to populate the recipient list.

QUESTION 40
You are the database administrator of a SQL Server 2005 computer running SQL Server 2005 Enterprise Edition. You support a database named OnlineSales. This database exists on the following three filegroups. The primary filegroupFG1, a read/write filegroup FG2, a read/only filegroup with historical data. The database is set to the Full Recovery model. You discover that a file from FG1 has been corrupted. FG1 is offline. All other filegroups are online. You need to restore FG1 while minimizing the time when no data is available. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Restore the transaction logs since the most recent full or filegroup backup.
B. Restore the most recent full database backup.
C. Restore the most recent backup of the FG1 filegroup.
D. Restore the FG2 filegroup.
E. Restore the most recent backup of the Primary filegroup.

Answer: A,C

Explanation: For a database that uses the full or bulk-logged recovery model, after using RESTORE DATABASE to restore one or more files, filegroups, and/or pages, typically, you must apply the transaction log to the files containing the restored data; applying the log makes those files consistent with the rest of the database.

QUESTION 41
You work as DBA at Certkiller .com. You administer a SQL Server 2005 computer. Your company's database auditing department must receive an e-mail message when the SQL Server service and the SQL Server Agent service are started, stopped, or paused. They also need to receive an e-mail message when the EXECUTE AS option is used with stored procedures and other commands. You need to ensure that the auditing department receives the e-mail messages that they need. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Create an Event Notification on the Audit Server Starts and Stops event class.
B. Use SQL Server Profiler to track the Audit Statement Permission event class.
C. Create a Windows Group Policy Object to audit System Events.
D. Use SQL Server Profiler to track the Audit Server Starts and Stops event class.
E. Create an Event Notification on the Audit Server Principal Impersonation event class.
F. Use SQL Server Profiler to track the Audit Server Principal Impersonation event class.

Answer: A,E

Explanation: The Audit Server Principal Impersonation event class occurs when there is an impersonation within server scope, such as execute as login. The Audit Server Starts and Stops event class occurs when the Microsoft SQL Server service state is modified.

QUESTION 42
You work as DBA at Certkiller .com. You administer a SQL Server 2005 computer named Certkiller
A. Certkiller A hosts a database named DB1. DB1 serves as the backend database for an application that tracks issues that help desk technicians receive and the associated trouble tickets. When installed, the help desk application loaded several stored procedures and views that are used for data manipulation and reporting purposes. DB1 contains more than 50 tables. The bulk of the data is stored within the Employees, Issues, Assets, and AssetTracker tables. An application developer inadvertently deletes the AssetTracker table in DB1. The AssetTracker table is referenced by several views and functions in the database. You need to ensure that users are not able to remove critical tables such as this that are referenced by views or functions. What should you do?

A. Create a new read-only filegroup for DB1 and move all tables to the new filegroup.
B. Use the ALTER SCHEMA Transact-SQL statement to add all critical tables to the same schema. Configure the DENY-DELETE permission for the Public role on the schema.

C. Identify the dependencies of each critical table. Alter the syntax of each view and function to include the SCHEMABINDING syntax.
D. Identify the dependencies of each view and function. Configure the DENY-CONTROL permission for the Public role on each critical table listed as a dependency.

Answer: C

Explanation: SCHEMABINDING binds the view to the schema of the underlying table or tables. When SCHEMABINDING is specified, the base table or tables cannot be modified in a way that would affect the view definition. The view definition itself must first be modified or dropped to remove dependencies on the table that is to be modified.

QUESTION 43
You are a database administrator for Certkiller .com. You create a maintenance plan that includes shrinking your SQL Server 2005 databases and reorganizing your indexes once a week. You test the plan and discover that the database does not shrink as expected. You need to troubleshoot why the database is not shrinking. What are two possible ways to achieve this goal? (Each correct answer presents a complete solution. Choose two.)

A. Configure yourself as an operator for failed jobs.
B. Review the job activity monitor.
C. Review the maintenance plan history log.
D. Configure an alert to respond to failed jobs.
E. Review the job history log.

Answer: C,E

Explanation: Use the Database Maintenance Plan History dialog box to find information about maintenance plans configured on the server. Viewing a job's history allows you to see when the job ran, the status of the job as a whole, and the status of each job step in the job. You can see whether the job ever failed in the past, when the job last completed successfully, and what output the job created each time the job ran.

QUESTION 44
You are the database administrator for Certkiller .com. The company uses a SQL Server 2005 database to track online sales. Employees who run the In-Stock report experience slow performance. This performance problem is caused by the contention between the In-Stock report and high volume of data entry to the tables that are accessed in this report. The company wants the In-Stock report returned immediately even though other employees might be changing the data within their data-entry transactions. Any changes made in other transactions while the report is running must be visible to the employees who are running the In-Stock report. You need to design a solution to achieve this goal. What should you do?

A. Change the transaction isolation level for the report transaction to snapshot.
B. Change the transaction isolation level for the report transaction to serializable.
C. Change the transaction isolation level for the report transaction to Read Uncommitted.
D. Configure the database to enable the Read Committed snapshot option.

Answer: C

Explanation: READ UNCOMMITTED Specifies that statements can read rows that have been modified by other transactions but not yet committed. Transactions running at the READ UNCOMMITTED level do not issue shared locks to prevent other transactions from modifying data read by the current transaction. READ UNCOMMITTED transactions are also not blocked by exclusive locks that would prevent the current transaction from reading rows that have been modified but not committed by other transactions. When this option is set, it is possible to read uncommitted modifications, which are called dirty reads. Values in the data can be changed and rows can appear or disappear in the data set before the end of the transaction. This option has the same effect as setting NOLOCK on all tables in all SELECT statements in a transaction. This is the least restrictive of the isolation levels.

QUESTION 45
You work as DBA at Certkiller .com. You administer a SQL Server 2005 computer named Certkiller
A. All company servers run Windows Server 2003 and are part of an Active Directory domain. Company policy states that all servers are shut down each night. A SQL Server Agent backup job is configured to run on Certkiller A each morning at 09:00. On the mornings when Certkiller A has not been turned on by 09:00, the job fails to start, and you must manually start it. You need to ensure that Certkiller A is backed up automatically each morning. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Configure the SQL Server Agent service to start when Certkiller A starts.
B. Configure a SQL Server Agent backup job to start when the CPU of Certkiller A is idle.
C. Configure a SQL Server Agent backup job to execute when the SQL Server service starts.
D. Configure a SQL Server Agent backup job to execute when the SQL Server Agent service starts.
E. Configure the SQL Server service to start when Certkiller A starts.

Answer: A,D

Explanation: You should configure the SQL Server Agent to start when Certkiller A starts because it will be started each morning. You should also configure the SQL

Server Agent backup job to start when the SQL Server Agent starts because the backup job needs that the Agent is running in order to execute.

QUESTION 46
You are a database administrator for Certkiller .com. You have separate SQL Server 2005 development and production environments. You use the Business Intelligence Development Studio to create a SQL Server Integration Services (SSIS) package in your development environment. Then, you use the SSIS package to import data into your development environment from one of your company's trading partners. You need to deploy the SSIS package to your production environment. Your production environment uses different table names than your development environment. What should you do?

A. Save the SQL Server Integration Services (SSIS) package to a file. Copy the file to the production server. Configure the SSIS package on the production server to use the new file.
B. Create a SQL Server Integration Services (SSIS) package configuration. Build a deployment utility. Copy the deployment folder for your SSIS project to your production server. Execute the manifest file.
C. Back up the master database and restore it to the production server. Rename the appropriate tables inside the master database.
D. Back up the msdb database and restore it to the production server. Rename the appropriate tables inside the msdb database.

Answer: B

Explanation: You want to create a new package configuration and a new deployment utility for the production environment as the tablenames do not match.

QUESTION 47
You are a database administrator for Certkiller .com. Users report that a SQL Server 2005 application is performing poorly. You use System Monitor and discover that disk activity on the volumes that contain the database data files is very high. You need to find out which SQL Server activity is causing the high disk activity. You want to accomplish this task by using SQL Server Profiler. What should you do?

A. Search for deadlock events.
B. Search for events that have high duration values.
C. Search for events that have high read values or high write values.
D. Search for transaction log events that have high write values.

Answer: C

Explanation: Only high read or write values will cause high disk activity.

QUESTION 48
You are a database administrator for Certkiller .com. You administer a SQL Server 2005

database named Contracts. The Contracts database becomes corrupted. You perform a restore by using the following Transact-SQL script.
RESTORE DATABASE Contracts
FROM contracts_bu_device
WITH CONTINUE_AFTER_ERROR, CHECKSUM, RECOVERY
After the restore, the SQL Server logs show errors in some of the page restores. You need to repair the database pages that are corrupt. You need to achieve this goal by using the method that facilitates the fastest possible repair. Which Transact-SQL statement should you use?

A. ALTER DATABASE Contracts SET TRUSTWORTHY ON
B. DBCC CHECKDB (Contracts, REPAIR_ALLOW_DATA_LOSS) WITH TABLOCK
C. ALTER DATABASE Contracts SET TORN_PAGE_DETECTION ON
D. DBCC CHECKDB (Contracts, REPAIR_ALLOW_DATA_LOSS) WITH NO_INFOMSGS

Answer: B

Explanation: REPAIR_ALLOW_DATA_LOSS specifies that DBCC CHECKTABLE should repair the found errors. To use a repair option the database must be in single-user mode. WITH TABLOCK causes DBCC CHECKTABLE to obtain a shared table lock instead of using an internal database snapshot. TABLOCK will cause DBCC CHECKTABLE to run faster on a table under heavy load, but decreases the concurrency available on the table while DBCC CHECKTABLE is running.

QUESTION 49
You are the database administrator for Certkiller .com. The company uses a database that contains a table named Sales. The CREATE statement for the Sales table is shown in the exhibit.

```
CREATE TABLE dbo.sales
  (Sale_Id int IDENTITY(1,1) PRIMARY KEY CLUSTERED
    , ProductID int
    , Qty int
    , Sales_Amount money
    , Description varchar(25)
    , StoreId int)

CREATE INDEX NC_Sales_Amount
  ON sales(Sales_amount)
```

The Sales table is very write-intensive and is commonly used in queries. Both of the indexes on the Sales table become fragmented within the first two hours of being rebuilt. Both leaf and intermediate level pages split frequently. There is sufficient disk space available to fully optimize the indexes. You need to optimize the nonclustered index on the Sales_Amount column of the Sales table. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Set the FILLFACTOR option to 100 when rebuilding the index.

B. Set the FILLFACTOR option to 70 when rebuilding the index.
C. Set the PAD_INDEX option to OFF when building the index.
D. Set the PAD_INDEX option to ON when building the index.

Answer: B,D

Explanation: FILLFACTOR specifies a percentage that indicates how full the Database Engine should make the leaf level of each index page during index creation or rebuild. PAD_INDEX = ON specifies that the percentage of free space that is specified by fillfactor is applied to the intermediate-level pages of the index.

QUESTION 50
You are a database administrator for Certkiller .com. You run SQL Server Profiler by using the SP:Recompile event class. You notice a large number of recompiles occurring. You need to identify the possible cause of the large number of recompiles. What is the most likely cause of the problem?

A. A database administrator created one new stored procedure.
B. Ad hoc batches are not being retrieved from the procedure cache.
C. The sp_executesql batches are not being retrieved from the procedure cache.
D. A database administrator executed UPDATE STATISTICS statements on all tables that are referenced by the most common stored procedures.

Answer: D

QUESTION 51
You are a database administrator for Certkiller .com. The company uses a SQL Server 2005 database. A full backup of the database is made each night. Transaction log backups are made each morning and each afternoon. You notice that the database transaction log file grows very large throughout the day. You need to minimize the size of the transaction log file. You also need to minimize data loss in the event of a failure. What should you do?

A. Configure the RECOVERY INTERVAL option to be a smaller value.
B. Run DBCC SHRINKFILE on the transaction log file.
C. Configure the database to use the simple recovery model.
D. Decrease the amount of time between transaction log backups.

Answer: D

Explanation: The transaction log file shrinks every time it is backed up as it contains all transactions since last backup. In order to minimize the transaction log filesize and mimnimize the data loss in the event of failure you should backup the transaction log more often.

QUESTION 52
You work as DBA at Certkiller .com. You administer a SQL Server 2005 computer. The performance of the server has degraded to a great extent over time. You are troubleshooting the indexing environment. You rebuild the clustered indexes that are used the most frequently. You want to optimize the most frequently accessed nonclustered index. You access the sys.dm_db_index_usage_stats dynamic management view (DMV). The results are shown in the following table.

database_id	object_id	index_id	user_seeks	user_scans	user_lookups
6	869578136	5	2	0	0
6	869578136	1	2	8	2
6	1077578877	2	0	2	0
6	1077578877	1	5	0	0
6	2066106401	2	0	2	0
6	2066106401	1	5	0	0
6	53575229	1	5	0	0
6	53575229	3	0	2	0
6	309576141	1	7	0	0

You need to identify which nonclustered index is being used the most frequently when the entire index is not read. Which object_id and index_id combination should you use?

A. Use the object_id 309576141 and the index_id 1.
B. Use the object_id 2066106401 and the index_id 2.
C. Use the object_id 869578136 and the index_id 1.
D. Use the object_id 2066106401 and the index_id 1.
E. Use the object_id 869578136 and the index_id 5.

Answer: E

QUESTION 53
You are a database administrator for Certkiller .com. Users report that the performance of a SQL Server 2005 application seems slow. You verify that the SQL Server computers CPU utilization, disk utilization, and memory utilization are normal. You also verify that the network is operating normally. You need to examine more detailed performance information for the appropriate instance of SQL Server 2005. What should you do?

A. Examine the distribution of the statistics in the databases that are hosted by the instance.
B. Examine the recovery model of the tempdb database.
C. Examine the appropriate dynamic management views (DMVs).
D. Examine the output of a statistics update command.

Answer: C

Explanation: Dynamic management views and functions return server state information that can be used to monitor the health of a server instance, diagnose problems, and tune performance.

QUESTION 54
You are a database administrator for Certkiller .com. Your company is a large retail store

chain with more than 500 outlets. Each retail store maintains its own SQL Server 2005 database that must replicate data to the corporate server each night. You need to monitor replication for each store. What are two possible ways to achieve this goal? (Each correct answer presents a complete solution. Choose two.)

A. Configure warnings and alerts by using Replication Monitor.
B. Monitor server activity by using SQL Server Profiler.
C. Monitor replication activity by using the Activity Monitor.
D. Monitor the current average and worst performance ratings by using Replication Monitor.

Answer: A,D

Explanation: MicrosoftSQL ServerReplication Monitor is a graphical tool that allows you to monitor the overall health of a replication topology. Replication Monitor provides detailed information on the status and performance of publications and subscriptions, allowing you to answer common questions, such as:
- Is my replication system healthy?
- Which subscriptions are slow?
- How far behind is my transactional subscription?
- How long will it take a transaction committed now to reach a Subscriber in transactional replication?
- Why is my merge subscription slow?
- Why is an agent not running?

QUESTION 55
You are a database administrator for Certkiller .com. You are responsible for monitoring the performance of your SQL Server 2005 computers. You have a SQL Server Integration Services (SSIS) package that usually takes 10 minutes to run. Today, the package is taking more than one hour to run. You suspect memory is too low. You need to identify the problem. What should you do?

A. Redesign the SQL Server Integration Services (SSIS) package so that it runs only when no exclusive table locks are in use.
B. Check the time-out values in the SQL Server Integration Services (SSIS) package.
C. Use the System Monitor to monitor the SQL Server Integration Services (SSIS) pipeline counters.
D. Use SQL Server Profiler to monitor the Scans event category counters.

Answer: C

Explanation: SQL Server 2005 Integration Services (SSIS) includes a set of performance counters for monitoring the performance of the data flow engine. To add a new log setting that includes all performance counters do the following:
In Control Panel, click Administrative Tools, and then click Performance. In the Performance dialog box, expand Performance Logs and Alerts, right-click Counter Logs,

and then click New Log Settings. Type the name of the log. For example, type MyLog.
In the MyLog dialog box, click Add Counters.
In the Add Counters dialog box, select SQL Server:SSISPipeline in the Performance object box.
Select the All Counters check box, and then close the dialog box.

QUESTION 56
You are a database administrator for Certkiller .com. A new SQL Server 2005 computer named Certkiller B hosts a mission-critical customer relationship management (CRM) database. All of the companys 500 employees in the sales and marketing departments access the CRM database. Your department has an annual budget for the purchase of new hardware and software. You need to devise a monitoring strategy that enables you to make decisions about the history of server performance. The monitoring strategy should also advise you on how to best allocate funds for hardware upgrades. What should you do?

A. Create a series of performance alerts to notify you when %Processor Time, Average Disk Queue Length, Pages/sec, and Bytes Total/sec exceed acceptable thresholds.
B. Use System Monitor in graph mode to display information about %Processor Time, Average Disk Queue Length, Pages/sec, and Bytes Total/sec. Perform this task at regular intervals during periods of peak server activity.
C. Use SQL Server Profiler to capture information to a SQL Server database table. Perform this task at regular intervals during periods of peak server activity.
D. Configure a counter log to capture information about %Processor Time, Average Disk Queue Length, Pages/sec, and Bytes Total/sec. Schedule the log to execute at regular intervals, and store the information in a comma-delimited text file.

Answer: D

Explanation: By the capturing the %Processor Time, Average Disk Queue Length, Pages/Sec, and Bytes Total/Sec you monitor all the relevant data needed to base your decisions on. By running them on a reoccurring interval and saving the data you provide the possibility to create graphs showing decreased performance over time.

QUESTION 57
You are a database administrator for Certkiller .com. Your company uses merge replication to replicate data between SQL Server 2005 computers. Users sometimes report that data on some of the computers is out of date. When this happens, you discover that merge replication times out before the merge could complete. You need to ensure that you are automatically notified by SQL Server when this problem occurs. What should you do?

A. Enable the Warn if a merge length for LAN connections exceeds the threshold warning.
B. Enable the Warn if a subscription will expire within the threshold warning.

C. Create an operator in SQL Server Agent.
D. Configure and enable Database Mail.

Answer: A

Explanation:
To set thresholds and warnings for a merge publication
1. Expand a Publisher group in the left pane, expand a Publisher, and then click a publication.
2. Click the Warnings and Agents tab.
* Enable a warning by selecting the appropriate check box:
* Warn if a subscription will expire within the threshold
* Warn if a merge length for dialup connections exceeds the threshold
* Warn if a merge length for LAN connections exceeds the threshold
* Warn if rows merged per second for LAN connections is less than the threshold
* Warn if rows merged per second for dialup connections is less than the threshold
3. Set thresholds for the warnings in the Threshold column. For example, if you selected Warn if a merge length for dialup connections exceeds the threshold in step 3, you could select a time of 10 minutes in the Threshold column.
4. Click Save Changes.

QUESTION 58
You are the database administrator for Certkiller .com. You create a new stored procedure. You run the stored procedure and discover an error. You want to gather and process any error information that is generated while running the procedure. Error logging must use the minimal amount of resources while providing the needed functionality. You need to know what caused the error. You also need to include the appropriate error functions in the new stored procedure. What should you do?

A. Use a GOTO statement.
B. Set the XACT_ABORT command to off.
C. Use the @@error function.
D. Use TRY...CATCH blocks.

Answer: D

Explanation: Errors in Transact-SQL code can be processed using a TRY...CATCH construct similar to the exception-handling features of the Microsoft Visual C++ and Microsoft Visual C# languages. A TRY...CATCH construct consists of two parts: a TRY block and a CATCH block. When an error condition is detected in a Transact-SQL statement contained in a TRY block, control is passed to a CATCH block where it can be processed. After the CATCH block handles the exception, control is then transferred to the first Transact-SQL statement that follows the END CATCH statement. If the END CATCH statement is the last statement in a stored procedure or trigger, control is returned to the code that invoked the stored procedure or trigger. Transact-SQL statements in the TRY block following the

statement that generates an error will not get executed.If there are no errors inside the TRY block, control passes to the statement immediately after the associated END CATCH statement. If the END CATCH statement is the last statement in a stored procedure or trigger, control is passed to the statement that invoked the stored procedure or trigger.

QUESTION 59
You work as DBA at Certkiller .com. You administer a SQL Server 2005 computer named Certkiller
A. Certkiller A contains a database that utilizes SQL Server log shipping. Log shipping occurs every 30 minutes. Each night, a full backup is made of the database, and all database indexes are rebuilt. The company's network administrator reports that Certkiller As network utilization becomes excessive after the nightly maintenance tasks are complete. You need to reduce the network bandwidth utilization for Certkiller A. What should you do?

A. Disable log shipping before the nightly maintenance. Re-enable log shipping after nightly maintenance completes.
B. Configure the database to use the bulk-logged recovery model.
C. Increase the time between transaction log backups.
D. Each night, rebuild only those indexes that require it.

Answer: D

Explanation: Every rebuilt index will also be rebuilt on the recipient of the Log shipping. Only rebuild the logs that needs to be rebuilt in order to minimize the logs that are shipped to the remote server.

QUESTION 60
You work as DBA at Certkiller .com. You administer a Microsoft Windows Server 2003 computer. Your company purchases a new enterprise sales application that runs SQL Server 2005. The application uses stored procedures that include the EXECUTE AS clause and that use Microsoft Windows accounts. The company's written security policy states that all enterprise applications must run under the context of a service account that requires the minimum amount of privileges. You need to configure the SQL Server service to run under the appropriate context for the installation of the new enterprise sales application. Under which context should the SQL Server service run?

A. under the context of the domain user account
B. under the context of the local service account
C. under the context of the local Administrator account
D. under the context of the local system account

Answer: B

Explanation: When using the EXECUTE AS clause and providing a username and

password, it is easiest to use a domain user account with the minimum amount of privileges needed to execute the task it should do.

QUESTION 61
You are a database administrator for Certkiller .com. You are creating a SQL Server 2005 database that will contain many tables to store contact information for customers, partners, and vendors. You need to ensure consistency in the data types that are used in all columns in the database tables. What are two possible ways to achieve this goal? (Each correct answer presents a complete solution. Choose two.)

A. Create a DDL trigger that alerts you when the schema in a table changes.
B. Create a CHECK constraint to enforce values allowed in the columns in the database tables.
C. Create CLR user-defined types for use in the tables.
D. Create a DML trigger that alerts you when the data in a table changes.
E. Create Transact-SQL user-defined data types for use in the tables.

Answer: C,E

Explanation: You should use user-defined data types in the tables. You create the type with either CLR or T-SQL. By using the user-defined data types you specify how data has to be formatted in order to be accepted in the table.

QUESTION 62
You are a database administrator for Certkiller .com. Users report that a SQL Server 2005 application stops responding for several seconds at a time during the day. This problem occurs randomly throughout the day and affects many users at once. When the problem occurs, you notice that CPU utilization and disk utilization on the SQL Server 2005 computer are low, but that the network is operating normally. You need to examine additional information relevant to the problem. What should you do?

A. Examine the sys.dm_tran_locks dynamic management view (DMV).
B. Examine the total number of lock requests on the SQL Server 2005 computer.
C. Examine the output of the DBCC SHOWCONTIG command.
D. Examine the total number of index and table scans on the SQL Server 2005 computer.
E. Examine the output of the DBCC SQLPERF(IOSTATS) command.

Answer: A

Explanation: sys.dm_tran_locks returns information about currently active lock manager resources. Each row represents a currently active request to the lock manager for a lock that has been granted or is waiting to be granted.The columns in the result set are divided into two main groups-resource and request. The resource group describes the resource on which the lock request is being made, and the request group describes the lock request.

QUESTION 63
You are a database administrator for Certkiller .com. You are creating a new SQL Server Integration Services (SSIS) package. The package will import one or more text files into a database each night. These text files are provided by company vendors and are not related to one another. You need to ensure that the package always succeeds, even if no text files are provided, with the least amount of administrative effort. What should you do?

A. In the SSIS package, use a Merge Join transformation to combine the data from the files.
B. Configure the SSIS package precedence constraints to be dynamically allocated.
C. Configure the SSIS package to use transactions.
D. In the SSIS package, use a For Loop condition to iterate through the available files.

Answer: D

Explanation: Use the For Loop page of the For Loop Editor dialog box to configure a loop that repeats a workflow until a specified condition evaluates to false.

QUESTION 64
You are a database administrator for Certkiller .com. The company's manufacturing floor has three automated testing areas for finished items. Each testing area uses SQL Server 2005 to store test results. You need to develop a replication strategy to ensure that test results flow continuously from the testing areas to the central SQL Server as quickly as possible. The test results are used for reporting. What should you do?

A. Create a separate transactional publication at each of the testing areas for the test results.Create a merge subscription on each distributor to the central server.
B. Create a separate snapshot publication at each of the testing areas for the test results.Create a merge subscription on each distributor to the central server.
C. Create a separate snapshot publication at each of the testing areas for the test results.Create a pull subscription on the central server to each of the testing area publications.
D. Create a separate transactional publication at each of the testing areas for the test results.Create push subscriptions on each of the testing areas to the central server.

Answer: D

Explanation: Transactional replication typically starts with a snapshot of the publication database objects and data. As soon as the initial snapshot is taken, subsequent data changes and schema modifications made at the Publisher are usually delivered to the Subscriber as they occur (in near real time). The data changes are applied to the Subscriber in the same order and within the same transaction boundaries as they occurred at the Publisher; therefore, within a publication, transactional consistency is guaranteed. By default, Subscribers to transactional publications should be treated as read-only, because changes are not

propagated back to the Publisher. Push subscriptions are typically used when the subscribers are treated as read only.

QUESTION 65
You are the database administrator for Certkiller .com. You manage a SQL Server 2005 database named Sales. You are given a SQL Server Profiler sample workload with queries to the Sales database on a typical day. You need to evaluate the effectiveness of current indexing and identify changes that would be appropriate. What should you do first?

A. Create a query with the five stored procedures that are used the most frequently. Then click the Analyze Query in Database Engine Tuning Advisor button.
B. Use the Database Engine Tuning Advisor (DTA) with the sample workload.
C. Use the Index Tuning Wizard with the sample workload.
D. Use SQL Server Profiler to run the sample workload.

Answer: B

Explanation: To build a recommendation of the optimal set of indexes, indexed views, or partitions for your databases, Database Engine Tuning Advisor requires a workload. A workload consists of a Transact-SQL script or a SQL Server Profiler trace saved to a file or table. If you are using a SQL Server Profiler trace file or table, they must contain Transact-SQL batch or remote procedure call (RPC) event classes, and the Event Class and Text data columns.

QUESTION 66
You are a database administrator for Certkiller .com. The company has two SQL Server 2005 computers named Certkiller A and Certkiller B. Certkiller A is located on the local network. Certkiller B is located at a vendors site and is connected by using a VPN over the Internet. You need to write heterogeneous queries on Certkiller A that access data from both Certkiller A and Certkiller B. To ensure that your queries are functional, you must configure access to the vendors site. What should you do?

A. Configure an HTTP endpoint for Certkiller A on Certkiller B.
B. Configure Certkiller B as a linked server on Certkiller A.
C. Configure Certkiller A as a linked server on Certkiller B.
D. Configure an HTTP endpoint for Certkiller B on Certkiller A.

Answer: B

Explanation: A linked server is used to execute queries over multiple SQL Servers. Certkiller B should be created as a linked server on Certkiller A as it is Certkiller A that will execute the query.

QUESTION 67
You are a database administrator for Certkiller .com. Users report that a SQL Server 2005

application is performing slowly. You check the SQL Server error log and discover that the server frequently runs out of memory to manage locks. The application designer informs you that dirty reads are acceptable. You need to resolve the problem indicated by the error log. What should you do?

A. Implement the Read Uncommitted isolation level.
B. Execute the sp_locks stored procedure.
C. Increase the maximum number of worker threads.
D. Configure the SQL Server max server memory setting to be a lower value.

Answer: A

Explanation: Transactions running at the READ UNCOMMITTED level do not issue shared locks to prevent other transactions from modifying data read by the current transaction. READ UNCOMMITTED transactions are also not blocked by exclusive locks that would prevent the current transaction from reading rows that have been modified but not committed by other transactions. When this option is set, it is possible to read uncommitted modifications, which are called dirty reads. Values in the data can be changed and rows can appear or disappear in the data set before the end of the transaction. This option has the same effect as setting NOLOCK on all tables in all SELECT statements in a transaction. This is the least restrictive of the isolation levels.

QUESTION 68
You are a database administrator for Certkiller .com. You administer a SQL Server 2005 computer. Customers send orders to your company over the Internet in an XML format. The XML is submitted as an input argument of a stored procedure. The stored procedure needs to produce a result set that includes all invalid product identification numbers (IDs) from the order. A company database contains a list of all valid product IDs. You need to ensure that the stored procedure can produce the desired result set. Your solution must provide the fastest possible query performance. What are two possible ways to achieve this goal? (Each correct answer presents a complete solution. Choose two.)

A. Write an OUTER JOIN query that includes a WHERE clause.Write the WHERE clause to remove valid product IDs.
B. Write a query that uses a NOT EXISTS() subquery.
C. Write a CROSS JOIN query that includes a WHERE clause.Write the WHERE clause to remove valid product IDs.
D. Write a query that uses the HASH JOIN query hint.

Answer: A,B

Explanation: An OUTER JOIN would produce a list of ID's in the XML order but not in the company database over valid ID's, a NOT EXISTS() subquery would give the same result.

QUESTION 69
You are a database administrator for Certkiller .com. The company uses a SQL Server 2005 database that includes a table named Inventory. The table contains a column named Price. A company policy states that the value in the Price column cannot be decreased by more than 10 percent in any single database operation. Updates to the Price column are made by various means, including by using ad hoc queries. You need to ensure that this company policy is enforced. What should you do?

A. On the Price column, create a foreign key constraint to a table that contains valid prices.
B. On the Price column, create a check constraint that requires a specified minimum value.
C. Create a trigger that rolls back changes to the Price column that violate company policy.
D. Create a stored procedure that disallows changes to the Price column that violate company policy.

Answer: C
A trigger would be the easiest way to implement this. When the trigger is fired just rollback to remove the change that violates the company policy.

QUESTION 70
You work as DBA at Certkiller .com. You administer two SQL Server 2005 computers named Certkiller A and Certkiller B. You were not responsible for the original installation of SQL Server on these computers. Yet you now must ensure that both computers are configured according to the following requirements. Administrators must be able to remotely connect to Certkiller A and Certkiller B for troubleshooting, even if the system becomes unresponsive. Certkiller A and Certkiller B must not be able to execute commands related to the operating system.Database access must be permitted by using Simple Object Access Protocol (SOAP) messages over HTTP. Certkiller A and Certkiller B must not be able to use stored procedures to send e-mail.Use of the OPENROWSET and OPENDATASOURCE Transact-SQL statements must not be permitted.Stored procedures for generating HTML must not be permitted. You need to configure Certkiller A and Certkiller B to meet these requirements. What should you do?

A. Use SQL Server Surface Area Configuration for Features.
B. Use SQL Server Configuration Manager to configure the appropriate server features on Certkiller A and Certkiller B.
C. Use SQL Server Surface Area Configuration for Services and Connections.
D. Use the sp_configure system stored procedure to configure the appropriate server features on Certkiller A and Certkiller B.

Answer: A

Explanation: Use SQL Server Surface Area Configuration to enable, disable, start, or stop the features, services, and remote connectivity of your SQL Server 2005

installations. You can use SQL Server Surface Area Configuration on local and remote servers.

QUESTION 71
You are a database administrator for Certkiller .com. The company uses a SQL Server 2005 application. Each night, data is imported into a database, and the database is then set to be read-only. During business hours, users run predefined and ad hoc queries. You need to monitor the servers performance during the day. What are two possible ways to achieve this goal? (Each correct answer presents a complete solution. Choose two.)

A. Use the Batches/sec performance counter.
B. Use the Full Scans/sec performance counter.
C. Use the Lock Waits/sec performance counter.
D. Use the Transactions/sec performance counter.
E. Use the Number of Deadlocks/sec performance counter.

Answer: A,B

Explanation: The Full Scans/Sec performance counter gives you the number of unrestricted full scans per second. These can be either base-table or full-index scans. The Batches/Sec performance counter gives you the number of batches per second that where completed successfully. Both these counters would give you the data needed to monitor the serves performance during daytime.

QUESTION 72
You work as DBA at Certkiller .com. You administer a SQL Server 2005 computer named Certkiller
A. All servers run Microsoft Windows Server 2003 and belong to a Microsoft Active Directory domain. The companys written security policy mandates strong passwords for all domain, local, and application accounts. The appropriate domain password policy has been deployed through the use of a Group Policy object (GPO). Many of the company's computers run MS-DOS-based or UNIX-based operating systems. These computers require varying levels of access to a database named Services on Certkiller
A. You need to ensure that these computers can access the Services database without violating the company's written security policy. What should you do?

A. Create one SQL Server logon account for all of the company's computers running MS-DOS or UNIX-based operating systems. Enable the Enforce password policy option for users' accounts. Provide the logon accounts with access to the Services database.
B. Configure a virtual directory through Internet Information Services (IIS) for access to Certkiller
A. Direct users to the virtual directory for data access.
C. Create a domain account for each of the company's users. Provide each domain account with access to Certkiller A and the Services database.
D. Create a SQL Server logon account for each of the company's users. Enable the

Enforce password policy option for each logon account. Provide each logon account with access to the Services database.
E. Create a local logon account on Certkiller A for each of the company's users. Provide each logon account with access to Certkiller A and the Services database.

Answer: D

Explanation: All UNIX and DOS users have to use SQL Server logon accounts in order to access the database. You do not want to have multiple users chairing one logon account. And you do not want the users to have a local logon account on the SQL Server.

QUESTION 73
You work as DBA at Certkiller .com. You administer a SQL Server 2005 computer named Certkiller
A. Certkiller A runs three instances of SQL Server. Your company's disaster recovery plan includes having the ability to connect to the dedicated administrative connection on each instance of SQL Server. While testing this ability, you discover that you can connect to the dedicated administrative connection on Certkiller As default instance. But you cannot connect to the dedicated administrative connection on the two other instances on Certkiller
A. You verify that the instances are running and that client applications are able to access them. You also verify that the dedicated administrative connection is enabled for all instances. You confirm that no other administrators are attempting to connect to any dedicated administrative connections on Certkiller
A. You need to ensure that you can connect to the dedicated administrative connection on all three instances. What should you do?

A. Start the SQL Server Browser service. Configure the service to start automatically.
B. Reconfigure the default instance to use an administrative port number other than 1434.
C. Use the Sqlcmd.exe tool to make the dedicated administrative connection.
D. Stop and restart the non-default instances of SQL Server.

Answer: A

Explanation: The DAC port is assigned dynamically by SQL Server during startup. When connecting to the default instance, the DAC avoids using a SQL Server Resolution Protocol (SSRP) request to the SQL Server Browser Service when connecting. It first connects over TCP port 1434. If that fails, it makes an SSRP call to get the port. If SQL Server Browser is not listening for SSRP requests, the connection request returns an error.

QUESTION 74
You are the database administrator for a SQL Server 2005 computer named Certkiller A. A user reports that his query has been running for a very long time and is still running.

You access the sys.dm_tran_locks dynamic management view (DMV). The relevant results are shown in the following table.

resource_ type	resource_ description	request _mode	request _status	request_ session_id	request_ owner_id
RID	1:1104:162	X	GRANT	56	104405
DATABASE		S	GRANT	56	0
DATABASE		S	GRANT	55	0
PAGE	1:1104	IS	GRANT	55	104445
PAGE	1:1104	IX	GRANT	56	104405
RID	1:1104:166	X	GRANT	56	104405
RID	1:1104:170	X	GRANT	56	104405
RID	1:1104:89	X	GRANT	56	104405
RID	1:1104:0	X	GRANT	56	104405
RID	1:1105:89	X	GRANT	56	104405
RID	1:1104:93	X	GRANT	56	104405
RID	1:1105:93	X	GRANT	56	104405
RID	1:1104:0	S	WAIT	55	104445
RID	1:1105:92	X	GRANT	56	104405

You need to find the user name of the user with the blocking connection. What are two possible ways to achieve this goal? (Each correct answer presents a complete solution. Choose two.)

A. Execute sp_who 56.
B. Select from the sys.syslockinfo compatibility view and locate spid 55.
C. Use the Activity Monitor in Microsoft SQL Management Studio and locate process 56.
D. Use the Activity Monitor in Microsoft SQL Management Studio and locate process 55.
E. Select from the sys.syslockinfo compatibility view and locate spid 56.
F. Execute sp_who 55.

Answer: A,C
Explanation The sp_who provides information about current users and processes in an instance of the Microsoft SQL Server Database Engine. The information returned can be filtered to return only those processes that are not idle. Use the Activity Monitor component of Microsoft SQL Server Management Studio to get information about users connections to the Database Engine and the locks that they hold.

QUESTION 75
DRAG DROP
You work as DBA at Certkiller .com. You administer a SQL Server 2005 computer named Certkiller
A. Certkiller A runs Windows Server 2003 and hosts a database named DB1.
DB1 is used for a critical, enterprise-level application that all sales representatives in the company use. The database is currently 87 GB and grows 5 GB each quarter. Certkiller A recently experienced a hard disk failure that resulted in significant system downtime.
You purchase two new hardware RAID controllers named Controller1 and Controller2.
You also purchase five new hard disk drives to try to prevent reoccurrences of

hardware-related downtime. The new hard disk drives are configured as shown in the following table.

Disk drive Size RPM
Disk1 100 GB 7200
Disk2 100 GB 7200
Disk3 100 GB 7200
Disk 460 GB 7200
Disk5 60 GB 7200

The operating system is configured for redundancy. You decide to build a RAID5 array on Controller1 and a RAID1 array on Controller2.

You need to ensure that DB1 continues to perform in the event of a disk failure.

What should you do?

Answer:

Explanation:

RAID-5 requires at least 3 disks. The database files should be put on the RAID-5 array. It is faster.

RAID-1, mirroring, uses 2 disks. Transaction log files are sequential and well fit for mirrored disks.

QUESTION 76

You are a database administrator for Certkiller .com. A database on one of the company's

SQL Server 2005 computers stores transaction information for the company's Web-based order system. The database is configured to use the full recovery model. Your company receives very few orders between the hours of 19:00 and 04:00. Your maximum acceptable risk for data loss is one hour. Database backups must be performed as quickly as possible. You need to develop a maintenance plan to manage this risk. What should you do?

A. Configure a Back Up Database task to do a full backup of the database every day at 19:00. Configure a second Back Up Database task to do differential backups at 09:00 and 14:00. Configure a third Back Up Database task to do transaction log backups every hour.
B. Configure a Back Up Database task to do a full backup of the database every hour. Configure a Check Database Integrity task to run every hour.
C. Configure a Back Up Database task to do a full backup of the database every day at 19:00. Configure a second Back Up Database task to do differential backups at 09:00 and 14:00. Configure a Check Database Integrity task to run every hour.
D. Configure a Back Up Database task to do a full backup at 09:00 and 14:00. Configure a second Back Up Database task to do transaction log backups every hour.

Answer: A

Explanation: It is not recommended to run a full backup during business-hours in this case. Full backups should be scheduled to between 19:00 and 04:00. Checking Database Integrity every hour will not help to recover the data if the database crashes. The only alternative that would work is the Full backup at 19:00 and then transaction log backups every hour. Doing differential backups at 9 and 14 will help.

QUESTION 77
You work as DBA at Certkiller .com. You administer a Microsoft Windows Server 2003 computer named Certkiller
A. Certkiller A runs SQL Server 2005 and is a member of a
Microsoft Active Directory domain named Contoso.com. The domain is configured with all of the default settings. Several members of the information security team have requested access to Certkiller
A. The information security team uses the Microsoft
Windows XP Professional, Linux, and Macintosh operating systems to perform vulnerability assessments. The information security team members ask you to create two new logon accounts for their use. They would like the logon accounts to have the following user names and passwords: User name\password for first account: pentest\P@ssw0rdUser name\password for second account: hacktest\password You need to provide the information security team with the requested access to Certkiller A. Which Transact-SQL script should you use?

A. CREATE LOGIN pentest
WITH PASSWORD = 'P@ssw0rd'

CREATE LOGIN hacktest
WITH PASSWORD = 'password',CHECK_POLICY = OFF
B. CREATE LOGIN pentest
WITH PASSWORD = 'P@ssw0rd'
CREATE LOGIN hacktest
WITH PASSWORD = 'password'[HASHED]
C. CREATE LOGIN pentest
WITH PASSWORD = 'P@ssw0rd'
CREATE LOGIN hacktest
WITH PASSWORD = 'password'
D. CREATE LOGIN [CONTOSO\pentest]
FROM WINDOWS
CREATE LOGIN [CONTOSO\hacktest]
FROM WINDOWS

Answer: A
Syntax:
CREATE LOGIN login_name { WITH <option_list1> | FROM <sources> }
<sources> ::=
WINDOWS [WITH <windows_options> [,...]]
| CERTIFICATE certname
| ASYMMETRIC KEY asym_key_name
<option_list1> ::=
PASSWORD = 'password' [HASHED] [MUST_CHANGE]
[, <option_list2> [,...]]
<option_list2> ::=
SID = sid
| DEFAULT_DATABASE = database
| DEFAULT_LANGUAGE = language
| CHECK_EXPIRATION = { ON | OFF}
| CHECK_POLICY = { ON | OFF}
[CREDENTIAL = credential_name]
<windows_options> ::=
DEFAULT_DATABASE = database
| DEFAULT_LANGUAGE = language

QUESTION 78
DRAG DROP
You are a database administrator for Certkiller .com. You are configuring a linked server named Certkiller 2 on a local server named Certkiller 1. You need to configure the options so that any administrator who is a member of the LocalDBAdmins group can connect to the linked server by using the remote logon of DBAdmin with a password of DBAdmin!1. All other users should be able to connect by using the remote logon of Guest with a password of Guest!1. What should you do?
To answer, drag the appropriate security group, login, or password to the correct location or locations in the answer area.

Select from these
LocalDBAdmins
DBAdmin
DBAdmin!1
Guest
Guest!1
New Linked Server
Select maps
Genertal
Security
Server Options
Script
Help
Local server login to remote server login mappings:
Local Login
Impersonate
Remote User
Remote Password
Place here
Place here
Place here
Place here
Place here
Place here
Add
Remove
Connection
Server:
XPL
Connection:
TRAN\Administrator
View connection properties
For a login not defined in the list above, connections will:
Not be made
Be made without using a security context
Be made using the login's current security context
Be made using this security context:
Progress
Ready
Remote login:
With password:
Place here
Place here
OK
Cancel

Answer:

QUESTION 79

You are a database administrator for Certkiller .com. A company vendor provides product inventory data by using a Web service. Your company needs to create several reports based on this data. You need to ensure that the reports have access to the necessary data. Your solution must provide the best reporting performance. What should you do?

A. Create a SQL Server Integration Services (SSIS) package that uses a Web service task to retrieve the data and store it in the database. Create reports that utilize the data in the database.
B. Create Reporting Services reports that retrieve data directly from the vendor Web service.
C. Create Reporting Services reports that retrieve data by using XPath queries.
D. Create a SQL Server Integration Services (SSIS) package that uses an FTP task to retrieve the data and store it in the database. Create reports that utilize the data in the database.

Answer: A

Explanation: The Web Service task executes a Web service method. You can use the Web Service task to for example writing to a variable the values that a Web service method returns. For example, you could obtain the highest temperature of the day from a Web service method, and then use that value to update a variable that is used in an expression that sets a column value.

QUESTION 80
You are a database administrator for Certkiller .com. Each night, you perform full backups of your SQL Server 2005 computer. During business hours, you perform hourly transaction log backups. You rebuild database indexes each night. You need to modify your backup strategy. You must ensure that the database recovers to a new server as quickly as possible. What should you do?

A. Schedule an additional transaction log backup to run after the nightly index is rebuilt.
B. Schedule a marker to be added to the transaction log before the nightly index is rebuilt.
C. Schedule the full backups to run after the nightly index is rebuilt.
D. Schedule the full backup to run before the nightly index is rebuilt. Schedule a differential backup to run after the nightly index is rebuilt.

Answer: C

Explanation: If the index rebuild is done after the full backup, the transaction log backups will be unnecessary large.

QUESTION 81
You work as DBA at Certkiller .com. You administer a SQL Server 2005 computer named Certkiller
A. Backups of all system databases are performed on Saturday nights. Backups of all user databases are performed on Sunday nights. All backups are stored in an off-site facility. Certkiller A unexpectedly turns off due to a power outage. When Certkiller A is brought back online, the SQL Server service fails to start. You view the SQL Server error log as shown in the exhibit. (Click the Exhibit button.) You need to return Certkiller A to working order as quickly as possible. What should you do first?

A. Restore all of the user databases from backup.
B. Insert the SQL Server 2005 installation CD and run the setup utility to reinstall the default instance.
C. Restore all of the system databases.
D. Run Setup.exe from a command line and specify a rebuild of the master database.

Answer: D

Explanation: The log indicates that the master database (master.mdf) can not be found. Run Setup.exe to rebuild, verify, and repair a SQL Server instance, and rebuild the system databases. This procedure is most often used to rebuild the master database for a corrupted installation of SQL Server.

QUESTION 82
You are a database administrator for Certkiller .com. You notice that the following Transact-SQL query is performing very slowly.
SELECT VideoTitle, UpcNum, RetailPrice, ReleaseDate
FROM Srvideo.VideoTitle WITH (INDEX(0))
WHERE ReleaseDate BETWEEN '20050401' AND '20050510'
There is a clustered index on the VideoTitle column. There is a nonclustered index on the ReleaseDate column that includes the UpcNum and RetailPrice columns. When you query the sys.dm_db_index_physical_stats dynamic management function (DMF) or the VideoTitle table, the avg_fragmentation_in_percent is 10 percent. The graphical execution plan for the slow query is shown in the exhibit.

You need to ensure that the query performs quickly. What should you do?

A. Remove the query hint from the query.
B. Re-create the index on only the ReleaseDate column.
C. Rebuild all indexes on the VideoTitle table.
D. Change the query hint to force the optimizer to force a clustered index seek or a scan.

Answer: A

Explanation: The WITH (INDEX(0)) is not necessary in this query.

QUESTION 83
You are a database administrator for Certkiller .com. You migrate several SQL Server 2000 Data Transformation Services (DTS) packages to a 64-bit version of SQL Server 2005 Standard Edition. After migrating the packages, you notice that they do not run. You verify that the packages run on a 32-bit version of SQL Server 2005 Standard Edition. You need to ensure that the packages run. You must minimize the amount of additional development time required. What should you do?

A. Run the packages by using the Dtsrun.exe command-line utility.
B. Rewrite the packages by using the 64-bit version of SQL Server 2005 Standard Edition Server Integration Services (SSIS).
C. Run the packages in the SQL Server 2000 DTS runtime.
D. Configure the packages to run in 32-bit mode.

Answer: D

Explanation: a DTS package created on a 32-bit architecture will not automatically

run in an 64-bit architecture. You have to "emulate" a 32-bit architecture for the DTS package to run in.

QUESTION 84
You work as DBA at Certkiller .com. You administer a SQL Server 2005 computer named Certkiller
A. Certkiller A has recently been upgraded from two to eight processors. The Certkiller A configuration is summarized in the following table.

Max degree of parallelism	0
Cost threshold for parallelism	20
Affnity mask	1
AWE enabled	1

You need to optimize Certkiller A so that longer running queries can run parallel plans. What should you do?

A. Change the AWE enabled setting to 0.
B. Change the max degree of parallelism to 1.
C. Change the cost threshold for parallelism to 0.
D. Change the affinity mask to 0.

Answer: D

Explanation: To carry out multitasking, Microsoft Windows 2000 and Windows Server 2003 sometimes move process threads among different processors. To enable the enable one or more processors, use the affinity mask option.

QUESTION 85
You are a database administrator for Certkiller .com. The company's financial forecasting application uses a SQL Server 2005 database that enables business users to run both ad hoc and predefined queries. You suspect that some queries consume an excessive amount of server resources. You need to identify which queries consume the most resources. You want to achieve this goal as quickly as possible. What should you do?

A. Use the sqldiag utility.
B. Use the sys.dm_exec_query_stats dynamic management view (DMV).
C. Use the DBCC INPUTBUFFER command.
D. Use the SHOWPLAN session option.

Answer: B

Explanation: Sys.dm_exec_query_stats returns aggregate performance statistics for cached query plans. The view contains one row per query plan and the lifetime of the row is tied to the plan itself. When a plan is removed from the cache, the corresponding row is eliminated from this view.

QUESTION 86
You are the database administrator of a SQL Server 2005 computer named Certkiller A. The following query is run frequently.

```
SELECT E.EmployeeID, C.FirstName + ' ' + C.LastName AS FullName , E.Title, E.VacationHours,
E.SickLeaveHours, A.AddressLine1, A.AddressLine2, A.City, A.PostalCode, S.[Name] AS State
FROM HumanResources.Employee AS E
 INNER JOIN HumanResources.EmployeeAddress AS EA
ON E.EmployeeID = EA.EmployeeID
INNER JOIN Person.Address AS A
ON A.AddressID = EA.AddressID
INNER JOIN Person.Contact AS C
ON C.ContactID = E.ContactID
INNER JOIN Person.StateProvince AS S
 ON S.StateProvinceID = A.StateProvinceID
ORDER BY C.LastName
```

All tables referenced in the query are read-intensive with very few inserts and updates. You cannot change existing objects in the database. You can add new objects to the database. You need to optimize the performance of the query. What should you do?

A. Create an indexed view that contains all of the columns that are used in the query.
B. Create a partitioned table that contains all of the columns that are used in the query.
C. Create a view that contains all of the columns that are used in the query.
D. Alter the current indexes by setting the FILLFACTOR option to 50.

Answer: A

Explanation: By creating a indexed view of the tables needed you don't need to access the tables themselves every time you execute the query and therefore you get a better performance on the query.

QUESTION 87
You are a database administrator for Certkiller .com. Your company has 10 SQL Server 2005 computers in a distributed environment. The SQL Server computers each subscribe to a transactional replication publication. Company policy defines service level agreements (SLAs) for maximum replication latency. You need to verify that the SLAs are being met. What should you do?

A. Ping each subscriber from the server that hosts the publication database. Record the response time for each.
B. Record the time stamps on replication-related events in the application event log of each subscriber.
C. Use tracer tokens to measure and record latency of each subscriber.
D. Create and execute a stored procedure that verifies the data on each subscriber. Record the execution time of the stored procedure.

Answer: C
Explantion: Transactional replication provides the tracer token feature, which provides a convenient way to measure latency in transactional replication topologies and to validate the connections between the Publisher, Distributor and Subscribers. A token (a small

amount of data) is written to the transaction log of the publication database, marked as though it were a typical replicated transaction, and sent through the system, allowing a calculation of:
- How much time elapses between a transaction being committed at the Publisher and the corresponding command being inserted in the distribution database at the Distributor.
- How much time elapses between a command being inserted in the distribution database and the corresponding transaction being committed at a Subscriber.

QUESTION 88
You are a database administrator for Certkiller .com. The company uses a SQL Server 2005 computer that runs Reporting Services. Reporting Services is used to produce hundreds of reports each day. You discover that the ReportServerTempDB database is growing. You need to minimize the size of the ReportServerTempDB database. What should you do?

A. Minimize the use of report snapshots in the reports.
B. Decrease the time between transaction log backups of the database.
C. Delete report snapshot history each week.
D. Minimize the use of session caching in the reports.

Answer: D

QUESTION 89
You are a database administrator for Certkiller .com. You run SQL Server Profiler by using the SP:Recompile event class. You notice a large number of recompiles occurring. You need to identify the possible cause of the large number of recompiles. What is the most likely cause of the problem?

A. A database administrator created one new stored procedure.
B. Ad hoc batches are not being retrieved from the procedure cache.
C. The sp_executesql batches are not being retrieved from the procedure cache.
D. A database administrator executed UPDATE STATISTICS statements on all tables that are referenced by the most common stored procedures.

Answer: D

Explanation: The SP:Recompile event class indicates that a stored procedure, trigger, or user-defined function has been recompiled. The most probable cause for a massive recompiles occurring is that someone has issued an UPDATE STATISTICS command.

QUESTION 90
You are a database administrator for Certkiller .com The company uses a SQL Server 2005 database that contains a table named Production.Product. There are more than 40 columns in the table. The most common queries are shown in the following Transact-SQL statements.

```
--QUERY 1
SELECT [Name], [ProductLine], [ListPrice], [Class], [Style]
FROM [Production].[Product]
WHERE [ProductLine] = 'T'
--QUERY 2
SELECT * FROM [Production].[Product]
ORDER BY [Name]
```

You need to choose the best indexes to support the most common queries to the Production.Product table while minimizing the space required for the indexes. Which two indexes should you use? (Each correct answer presents part of the solution. Choose two.)

A. Create a clustered index on the Name column.
B. Create a nonclustered index on the ProductLine column and include the ListPrice, Class and Style columns.
C. Create a nonclustered index on the Name column.
D. Create a clustered index on the ProductLine, ListPrice, Class and Style columns.
E. Create a nonclustered index on the ProductLine, ListPrice columns.

Answer: A,B

Explanation: The name is used frequently in a way that would benefit from a clustered index. (ORDER BY [Name]). Next you se in the QUERY 1 that ListPrice, Class, and Style is also used frequently but without an ORDER BY clause attached to them. These would benefit from a nonclustered index on the ProductLine column including the other columns.

QUESTION 91
You are a database administrator for Certkiller .com. You are responsible for 20 SQL Server 2005 computers. These computers are monitored by other administrators who are required to ensure that query response times meet company service level agreements (SLAs). You need to provide these administrators with a consistent way of monitoring query response times on the servers. What should you do?

A. Create SQL Server Profiler templates that include query start times and end times. Distribute these templates to the database administrators.
B. Write a query that queries the sys.dm_db_partition_stats dynamic management view (DMV). Distribute this query to the administrators.
C. Create an XML document that contains the event and column names of the query response times that must be captured in SQL Server Profiler. Distribute the XML file to the database administrators.
D. Instruct the administrators to use System Monitor to monitor cache hit ratio statistics.

Answer: A

Explanation: You can use SQL Server Profiler to create templates that define the event classes and data columns to include in traces. After you define and save the

template, you can run a trace that records the data for each event class you selected.
You can use a template on many traces; the template is not itself executed.

QUESTION 92
You work as DBA at Certkiller .com. You administer a SQL Server 2005 computer named Certkiller B. Certkiller B runs a single SQL Server instance. You manage Certkiller B from an administrative workstation named DBA1. Certkiller B intermittently fails to respond to user queries. Currently, it is not responding to your connection through SQL Server Management Studio. You need to correct the problem. What should you do?

A. Log on interactively to Certkiller B as an administrator. Establish a dedicated administrator connection to the SQL Server instance.
B. Log on to Certkiller B by using the Administrator logon account that is built into Microsoft Windows.
C. Log on to the SQL Server instance on Certkiller B by using the sa logon account that is built into SQL Server.
D. Restart the SQL Server Browser on Certkiller B.

Answer: A

Explanation: SQL Server 2005 provides a special diagnostic connection for administrators when standard connections to the server are not possible. It allows an administrator to access SQL Server to execute diagnostic queries and troubleshoot problems even when SQL Server is not responding to standard connection requests. This dedicated administrator connection (DAC) is available and supported through the command-line interface, sqlcmd, using a special administrator switch (-A).

QUESTION 93
You work as DBA at Certkiller .com. You administer a SQL Server 2005 computer named Certkiller
A. You create a security template that disables unnecessary services. The template is appropriate only for Certkiller
A. You need to ensure that the security template is applied to Certkiller
A. Your solution must ensure that the template automatically overrides any manual configuration changes made by other administrators within an hour. What should you do?

A. Configure Task Scheduler to import the security template by using Secedit.exe. Configure the task to run every half hour.
B. Configure Task Scheduler to run the Microsoft Baseline Security Analyzer tool every half hour.
C. Use the Local Security Policy editor to import the security template into the Local Security Policy object.
D. Use the SQL Server Surface Area Configuration tool to import the security template.

Answer: A

Explanation: The Baseline Security Analyzer tool only analyzes the current security settings on a computer. If you import the template with the Local Security Policy editor it will not guarantee that no modifications are done to the computer after the import. SQL Surface Area Configuration tool only implies to SQL specific settings. By importing the template every 30 minutes with Secedit.exe and a Scheduled task you ensure that any modifications will be undone within 30 minutes.

QUESTION 94
You are a database administrator for Certkiller .com. The company uses a SQL Server 2005 application. Users report that the application sometimes responds very slowly for several minutes at a time. This problem occurs throughout the day and typically takes place after a large number of database rows are deleted. The database properties are configured as shown in the exhibit. (Click the Exhibit button.) You need to ensure that this performance problem does not recur. What should you do?

Max degree of parallelism	0
Cost threshold for parallelism	20
Affinity mask	1
AWE enabled	1

A. Set Page Verify to None.
B. Set ANSI Warnings Enabled to True.
C. Configure the database so that the AUTO-SHRINK option is disabled.
D. Configure the database to be the simple recovery model.

Answer: C

Explanation: When a large number of rows is deleted the SQL Server will try to AUTO-SHRINK the database and will temporarily respond slowly due to the increased workload.

QUESTION 95
You are a database administrator for Certkiller .com. You are configuring a new SQL Server 2005 computer. The computer contains five hard disks. You need to ensure that the server can continue functioning in the event that a single hard disk fails. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Configure a non-RAID volume that uses one hard disk.Install Microsoft Windows Server 2003 and SQL Server on the non-RAID volume.
B. Configure a RAID-1 volume that uses two hard disks.Install Microsoft Windows Server 2003 and SQL Server on the RAID-1 volume.
C. Configure a RAID-5 volume that uses four hard disks.Place the transaction log and data files on the RAID-5 volume.

D. Configure a RAID-5 volume that uses three hard disks.Place the transaction log and data files on the RAID-5 volume.
E. Configure a RAID-0 volume that uses three hard disks.Place the transaction log and data files on the RAID-0 volume.

Answer: B,D

Explanation: By creating a mirrored disk set (RAID-1) for the OS and the SQL Server installation you ensure that there is a copy of the installation if a hard disk error occurs. By putting the data and transaction logs on a Striped set with parity (RAID-5) you ensure that the data is available even if one of the three disks in the RAID-5 configuration crashes. RAID-0 or non-RAID volumes provides no fault tolerance. And configuring a RAID-5 over 4 disks would mean that you have to use one non-RAID volume.

QUESTION 96
You work as DBA at Certkiller .com. You administer a SQL Server 2005 computer named Certkiller
A. The SQL Server service and the SQL Server Agent service are configured to start automatically. You need to configure Certkiller A to audit all user names and application names that attempt to access information from Certkiller
A. Certkiller A must
perform auditing at all times, and the results must be kept for 10 years. What should you do?

A. Create a SQL Server Agent job to run the SQL Trace stored procedure. Configure the job to start when the SQL Server Agent service starts.
B. Set the Login auditing setting to Both failed and successful logins.
C. Disable the C2 Audit Tracing setting on the server properties.
D. Configure the server authentication mode as SQL Server and Windows Authentication mode.

Answer: A

Explanation: Microsoft SQL Server provides Transact-SQL system stored procedures to create traces on an instance of the SQL Server Database Engine. These system stored procedures can be used from within your own applications to create traces manually, instead of using SQL Server Profiler. To ensure that the trace is always running start the trace as a SQL Server Agent job configured to start when SQL Server Agent start (which should be when the operative system starts)

QUESTION 97
You work as DBA at Certkiller .com. You administer a SQL Server 2005 computer named Certkiller
A. Users report that all client applications that connect to Certkiller A are

responding slowly. You discover that Certkiller As CPU and memory utilization is low and that disk activity is low. You need to identify the cause of the performance problem. What should you do?

A. Use System Monitor to examine Certkiller As cache hit ratio.
B. Examine the sys.dm_db_index_physical_stats dynamic management function (DMF).
C. Use Task Manager to examine utilization of Certkiller As network adapter.
D. Examine the sys.dm_db_partition_stats dynamic management view (DMV).

Answer: C

Explanation: The Task Manager will show you the current status of all network adapters and their workload. If the Server experiences a lot of network activity that could cause the applications to respond slowly.

QUESTION 98
You need to design a stored procedure to import the registry information from AppServer1. You want to accomplish this goal without allowing the execution of unmanaged code. What should you do?

A. Use a regular stored procedure that calls xp_cmdshell.
B. Use an extended stored procedure.
C. Use a CLR stored procedure with the SAFE permission set.
D. Use a CLR stored procedure with the EXTERNAL_ACCESS permission set.
E. Use a CLR stored procedure with the UNSAFE permission set.

Answer: D

Explanation: The set of CAS permissions granted to assemblies by the SQL Server host policy level is determined by the permission set specified when creating the assembly. There are three permission sets: SAFE, EXTERNAL_ACCESS and UNSAFE.
SAFE: Only internal computation and local data access are allowed. SAFE is the most restrictive permission set. Code executed by an assembly with SAFE permissions cannot access external system resources such as files, the network, environment variables, or the registry.
EXTERNAL_ACCESS: SAFE, with the additional ability to access external system resources such as files, networks, environmental variables, and the registry.
UNSAFE: UNSAFE allows assemblies unrestricted access to resources, both within and outside SQL Server. Code executing from within an UNSAFE assembly can call unmanaged code.

QUESTION 99
You are the administrator of a SQL Server 2005 computer named SQL1. SQL1 contains two user databases. SQL1 also contains the publisher database for a transactional replication publication. Every night, a full backup is made of all databases. Transaction

log backups are made twice each day for both user databases. SQL1 is configured to use SQL Server and Windows authentication. Client applications connect by using SQL Server login accounts. The disk subsystem on SQL1 experiences a complete failure. You replace the failed hardware, reinstall Microsoft Windows Server 2003, and reinstall SQL Server 2005. You need to ensure that SQL1 is operating normally as quickly as possible and with a minimum loss of data. Your solution must make the user databases available to client applications as soon as those databases are restored. What should you do first?

A. Restore all of the system databases.
B. Restore the two user databases only.
C. Restore the publisher database only.
D. Re-create the transactional replication publication.

Answer: A

Explanation: If you choose to perform any of the other options you miss all login information used to connect to any of the databases.

QUESTION 100
You are a database administrator for Certkiller .com. Your SQL Server 2005 computer contains a user database named Products. You use SQL Server Integration Services (SSIS) packages to export data from the Products database to a text file. You use FTP to send the text file to your company's trading partners. You need to ensure that you can recover your SSIS packages if a disaster occurs. What should you do?

A. Back up the Products database.
B. Back up the msdb database.
C. Configure your server to use the full recovery model.
D. Configure your server to use the bulk-logged recovery model.

Answer: B

Explanation: The msdb database is used by SQL Server, SQL Server Management Studio, and SQL Server Agent to store data, including scheduling information and backup and restore history information.

QUESTION 101
You are a database administrator for Certkiller .com. You administer a SQL Server 2005 computer that contains a database named Customers. The database includes a table named CustInfo. The table includes an identity column named CustID and an nvarchar column named CustName. Company policy requires that rows containing duplicate CustName values be removed from the CustInfo table once each year. However, rows cannot be removed from the CustInfo table until they have been manually examined and verified as being duplicates. You need to provide a way to identify potential duplicate rows for manual examination. You need to accomplish this goal by using the least amount of administrative effort. What should you do?

A. Create a trigger for the CustInfo table that rolls back INSERT queries that contain duplicate data.
B. Use a SELECT INTO query that includes GROUP BY and HAVING clauses to create a new table that contains duplicate rows from the CustInfo table.
C. Create a new unique index on the CustName column. Specify IGNORE_DUP_KEY = ON when creating index.
D. On the CustName column, create a foreign key constraint that references a distinct list of CustName values.

Answer: B.

QUESTION 102
You are a database administrator for a financial services company. You are configuring replication between two SQL Server 2005 computers named SQL1 and SQL2. SQL1 stores real-time transactional data. SQL2 is used for reporting. SQL2 must not change data on SQL1. The publication contains a large amount of data. You need to ensure that during replication, data is copied from SQL1 to SQL2 in as near real-time as possible to ensure accurate reporting. You need to ensure that this data is copied securely. What should you do?

A. Configure snapshot replication on SQL1. Configure SQL2 as a standard subscriber for a standard subscription.
B. Configure merge replication on SQL1. Configure SQL2 as a standard subscriber for an updateable subscription.
C. Configure transactional replication on SQL1. Configure SQL2 as a standard subscriber for an updateable subscription.
D. Configure transactional replication on SQL1. Configure SQL2 as a standard subscriber for a standard subscription.

Answer: D

Explanation: Transactional replication typically starts with a snapshot of the publication database objects and data. As soon as the initial snapshot is taken, subsequent data changes and schema modifications made at the Publisher are usually delivered to the Subscriber as they occur (in near real time). The subscription should not be configured as updatable by the subscriber as SQL-2 is not allowed to change the data.

QUESTION 103
You are the administrator of a SQL Server 2005 computer named SQL1. SQL1 contains two databases named Production and DW. You create a new database named Staging. The Staging database temporarily stores and manipulates data as the data moves from the Production database into the DW database. You need to ensure that tables are not removed from the Staging database. You also need to ensure that any attempts to remove tables are logged. Other databases must not be affected by your solution. What should

you do?

A. Create a DML trigger on each table to prevent deletion of data.
B. Create an event notification to fire when the TRUNCATE TABLE Transact-SQL statement is submitted to the Staging database.
C. Create a DDL trigger that uses the ON DATABASE parameter for the Staging database.
D. Create a DDL trigger that uses the ON ALL SERVER parameter.

Answer: C

Explanation: A DDL trigger created with the ON DATABASE parameter will fire whenever the T-SQL language event configured to fire the DDL trigger occurs anywhere in the DATABASE.

QUESTION 104
You are a database administrator for Certkiller .com. You have a Data Transformation Services (DTS) package stored in SQL Server 2000 that you want to migrate into SQL Server 2005. The DTS package uses complex Microsoft Visual Basic Scripting Edition (VBScript) to dynamically configure precedence constraints. You run the SQL Server 2005 Package Migration Wizard, which fails to convert the package from SQL Server 2000 to SQL Server 2005. You need to ensure that the DTS package runs in SQL Server 2005. You must get the package running as quickly as possible. What should you do?

A. Manually recreate the SQL Server 2000 Data Transformation Services (DTS) package as a SQL Server Integration Services (SSIS) package.
B. Configure the SQL Server 2000 Data Transformation Services (DTS) task to not use precedence constraints. Then, run the SQL Server 2005 Package Migration Wizard again.
C. Ensure that the SQL Server 2000 Data Transformation Services (DTS) package is wrapped in an Execute DTS 2000 Package task.
D. Run the SQL Server 2005 Package Migration Wizard. If the upgrade is not successful, run a Transfer SQL Server Objects task.

Answer: C

Explanation: The Execute DTS 2000 Package task runs packages that were developed by using the SQL Server 2000 tools. By using this task, you can include SQL Server 2000 DTS packages in SQL Server 2005 data transformation solutions. A package can include both Execute Package tasks and Execute DTS 2000 Package tasks, because each type of task uses a different version of the run-time engine.

QUESTION 105
You are a database administrator for Certkiller .com. You discover that a SQL Server 2005 application performs slowly when you execute the following query. SELECT * FROM Orders WHERE OrderStatus = 'InProgress' The application executes this query as an ad hoc query. This query usually executes much more quickly. The OrderStatus

column is indexed. Only a small number of the rows contain the value InProgress. However, the OrderStatus column index is not being used, even though the index is optimal for this query. You need to improve the performance of this query. However, you cannot modify the application that executes the query. Your solution must also minimize the impact on end users. What should you do?

A. Update the statistics on the index.
B. Rebuild the index by using a FILLFACTOR of 10 percent.
C. Recreate the index to include all of the columns in the table.
D. Create an indexed view of the Orders table.

Answer: A

Explanation: If lots of data in an indexed column has been added, changed, or removed (that is, if the distribution of key values has changed), or the table has been truncated by using the TRUNCATE TABLE statement and then repopulated, use UPDATE STATISTICS.

QUESTION 106
You are a database administrator for Certkiller .com. Users report that a SQL Server 2005 application is performing slowly. You need to identify the queries that are experiencing slow performance due to blocking. What should you do?

A. In a SQL Trace log file, look for queries that have low duration values and high read and write values.
B. In a SQL Trace log file, look for queries that have high duration values and low read and write values.
C. In a query execution plan, look for queries that have a large number of table scans.
D. In a query execution plan, look for queries that have missing or out-of-date statistics.

Answer: B

Explanation: A high duration value in combination with low read and write values indicates that the query has trouble finding the data it is searching for and uses most of the time just to search for the location of the data.

QUESTION 107
You are a database administrator for Certkiller .com. Your company uses a SQL Server 2005 application. The application executes a query that returns three columns of the nvarchar data type and one column of the XML data type. The query uses a WHERE clause that includes all three of the nvarchar columns. The table contains 5 million rows, and the query returns 50,000 rows. You need to improve the performance of the query. What should you do?

A. Create a composite index on the three nvarchar columns, and specify INCLUDE for the XML column.

B. Create a primary XML index on the XML column.
C. Create statistics on the nvarchar columns.
D. Create a view that includes only the four columns that the query uses.

Answer: A

Explanation: By specifying INCLUDE for the XML column you add the nonkey column to the leaf level of the nonclustered index.

QUESTION 108
You are the administrator of a SQL Server 2005 computer named SQL1. Users report that SQL1 is not responsive. You discover that SQL1s network segment is heavily utilized. You cannot connect to SQL1 by using the graphical SQL Server administrative tools. You suspect that SQL1 is the target of a Denial of Service (DoS) attack. You need to connect to SQL1 to examine the current activities. What should you do first?

A. Restart SQL1.
B. Stop and restart the SQL Server service on SQL1.
C. Use the dedicated administrative connection to connect to SQL1.
D. Use SQL Server Profiler to connect to SQL1.

Answer: C

Explanation: SQL Server 2005 provides a special diagnostic connection for administrators when standard connections to the server are not possible. It allows an administrator to access SQL Server to execute diagnostic queries and troubleshoot problems even when SQL Server is not responding to standard connection requests. This dedicated administrator connection (DAC) is available and supported through the command-line interface, sqlcmd, using a special administrator switch (-A).

QUESTION 109
You are the administrator of a SQL Server 2005 computer named SQL1. SQL1 stores confidential customer information in a database named Customers. The company's written security policy states that transmission of customer data between client computers and servers must always take place in a manner that supports authentication, non-repudiation, and encryption. Client computers that do not support the company's written security policy are denied data access. You need to ensure that the Customers database is in compliance with the company's security policy. What should you do?

A. Install a certificate on SQL1 from a Trusted Root Certification Authority.
B. Configure SQL1 to use a self-signed certificate.
C. Configure the local security policy of SQL1 to use the IPSec Server policy.
D. Encrypt all tables in the Customers database.
E. Enable C2 auditing on SQL1.

Answer: A

Explanation: Microsoft SQL Server 2005 can use Secure Sockets Layer (SSL) to encrypt data transmitted across a network between an instance of SQL Server and a client application. The SSL encryption is performed within the SQL Native Client Net-Library and applies to all inter-computer protocols supported by SQL Server 2005. SSL encryption works with instances of SQL Server running on a computer that has been assigned a certificate from a public certification authority. The computer on which the application is running must be configured to trust the certificate's root authority. (Encryption with a self-signed certificate is possible and described in the next section, but a self-signed certificate offers only limited protection.)

QUESTION 110
You are a database administrator for Certkiller .com. You manage 10 SQL Server 2005 computers. The computers reside on an isolated portion of the company's network that has been restricted from accessing the Internet. Only intranet client computers have access to the SQL Server 2005 computers. You need to audit the SQL Server computers to identify only the missing operating system or SQL Server patches, hotfixes, and service packs. What should you do?

A. From a client computer on the network, run the Microsoft Baseline Security Analyzer (MBSA) to scan the IP address of the 10 SQL Server 2005 computers.Configure MBSA to check for Microsoft Windows vulnerabilities, SQL Server vulnerabilities, and security updates against Microsoft Windows Update.
B. From a client computer on the network, run the Microsoft Baseline Security Analyzer (MBSA) to scan the IP address of the 10 SQL Server 2005 computers.Configure MBSA to check for SQL Server vulnerabilities and security updates against a network Windows Server Update Services (WSUS) server.
C. From a client computer on the network, run the Microsoft SQL Server Best Practices Analyzer.
D. On each SQL Server computer, run the SQL Server Surface Area Configuration for Services and Connections.

Answer: B

Explanation: MBSA is a tool that scans for common insecure configurations in several Microsoft products including SQL Server and Microsoft SQL Server. It can be run locally or over a network. It tests SQL Server installations for problems such as:
Too many members of the sysadmin fixed server role.
Granting of right to create CmdExec jobs to roles other than sysadmin.
Blank or trivial passwords.
Weak authentication mode.
Excessive rights granted to the Administrators group.
Incorrect access control lists (ACLs) on SQL Server data directories.

Plaintext sa password in setup files.
Excessive rights granted to the guest account.
SQL Server running on a system that is also a domain controller.
Improper configuration of the Everyone group, providing access to certain registry keys.
Improper configuration of SQL Server service accounts.
Missing service packs and security updates.

QUESTION 111
You are a database administrator for Certkiller .com. The company uses a SQL Server 2005 computer that runs Reporting Services. The server runs reports that include only data from the previous days sales. You discover that an OLTP database application runs slowly when reports are run during business hours and that reports sometimes time out. You need to correct the problem and prevent it from recurring. What should you do?

A. Configure the reports to run under the Snapshot isolation level.
B. Store the report definitions on a separate server.
C. Increase the size of the ReportServerTempDB database.
D. Configure the reports to use report snapshots. Schedule the report snapshots to run after business hours.

Answer: D

Explanation: A report snapshot is a report that contains layout information and query results that were retrieved at a specific point in time. Unlike on-demand reports, which get up-to-date query results when you select the report, report snapshots are processed on a schedule and then saved to a report server. When you select a report snapshot for viewing, the report server retrieves the stored report from the report server database and shows the data and layout that were current for the report at the time the snapshot was created.

QUESTION 112
You are a database administrator for Certkiller .com. Users report that some reports are performing poorly. You ascertain that your tables have the appropriate indexes and that your queries should be performing optimally. You execute a SHOWPLAN statement on the poorly performing reports. You find that incorrect indexes are being used in some cases. You want the SQL Server 2005 query optimizer to automatically select the correct indexes. What should you do?

A. Create a maintenance plan that includes an Update Statistics task.
B. Create a maintenance plan that includes a Check Database Integrity task.
C. Rewrite all poorly performing queries so that they use query hints.
D. Rebuild the indexes and restart the server.

Answer: A

Explanation: Statistics is used by the query optimizer to determine the optional

query plan by estimating the cost of using an index to evaluate the query. The optional query plan may change over time and therefore you should update statistics on a regular interval to provide accurate information for the query optimizer.

QUESTION 113
You are the administrator of a SQL Server 2005 computer named SQL1. SQL1 hosts a database named AssetTrack. You need to design a strategy to quickly perform point-in-time and page-level restores of the AssetTrack database. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Design a backup strategy that involves full and differential backups.
B. Configure the Recovery model database option as Full.
C. Configure the Recovery model database option as Simple.
D. Design a backup strategy that involves full and transaction log backups.
E. Configure the Restrict access database option as Restricted.

Answer: B,D

Explanation: Point-in-time and page-level restores require the bulk-logged or full recovery model.

QUESTION 114
You are a database administrator for Certkiller .com. You create a SQL Server Integration Services (SSIS) package that contains confidential information. The package will be used by only two company employees. The package is stored in the msdb database. You need to ensure that only the appropriate employees can execute the package. You must accomplish this goal by using the least amount of administrative effort. What should you do?

A. Configure the package to use the Encrypt all with user key package protection level.
B. Configure the package to use the Encrypt all with password package protection level.
C. Save the package to a file. Encrypt the file by using the Encrypting File System (EFS).
D. Save the package to a SQL Server 2005 computer that has an IPSec Secure Server policy applied.

Answer: B

Explanation: Encrypt all with password - Encrypts the whole package by using a password. The package is encrypted by using a password that the user supplies when the package is created or exported. To open the package in SSIS Designer or run the package by using the dtexec command prompt utility, the user must provide the package password. Without the password the user cannot access or run the package.

QUESTION 115
You are a database administrator for Certkiller .com. You are configuring a SQL Server 2005 database on a server named ServerA to use a CLR user-defined type. The CLR user-defined type needs to access a configuration file on a server named ServerB. You create a CLR assembly by using the default permission set. However, when the CLR user-defined type is called on ServerA, the assembly returns a security error. You need to correct the problem. What should you do?

A. Alter the assembly to use the SAFE permission set.
B. Alter the assembly to use the EXTERNAL_ACCESS permission set.
C. Alter the assembly to use the VISIBILITY = ON option.
D. Alter the assembly to use the UNCHECKED DATA option.

Answer: B

Explanation: EXTERNAL_ACCESS enables assemblies to access certain external system resources such as files, networks, environmental variables, and the registry.

QUESTION 116
You are a database administrator for Certkiller .com. You receive nightly data feeds from your consumer electronics suppliers that show their inventory levels. The data value format that you receive from each supplier is not necessarily consistent. You need to ensure that the data that you import into your database is accurate and is not duplicated. What should you do?

A. Use a Fuzzy Lookup transform in SQL Server Integration Services (SSIS) to import the data into your database.
B. Write a query that includes the HAVING clause to remove duplicate values before the data is imported into your database.
C. Write a query that uses the CHARINDEX function to import the data by using the SQL Server Import Wizard and configure it to ignore duplicate values.
D. Configure CHECK constraints on the table that contains the imported data.

Answer: A

Explanation: The Fuzzy Lookup transformation performs data cleaning tasks such as standardizing data, correcting data, and providing missing values.

QUESTION 117
You are a database administrator for Certkiller .com. You have many complex SQL Server Integration Services (SSIS) packages that move data among your servers. The SSIS packages import and export data to and from your company's trading partners. The SSIS packages can only run after certain conditions are met that exist outside of SQL Server. Your department uses a third-party tool to schedule the running of nightly scripts to test for these conditions. You need to run SSIS from your scripts as seamlessly as possible. What should you do?

A. When conditions are met in the scripts, have the scripts execute the DTExec utility to run the SQL Server Integration Services (SSIS) packages.
B. When conditions are met in the scripts, have the scripts execute the DTUtil utility to run the SQL Server Integration Services (SSIS) packages.
C. Have the scripts write a status code to a text file that the SQL Server Integration Services (SSIS) packages look for and act upon.
D. Create a trigger that runs the SQL Server Integration Services (SSIS) packages.

Answer: A

QUESTION 118
You are a database administrator for Certkiller .com. The company uses a database named VideoStore. The SQL statements used to create the Sales table in the VideoStore database, an existing index, and the two most common queries executed against this table are shown in the exhibit. (Click the Exhibit button.) The existing indexes have just been rebuilt. The VideoID and VideoTitle fields are highly selective. The RetailPrice, WholesalePrice and Genre fields have low selectivity. You need to optimize the performance of both queries while minimizing the size of the index. What should you do?

```
CREATE TABLE Video.Sales
  (VideoID int identity (1,1) not null Primary Key  nonclustered
  , VideoTitle varchar(25) not null
  , RetailPrice Money null
  , WholesalePrice Money not null
  , Genre char(15) null
  , BarCode char(20) Not null)


Create Clustered Index CL_videotitle on Video.Sales(Videotitle)

SELECT VideoID, VideoTitle, RetailPrice from Video.Sales ORDER BY VideoTitle

Select VideoTitle, Barcode, VideoID, WholesalePrice, Genre
  FROM Video.Sales WHERE VideoID =5
```

A. Create a clustered index on the VideoTitle and RetailPrice columns.
B. Create a nonclustered index on the Barcode and VideoID fields and include the WholesalePrice and Genre fields.
C. Create a nonclustered index on the VideoTitle, Barcode, VideoID, WholesalePrice, and Genre fields.
D. Drop the clustered index on the VideoTitle field. Create a nonclustered index on the VideoTitle field.
E. Alter the existing nonclustered index by using the REORGANIZE option.

Answer: B

QUESTION 119
You are the database administrator for a SQL Server 2005 computer named SQL1. Your company has five databases running on a single SQL Server 2005 instance. All indexes are created by using the SORT_IN_TEMPDB option to reduce the amount of time

required and the amount of space used in the user databases to create and rebuild indexes. You need to design the tempdb database for optimal performance. What should you do?

A. Place the tempdb database on the same RAID-5 volume as the user databases.
B. Place the tempdb database on a different RAID-5 volume from the user databases.
C. Place the tempdb database on the same RAID-0 volume as the user databases.
D. Place the tempdb database on a different RAID-0 volume from the user databases.

Answer: D

Explanation: RAID-0 performs better than RAID-5 (the cost for the better performance is the lack of redundancy). Different volumes for user databases and tempdb database has better performance than a shared volume as it can read and write in both databases at the same time.

QUESTION 120
You are the administrator of a SQL Server 2005 computer named SQL1. The SQL Server transaction log files are stored on an 80-GB mirrored volume. New databases have been added to SQL1, and the 80-GB volume is 85 percent full. You do not currently have the ability to upgrade the volume or to add more disk space. You need to receive an alert if the unused disk space on the 80-GB volume falls below 5 GB. What should you do?

A. In the Performance Logs and Alerts console, create an alert on the Logical Disk % Free Space counter.
B. In SQL Server Agent, create an alert for the SQL Server: Databases Percent Log Used object.
C. In the Wmic.exe utility, execute the Microsoft Windows Management Instrumentation (WMI) query SELECT FreeSpace FROM Win32_LogicalDisk.
D. In SQL Server Management Studio, run the DBCC SQLPERF(LOGSPACE) command.

Answer: A

Explanation: An alert on the Logical Disk % Free Space counter in the Performance Logs and Alerts console will provide you with the needed alert.

Topic 2, A. Datum Corporation, Scenario

Company Overview
A.Datum Corporation is an independent software vendor that has a worldwide customer base. The company sells its software through a combination of an e-commerce Web site and a telephone-based ordering system.

Planned Changes.
The company plans to upgrade all of its database servers to SQL Server 2005. The BusinessDats database will be redesigned to improve manageability, and a new database named MarketionAnalysis will be created to allow marketing analysts to generate reports

from sales data. The most common report that will be generated will retrieve the names of products that are sold and the cities where the customers live.

Problem Statements
The company wants to improve the security of its data and wants to minimize the risk of unauthorized data access or malicious attack.
On several occasions, customers were unable to place an order because the database server was unavailable for na extended period of time.

EXISTING DATA ENVIRONMENT
Databases
The HRData database contains employee data, including sensitive information such as salary and employee reviews
The BusinessData database contains product and data. Analysis indicates that each user typically accesses only a subset of the tables in the database. This subset is related to the department in which the works.
Business analysis indicates that approximately 4,000 new records are added to the BusinessData database each day,and that 90 percent of records are not modified after they are entered.
No managed objects currently exist in any database.

Database Servers
The company currently has a single default instance of SQL Server 2000 in which the HRData database and the BusinessData database are stored.The SQL Server instance is installed on a server named Certkiller 1.
Written company policy to deploy a hardware RAID solution in the next six months. However, no disk redundancy solution is currently implemented.

Database Client Computers
Data in the HRData database is accessed through an ASP.NET application. The application runs in the security context of a Windows user named HRApp and uses Windows Authentication to connect to SQL Server.
The BusinessData database is accessed by users in the sales department, who use Windows Authentication to connect to SQL Server. In addition ,users in the software development team need to access the BusinessData database from client computers that run either a Microsoft windows operating system or another operating system Users on client computers that do not run Windows use SQL Server Authentication to connect to SQL Server.
All client applications are configured to connect to the SQL Server instance. Therefore, users do not need to browse for a server.

EXISTING INFRASTRUCTURE
Network Infrastructure
All computers are connected to a TCP/IP-based network. The network is configured as shown in the following diagram.

Computers in the sales call center are connected to the network by network cables. All other computers use 802.11 wireless networking with encryption.

Directory Services Infrastructure

The company's network consists of one Active Directory domain, which contains Windows 2000 Server computers and Windows Server 2003 computers.
Most employees use client computers that run Windows XP Professional. Some developers use client computers that do not run Windows.
A domain-level policy is enabled that enforces password complexity and expiration after 30 days.

Server Infrastructure

In addition to Certkiller 1,there are two unutilized file and print servers that can be used in the proposed upgrade to SQL Server 2005.The specifications for all database servers are shown in the following table.

Server name	Operating system	Processor	Memory	Disks
CertKiller1	Windows Server 2003	Pentium II 300 MHz	1 GB	5 x 100-GB SCSI
CertKiller2	windows Server 2003	Pentium III 500 Mhz	128 MB	3 x 100-GB SCSI
CertKiller3	windows 2000 Server with Service Pack 3	pentium III 1 GHz	512 MB	3 x 100-GB SCSI

All Windows Server 2003 computers have the latest service pack applied.

BUSINESS REQUIREMENTS

General Requirements

The upgrade project must not require the acquisition of new hardware or servers. However. the memory, processors, and software in existing servers can be upgraded if necessary.

Performance
The upqraded HRData database and the redesiqned BusinessData database must or exceed the performance levels of the current implementations, except in cases where new security-related functionality has a negative impact on performance. In these cases, the performance impact that is caused by security-related enhancements must be minimized.
To improve query performance, a partitioned table should be used. The table should be named Sales.Orders and it should have three partitions:
. one for orders placed in the current month
. one for orders placed in the previous month
. one for orders placed in the month prior to the previous month
Order data that is older than the data in the three partitions should be archived in a second partitioned table named Sales.OrderArchive.This table should have two partitions:
. one for archived order data
. an empty partition that will be used as a staging area for the archival process
At the end of each month,the following procedure must be used to archive the order data.
1. Use a SWITCH operation to move the data in partition 1 of the Sales.Orders table to the empty partition 2 of the Sales.OrderArchive table.
2. Use MERGE and SPLIT operations to reorganize the data in the Sales.Orders table so that last month's data will be in partition 1, this month's data will be in partition 2,and partition 3 will be empty and ready for next month's data.
3. Use MERGE and SPLIT operations to move all archived data to partition l of the Sales.OrderArchive table and to create a new empty partition 2 that will be ready for next month' s archival process.
The new MarketingAnalysis database must provide the fastest possible query performance when retrieving data for the most commonly generated reports.

Availability
In the event of server failure, the BusinessData database must be made available as quickly as possible and with a minimum amount of administrative intervention. The company plans to use database mirroring to achieve this goal.
In normal operations, there should be no data loss in the event of a server failure. However, in exceptional circumstances a minimal amount of data loss is acceptable.
An interim disk-availability solution must be implemented for SQL 1 until the hardware RAID solution is implemented. The interim solution must provide fault tolerance in the event that a single disk containing database data fails. The interim solution must minimize the time needed to recover in the event of a system disk failure, and it must provide the highest possible level of read performance while fulfilling the general application solution requirements.

Recoverability
The backup and recovery strategy for the BusinessData database must meet the following requirements.
. Allow full recovery in the event of total hardware failure.
. Minimize performance overhead caused by backup and restore operations.
. Allow the database to be restored with a maximum loss of 30 minutes of database

activity.
Include contingency plans to handle database file corruption.

TECHNICAL REQUIREMENTS
Security
All security credentials that are used in all of the company's IT systems must use complex passwords that expire after 30 days.
In the HRData database, sensitive data must be encrypted so that only the login that encrypted the data can decrypt it. The risk of unauthorized access to encryption keys and passwords within the database server must be minimized.
All data that is passed across the network must be encrypted.An HTTP endpoint should be used in the BusinessData database to provide access to two stored procedures named Sales.AddOrder and Sales.GetOrderDetails.The HTTP endpoint must be accessed only by sales employees, who use Windows XP Professional computers in the sales subnet.
The risk of security violation must be mitigated by minimizing the attack surface area of the database servers.

Maintainability
The BusinessData database must be implemented so that an object does not need to be renamed or dropped and re-created if the user that created the object is dropped.
The database design should minimize the number of permissions that must be granted on individual database objects.
The database objects must be created by the dbo user.
All backups must be performed using the built-in backup features of SQL Server.
Access to the SQL Server data files will not be required from any third-party applications.
Administrative intervention must be minimized through the use of scheduled tasks that are created by using the Database Maintenance wizard.
The transfer of data from the BusinessData database to the MarketingAnalysis database must be automated through scheduled SQL Server Integration Services(SSIS)tasks.

Topic 2, A. Datum Corporation (10 Questions)

QUESTION 1
You are planning the backup strategy for the BusinessData database. You need to include a strategy for backup redundancy. Which backup redundancy strategy should you include?

A. Back up the database to a disk backup device, and then back up the database to a tape device.
B. Use different backup devices for full backups and transaction log backups.
C. Back up only the filegroups that are not stored in a RAID disk array.
D. Use a mirrored media set to back up the database to multiple backup devices of the same type.

Answer: D

QUESTION 2
You need to ensure that the companys standard password policy is enforced for all logins that are used to access SQL Server 2005. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Set the appropriate local password policies for all computers on which SQL Server is installed.
B. Set the server authentication mode of all SQL Server instances to Windows Authentication mode.
C. Install all instances of SQL Server 2005 on computers that run Windows Server 2003 or later.
D. Create SQL Server logins that have CHECK_POLICY enabled.

Answer: C,D

QUESTION 3
You want to implement database mirroring to ensure the availability of the BusinessData database. You specify Certkiller 1 as the principal server and Certkiller B as the mirror server. You need to ensure that the database mirroring solution fulfills the business requirements. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Configure Certkiller 3 as a monitor server.
B. Configure Certkiller 3 as a witness server.
C. Create a database snapshot of the BusinessData database.
D. Configure the mirror session to use a synchronous operating mode.

Answer: B,D

QUESTION 4
You are designing a data archival strategy for order data. The placements of data and partitions for the Sales.Orders table at the end of July are shown in the following display. On which filegroup should you locate partition 2 of the Sales.OrderArchive table?

A. FG1
B. FG2
C. FG3
D. FG4

Answer: B

QUESTION 5
You are designing the interim disk availability solution for Certkiller 1. You plan to use Windows RAID functionality. You need to identify the most appropriate RAID configuration to fulfill the availability requirements. Which RAID configuration should you use?

A. Create a mirrored volume for the system files and database logs, and a stripe set with parity for the data files.
B. Create a mirrored volume for the system files and database logs, and a stripe set without parity for the data files.
C. Create a mirrored volume for the system files, database logs, and data files.
D. Create a stripe set with parity for the system files, database logs, and data files.

Answer: A

QUESTION 6
You are designing the backup strategy for the BusinessData database. You need to ensure that the backup strategy fulfills the business requirements for minimizing data loss and database downtime. Which three backup methods should your strategy include? (Each correct answer presents part of the solution. Choose three.)

A. differential backup every three hours
B. full database backup once per day
C. transaction log backup every three hours
D. transaction log backup every 30 minutes
E. full database backup every 30 minutes
F. differential backup once per day

Answer: A,B,D

QUESTION 7
You need to implement the HTTP endpoint for the Sales.AddOrder and Sales.GetOrderDetails stored procedures while minimizing the risk of unauthorized access to data and the risk of execution of unauthorized Transact-SQL code. Which action or actions should you perform? (Choose all that apply.)

A. Specify that the endpoint must support BATCHES.
B. Specify that the endpoint must use Secure Sockets Layer (SSL) ports.
C. Grant CONNECT permission on the endpoint to the logins in the sales department.
D. Grant EXECUTE permission on the Sales.AddOrder and Sales.GetOrderDetails stored procedures to the users in the sales department.
E. Specify that the endpoint must use clear ports.

Answer: B,C,D

QUESTION 8
You are planning the configuration of the SQL Server 2005 instance where the BusinessData database will be stored. As a security precaution, you need to ensure that Windows services that are not essential are disabled. Which Windows service or services should be disabled? (Choose all that apply.)

A. SQL Browser
B. SQL Server
C. SQL Server Analysis Services
D. SQL Writer
E. SQL Server Integration Services
F. SQL Server Agent

Answer: A,C,D

QUESTION 9
For the MarketingAnalysis database, you are adding functionality that sends the results of a query in an e-mail message to the marketing supervisors when new sales data has been entered. You need to implement a method that fulfills this requirement and minimizes the security risks. Which method should you use?

A. Database Mail
B. SQL Mail
C. a managed stored procedure
D. a command line program that is called by xp_cmdshell

Answer: A

QUESTION 10
DRAG DROP
Your boss, Mrs. Certkiller, wants you to specify the procedure for implementing cryptographic functionality in the HRData database.
Select and order the appropriate actions.

Answer:

Topic 3, World Wide Importers, Scenario

Company Overview

Wide World Importers imports clothing from all over the world. The company sells the clothing to retailers that are located through North America. These retailers place orders

based on price lists that are maintained on the Wide World Importers Web Site.
The company has 4,500 employees. The company has three offices, which are connected as shown in the following diagram. (The diagram can also be viewed by clicking the Case Study Exhibits button).

Planned Changes
A newly purchased customer relationship management (CRM) application is being installed, and it uses SQL Server 2005 as its data store.
Some database backup jobs on a SQL Server computer named Certkiller A take too long to run. Additional disk drives will be made available to increase the speed of these backups.
The company plans to implement two new SQL Server computers named Certkiller 6 and Certkiller 7.

Problem Statements
Certkiller 7 is currently being tested with the CRM application. A full database backup of the CRM data takes five hours, even though a fast disk volume is being used for the backups.
Database backups on a quality assurance (QA) server named Certkiller 5 are occasionally not usable dur to sporadic hardware problems that have not yet be resolved.

EXISTING DATA ENVIRONMENT
Database Servers
The company's central IT department currently supports four production SQL Server computers, one QA server, and one development server, as shown in the following table

Server name	Location	Environment	Databases (sizes)
CertKiller1	Chicago	Production	**Marketing** (50 GB) **HR** (35 GB) **Orders** (500 GB) **Accounting** (125 GB)
CertKiller2	Denver	Production	**D_Inventory** (170 GB) **D_Shipping** (45 GB)
CertKiller3	Boston	Production	**B_Inventory** (150 GB) **B_Shipping** (40 GB)
CertKiller4	Chicago	Production	**Research** (200 GB) **Doclib** (140 GB)
CertKiller5	Chicago	Quality assurance	**Orders** (500 GB) **HR_qa** (20 GB)
CertKiller99	Chicago	Development	(varies with need)

The inventory and shipping databases that are located on Certkiller 2 and Certkiller 3 have identical data base schemas. However, Certkiller 2 contains only information that is related to operations in Denver, and Certkiller 3 contains only information that is related to operations in Boston.
All SQL Server computers were recently upgraded to SQL Server 2005 Enterprise Edition running on Microsoft Windows Server 2003.
Certkiller 1 stores data on a RAID-5 volume and stores log files on a RAID-1 volume. Database backups from Certkiller 1 are stored on the same drives as the log files.
All drives are located in local hardware-based RAID storage. The company has not invested in storage area network (SAN) or network attached storage (NAS) technology.
The orders application is under ongoing development, and new database objects are added on a regular basis.
The marketing database contains a role named marketing-sql-users. Members of this role can access the Marketing application.
Users in the research department frequently perform data analysis by using data that is stored in the Marketing and Accounting databases. In the Accounting database, the users access only a few of the larger tables, working with data from prior months. This data needs to be refreshed only on a monthly basis. In the Marketing database, the users access approximately half of the tables, and they read the most current information that is available. The user in the research department have read-only access to all of the information they access in both database.
Ninety percent of the space in the Doclib database is allocated for storing research documents as binary data and full-text indexes that are used to search those documents. This database is set to use the simple recovery model and has nightly full backups. The documents in this database are relatively volatile, with three percent of them changing each day.
Once per day the company updates the prices that are listed on its Web site by running a stored procedure as a SQL Server Agent job. The stored procedure is owned by a user named Andy, and the stored procedure examines confidential data that is held on Certkiller 4. Andy does not own the tables that contain this data. However, Andy is a member of a group that has been granted permission to read this data.
Overall performance of queries against the two largest tables in the Orders database has been slow. Investigation reveals that only a few types of Transact-SQL batches account for most of these poorly performing queries. Specifically, the investigation revealed the

following results.
* Users in the sales department tend to execute a large number of shot-running Transact-SQL batches in the Orders database. These batches perform a high proportion of writes, and they use data that is mostly from the current month.
* By contrast, users in the accounting department execute Transact-SQL batches in the Orders database that are long-running and very read-intensive. These batches use data that is mostly from prior months.

EXISTING INFRASTRUCTURE
Directory Services Infrastructure
The network consists of two Active Directory forests. Each forest contains a single domain. The two domains and the organizational units (OUs) in the wideworldimporters.com domain are shown in the following diagram.

Each department is mapped to an OU, and each departmental OU contains a group that has administrative rights for that OU. For example, there is a Marketing OU for the marketing department, and this OU contains a group named marketing-admin that has administrative rights in that OU.
The Marketing OU in the wideworldimporters.com domain contains a universal group named marketing-sql-access.
The server named SQL99 is in the stand-alone dev.wideworldimporters.com Active Directory forest, which shares no trust relationship with the production wideworldimporters.com forest.

Quality Assurance
The quality assurance (QA) department has a lab with a production-grade server named Certkiller 5 that runs SQL Server. The QA department has given approval for Certkiller 5 to function as a production server if an existing production server encounters hardware failures. Certkiller 5 uses the same Active Directory domain as

the production servers.
To investigate data-related problems, the QA department frequently needs to restore temporary copies of the Orders database onto Certkiller 5. These restores are usually point-in-times that capture the Orders database as it existed at the end of the prior business day.
However, the QA department occasionally needs to investigate problems that involve the current day's activity. On these occasions, the database administrators take an unscheduled backup of the Orders database for the QA department, and this backup is restored onto Certkiller 5.

BUSINESS REQUIRMENTS
Availability
Currently, users in the Denver and Boston processing centers can view inventory data from SQL Server computers at only their respective locations. In the future, all of this data must be made available to users at both locations.
The backups on Certkiller 7 need to take longer than two hours each evening from Monday through Saturday, so that they will not compete for resource with other jobs that run on those evenings. Point-in-time recovery is required for the CRM application. The CRM database contains six different schemas and is currently configured to use the full recovery model.
The orders database on Certkiller A needs to be configured for high availability. The QA department wants to be able to leverage this change so that point-in-time images of the Orders database on Certkiller 5 can be constructed more easily and efficiently.

Recoverability
Recover of the Orders database on Certkiller A should require no more than 10 RESTORE commands in the event of a database failure, and no more than 10 minutes of work should be lost in the event of hardware failure.
The Windows administrators are implementing procedures that will automatically copy backup files to tape after the backups are complete. The disk volumes that store the backups do not need to be fault tolerant.

Data Access
Occasionally, new employees are not able to access the company's database for up to two weeks after their start date. Active Directory administrators in each department have time to set up employee access, but only database administrators have permission to give employees access to the database. The company wants all new employees to be able to use the database no later than two days after their start date.

TECHNICAL REQUIRMENTS
Maintainability
Volatile document data in the Doclib database should be backed up more frequently than the current daily backups, without unnecessarily backing up unchanged data. The full-text indexes that are used to search the documents should also be backed up when they change. Long management should be as simple as possible for the Doclic database.

Data Security
The company's written security policy states that the change history of all data in the HR database must be audited. The auditing should be done in the database so that the auditing cannot be bypassed by employees who use various programs to work with the data. The audit records must show who performed each change, when the change occurred, and what the actual was prior to and after the change.
Because Certkiller 4 stores confidential research data, the company needs to ensure that the data is passed to and from this SQL Server computer cannot be read by unauthorized users if the data is intercepted on the network.

Secure Communication
To enable users in the Boston and Denver processing centers to view other's inventory data, a secure communication method must be implemented that allows remote stored procedures to be invoked instead of ad hoc SQL being sent across the network.
Portions of the Orders application run on remote client computers that run Linux and that do not support the Microsoft.NET Framework. The communication method that is implemented must also function for those computers.

Application Functionality
Some of the employees in the marketing department must be able to occasionally run unscheduled pricing updates.
The development team wants database snapshots of the HR database to be available on SQL9

Topic 3, World Wide Importers (12 Questions)

QUESTION 1
You need to improve the speed of backups on Certkiller 1. Management has approved the purchase of additional hard disks for this server. What should you do?

A. Configure the hard disks as a RAID-0 array, and store the backups on this new array.
B. Configure the hard disks as a RAID-5 array, and store the backups on this new array.
C. Configure the hard disks as a RAID-10 array, and store the backups on this new array.
D. Configure the hard disks as a spanned volume, and store the backups on this new volume.
E. Use the hard disks to extend the volume that currently holds SQL Server backups.

Answer: A

QUESTION 2
You need to implement an auditing strategy that will fulfill the company's business requirements. What should you do?

A. Use C2 auditing.
B. Use DML triggers.
C. Use DDL triggers.

D. Use event notifications.

Answer: B

QUESTION 3
DRAG DROP
The long-running queries that the employees in the research department run in the Marketing and Accounting database sometimes cause performance problems for other application that use Certkiller 1. A new SQL Server computer named Certkiller 6 has been purchased for the marketing employees to use to run these analytical queries.
You need to select the most efficient method for transferring data from Certkiller 1 to Certkiller 6.
What should you do?

Answer:

Explanation:
Given the scenario text.
Users in the research department frequently perform data analysis by using data that is stored in the Marketing and Accounting databases. In the Accounting database, the users access only a few of the larger tables, working with data from prior months. This data needs to be refreshed only on a monthly basis. In the Marketing database, the users access approximately half of the tables, and they read the most current information that is

available. The user in the research department have read-only access to all of the information they access in both database.

QUESTION 4
You are initializing database mirroring between Certkiller A and SQL99. You are attempting to configure mirroring as shown in the following table, but the mirroring sessions do not initialize properly.

Attribute	Value
Primary server name	CertKiller1
Target server name	CertKiller99
Database name	HR
Database recovery mode	Full
Mirroring operating mode	High-performance
Mirroring session authentication	Windows

You need to correct the problem. What should you do?

A. Change the database mirroring operating mode.
B. Change the recovery model of the primary database.
C. Change the authentication method for the mirroring sessions.
D. Use replication instead of database mirroring between Certkiller A and SQL99.

Answer: C

QUESTION 5
You need to ensure that the WIDEWORLDIMPORTERS\marketing-admin Active Directory group is able to manage authentication for the Marketing application without help from the database administrators. However, you do not want to grant any unnecessary SQL Server privileges to the WIDEWORLDIMPORTERS\marketing-admin group. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Create a SQL Server login for each user that is authenticated by SQL Server.
B. Add the WIDEWORLDIMPORTERS\marketing-sql-access Active Directory group as a member of the marketing-sql-users database role.
C. Add the WIDEWORLDIMPORTERS\marketing-admin Active Directory group to SQL Servers serveradmin fixed server role.
D. Instruct the members of the WIDEWORLDIMPORTERS\marketing-admin Active Directory group to manage the membership of the WIDEWORLDIMPORTERS\marketing-sql-access Active Directory group.
E. Add the WIDEWORLDIMPORTERS\marketing-admin Active Directory group to the db_securityadmin fixed database role in each application database.

Answer: B,D

QUESTION 6
You need to enable more frequent backups of only the volatile data that is stored in the Doclib database. What should you do?

A. Add database log backups of the Doclib database.
B. Add full database backups of the Doclib database.
C. Add differential database backups of the Doclib database.
D. Add differential backups created by the Windows Backup Utility.
E. Add incremental backups created by the Windows Backup Utility.

Answer: C

QUESTION 7
You need to design an appropriate high-availability configuration for the main Orders database on Certkiller
A. Your solution should not require special disk hardware, and it should allow for automatic failover. You need to minimize expenses and administrative effort. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Use database snapshots to provide employees in the QA department with the data access they need.
B. Use one of the QA departments SQL Server computers in a failover cluster for the Orders database.
C. Use transactional replication to create a copy of the Orders database in the QA environment.
D. Use merge replication to create a copy of the Orders database in the QA environment.
E. Use database mirroring to create a copy of the Orders database in the QA environment.

Answer: A,E

QUESTION 8
You need to design a method for verifying that future backups from Certkiller 5 can be restored and that the databases that are stored in the backups do not contain any allocation, structural, or logical integrity problems. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Restore the backups to another SQL Server computer.
B. Run Database Console Command (DBCC) statements on the original databases.
C. Run Database Console Command (DBCC) statements on the restored backups.
D. Use the RESTORE VERIFYONLY command with the CHECKSUM option.
E. Use the RESTORE VERIFYONLY command without the CHECKSUM option.

Answer: A,C

QUESTION 9
You must implement the best way to allow the employees in the marketing department to run Andys stored procedure to perform pricing updates. Which two actions should you

perform? (Each correct answer presents part of the solution. Choose two.)

A. Create a database role, and add the marketing employees to this role.
B. Grant the marketing employees the permission to read the confidential data.
C. Grant the permission to execute Andys stored procedure to an appropriate role.
D. Create an application role, and set this role in the Marketing application prior to running the stored procedure.
E. Modify the stored procedure so that it will always execute with Andys permissions.
F. Grant the marketing employees the permission to execute Andys stored procedure.

Answer: E,F

QUESTION 10
DRAG DROP
Select the appropriate backup scheduled for World Wide Importers.

Answer:

Explanation:
Give the scenario text:
Recover of the Orders database on Certkiller A should require no more than 10 RESTORE

commands in the event of a database failure, and no more than 10 minutes of work should be lost in the event of hardware failure.

Databases	Frequencies	Reason
Backup database - differential	Hourly	Requirement: no more than 10 RESTORE commands.
Backup log --	Every 10 minutes	Requirement: no more than 10 minutes data lost.
Backup log – truncate only	Never	No reason, destroys the backup plan continuity

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QUESTION 11
You need to ensure that all communication with Certkiller 4 is as secure as possible. What are two possible ways to achieve this goal? (Each correct answer presents a complete solution. Choose two.)

A. Set the Windows IP Security Policy on the SQL Server computers to require security.
B. Use SQL Server Configuration Manager to set the ForceEncryption option.
C. Use SQL Server Configuration Manager to specify that SQL Server will listen on port 443.
D. Require client computers to possess X509 certificates from a trusted certificate authority (CA).

Answer: B,C

QUESTION 12
You need to increase the speed of query execution in the Orders database for the sales and accounting departments with no impact on existing application code. What should you do?

A. Create a database snapshot that can be used to access the older data.
B. Use replication to move a copy of the older data into a separate database.
C. Use log shipping to move a copy of the older data into a separate database.
D. Design a partitioning scheme to store the current data and the older data on separate disk volumes.

Answer: D

Topic 4, Certkiller 's Travel, Scenario

BACKGROUND

Company Overview

Certkiller 's Travel provides a variety of travel services. It has 15 storefront agencies in 10 major North American cities, and a main office in Atlanta. The company also serves worldwide customers through an online travel agency.

Planned Changes

Certkiller 's Travel plans to upgrade all existing SQL Server computers from SQL Server

2000 to SQL Server 2005. The company wants to consolidate servers wherever possible in order to improve manageability and to lower the total cost of ownership.
The company plans to implement database standards and conventions including object naming conventions, coding standards, schema naming conventions, and documentation standards.

Problem Statements
The company needs to define and document its disaster recovery plan, including possible failures, error messages, and recovery steps.
Due to the high volume of reservations in the TravelOnline and Storefront databases, an agent might inadvertently delete existing reservations. Currently, full restores followed by point-in-time transaction log restores can be used to recover lost data. However, administrators might choose not to use a restore to recover the lost data if they decide that to many other changes will be lost.

EXISTING DATA ENVIRONMENT
Database Servers and Databases
All SQL Server computers are located at the main office in Atlanta. Currently all SQL Server computers are installed with a single default instance.
The existing databases are shown in the following table.

Server name	Server configuration	Database name	Database size	Description
CertKiller1	• 1 GB of RAM • 550-MHz processor • 650 MB of free hard disk space	**HR**	500 MB	Employee information, benefits information, and commission data
CertKiller2	• 3 GB of RAM • 3.8-GHz processor • 6 GB of free hard disk space	**Storefront**	2 GB	Reservation tracking and completed travel forms for storefront travel agencies
CertKiller3 , in the perimeter network	• 2 GB RAM • 2.53-GHz processor • 5 GB of free hard disk space	**OnlineReadOnly**	3 GB	Read-only subscriber to the **TravelOnline** database. Provides information on existing reservations to Internet customers through the Web server.
CertKiller4	• 3 GB of RAM • 3.8-GHz processor • 3 GB of free hard disk space	**TravelOnline**	5 GB	Reservation tracking and completed travel forms for the online travel agency

The Storefront database is accessed through a Microsoft Visual Basic application. The TravelOnline and OnlineReadOnly databases are accessed through a Web services application.

Database Client Computers
Client computers run Microsoft Windows XP Professional, Windows 2000 Professional, or Windows NT Workstation 4.0 with Service Pack 6.

EXISTING INFRASTRUCTURE
Network Infrastructure
The relevant portion of the network is configured as shown in the following diagram. (The diagram can also be viewed by clicking the Case Study Exhibits button.)

Directory Services Infrastructure
The network consists of a single Active Directory forest with a single domain. All employees use domain user accounts. Users are organized into organizational units (OUs) by department. The Active Directory domain is configured as shown in the following diagram. (The diagram can also be viewed by clicking the Case Study Exhibits button.)

Recoverability
The TravelOnline and Storefront databases are mission-critical. The current backup strategy includes:
Nightly full backups
Hourly transaction log backups
The bulk-logged recovery model
System databases are maintained on a hard disk set that is separate from the user databases.

BUSINESS REQUIREMENTS
Performance
The TravelOnline database is the busiest database and should be optimized accordingly. In the Reservation table in the Storefront database, reservations that were made during the last six months should be retrieved the fastest.

Scalability
The TravelOnline, Storefront, and OnlineReadOnly databases are expected to double in size in the next year. The other databases are expected to grow by at least 50 percent. All recommendations should support one year's growth.
The company wants all historical and current data from the online and storefront reservations to be available in a new database. Changes should be replicated as they occur. Some latency is permissible. This database will become very large.
The distribution server has a large amount of free disk space. The distribution database must be able to be restored from the most recent backup and then receive changes from the publication database, allowing replication to continue.

Recoverability
All databases must be on fault-tolerant volumes.
Requirements after upgrading to SQL Server 2005 will include:
Full protection for data that is held in Large Value data types
Recovery to a specific point in time
Ability to recover data in a given field that is updated multiple times each day
Shortened recovery time
The database administrators have the following three naming requirements:
All objects must be sorted alphabetically by object name, not object type.
An object's name should represent the object type (for example: table, view).
All objects must be organized by business functions.
All servers must be able to perform a complete or kernel memory dump if the server stops unexpectedly.
A single drive failure should not cause a server to fail.

TECHNICAL REQUIREMENTS
Security
The written company security policy states that e-mail alerts must be sent as securely as possible to users and database administrators.
All users must change their passwords every 30 days, and they must use a minimum password length of nine characters. The company wants to impose additional, unique password requirements for users in the human resources (HR) department.
Database administrators will need to be able to add, modify, and delete database objects when certain criteria are satisfied. Schema modifications will need to be rolled back when these criteria are not satisfied. The criteria for adding and modifying objects differ from the criteria for dropping objects.
The written company security policy states that any SQL Server computer that communicates with a Web server that is accessible from the Internet must be in the perimeter network. This server should hold only one database, and that database should be logically read-only.
Jobs on the SQL Server computers run as different proxy accounts. The company wants to increase security by redesigning the proxy account usage after upgrading to SQL Server 2005.

Maintainability
The company uses SQL Server Agent jobs to maintain the SQL Server computers. These jobs occasionally run programs that execute cmdExec commands and ActiveX scripts. Certkiller 2 must have the capability to automate SQL Server maintenance and to receive replication updates. This server is managed by using Remote Desktop for Administration. Data Transformation Services (DTS) has been used extensively on Certkiller C. Over time, these packages will be upgraded to the new technology. Windows printers and shares do not exist. No users connect to this serve directly.
Current SQL Server 2000 computers use SQL Mail to alert database administrators and users when certain changes or events occur.

Supporting Infrastructure
All servers should fulfill or exceed Microsoft's recommended hardware requirements.

Topic 4, Certkiller 's Travel (10 Questions)

QUESTION 1
You need to implement an authentication method on Certkiller 4. The TravelOnline database will be accessed through a Web services application. You need to make the authentication method as secure as possible. What should you do?

A. Create an HTTP endpoint with NTLM authentication, and create a service principal name (SPN).
B. Create an HTTP endpoint with digest authentication, and create a service principal name (SPN).
C. Create an HTTP endpoint with integrated authentication, and create a service principal name (SPN).
D. Create an HTTP endpoint with Kerberos authentication.

Answer: C

QUESTION 2
You need to define the steps that are needed to implement the companys object creation and modification policies on SQL Server 2005. You want to achieve this goal by using the minimum amount of administrative effort. Which three actions should you perform? (Each correct answer presents part of the solution. Choose three.)

A. For each database, create DDL triggers at the database level for the required events.
B. Grant the ALTER ANY DATABASE permission at the server level.
C. Grant the CREATE permission to the appropriate users on the appropriate object types at the database level.
D. Grant the ALTER SCHEMA permission to the appropriate users on the appropriate schemas.
E. Set up event notifications for all schema changes.

Answer: A,D,E

QUESTION 3
You want to consolidate some of the databases onto existing SQL Server computers until additional hardware can be purchased. You need to identify which of the servers, in its current configuration, can support additional databases. You need to ensure that your solution fulfills the companys security requirements while allowing for future database growth requirements. Which server and database combination can be used?

A. Certkiller 3 with the OnlineReadOnly and HR databases
B. Certkiller 4 with the TravelOnline and Storefront databases
C. Certkiller 2 with the Storefront and TravelOnline databases
D. Certkiller 2 with the Storefront and HR databases

Answer: D

QUESTION 4
You are configuring the storage on a new server that will hold the HR, Storefront, and TravelOnline databases. You need to ensure that the solution fulfills the company's recoverability requirements. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Place the boot partition and the system partition on a RAID-0 set.
B. Place the TravelOnline database on its own RAID-0 set.
C. Place the TravelOnline database on its own RAID-5 set.
D. Place the pagefile, the boot partition, and the system partition on a hardware RAID-1 set.
E. Place the pagefile on its own RAID-0 set.

Answer: C, D

Explanation:
C and D meet the business requirements.
Not E: E does not meet the Recoverability requirements. Because in the scenario it asks for to able to take complete or kernel memory dump. For that the pagefile must be large enough and must be on the boot volume.

QUESTION 5
You need to develop a solution to recover deleted reservations on Certkiller B. What should you do?

A. Configure transactional replication to occur continuously.
B. Configure snapshot replication to occur once every 30 minutes.
C. Change the recovery model to bulk-logged.
D. Create and maintain database snapshots of the Storefront database.

Answer: D

QUESTION 6
After the upgrade to SQL Server 2005, you need to mitigate the risks that are associated with users gaining access to ActiveX scripts or gaining direct hard disk access due to SQL Server Agent job settings. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Use an account that is a member of the sysadmin role to create and run all jobs. Do not use proxies for job steps. Allow the SQL Server Agent service account to be used to run all job steps.
B. Use sp_revoke_proxy_from_subsystem to remove the UpgradedProxyAccount global proxy account from each subsystem that was granted access through the upgrade process.
C. Make sure that the SQL Server Agent service is running as a domain account that is a member of the local administrators group.
D. Add all users to the SQLAgentUserRole database role to eliminate the need for proxy accounts.
E. Use dedicated user accounts for proxy accounts.

Answer: B,E

QUESTION 7
You are creating a backup plan for the TravelOnline and Storefront databases. You need to ensure that the plan fulfills the companys recoverability and performance requirements. What should you do?

A. Change the recovery model to the full recovery model.Add a differential backup during a low-usage time in the middle of the business day.Keep the transaction log backups as they are currently configured.
B. Keep the bulk-logged recovery model.Change the nightly full backups to differential backups.Keep the transaction log backups as they are currently configured.
C. Keep the bulk-logged recovery model.Keep the nightly full backups as they are currently configured.Change the transaction log backups to occur once every 30 minutes.
D. Change the recovery model to the full recovery model.Change the nightly full backups to differential backups.Keep the transaction log backups as they are currently configured.

Answer: A

Explanation:
Given the scenario text:
Recoverability
"The TravelOnline and Storefront databases are mission-critical. The current backup strategy includes:
Nightly full backups
Hourly transaction log backups
The bulk-logged recovery model"
And the following scenario text:

Recoverability
"All databases must be on fault-tolerant volumes.
Requirements after upgrading to SQL Server 2005 will include:
Full protection for data that is held in Large Value data types
Recovery to a specific point in time
Ability to recover data in a given field that is updated multiple times each day
Shortened recovery time"
Recovery to a specific point in time:
Only full the recovery model fully supports point-in-time recovery.
From BOL (Backing Up and Restoring Databases > Getting Started with Backup and Restore > Overview of the Recovery Models >):
"If a log backup contains any bulk operation, the database can be recovered only to the end of the log backup, not to a point in time or marked transaction within the log backup."
Only
Shortened recovery time:
Replacing the nightly full backups with differential ("Change the nightly full backups to differential backups.") would require many differential backups to restore. This increases and not shortens the recovery time.

QUESTION 8
You are upgrading Certkiller 1 to SQL Server 2005. You need to minimize the security risks that are associated with e-mail notifications. Which three actions should you perform? (Each correct answer presents part of the solution. Choose three.)

A. Disable Database Mail through the SQL Server Surface Area Configuration tool.
B. Add a POP3-compliant e-mail client.
C. Disable SQL Mail through the SQL Server Surface Area Configuration tool.
D. Configure e-mail functionality to use Database Mail.
E. Upgrade Microsoft Outlook to the latest version on Certkiller 1.
F. Remove Microsoft Outlook from Certkiller 1.

Answer: C,D,F

QUESTION 9
You need to reduce the attack surface on Certkiller 3 by disabling services that are not needed for fulfilling the companys technical requirements. Which three services should you disable? (Each correct answer presents part of the solution. Choose three.)

A. SQL Server Agent service
B. IIS Admin service
C. SQL Server Browser service
D. SQL Server Integration Services (SSIS) service
E. Terminal Services service
F. Server service

Answer: B,C,F

QUESTION 10
You need to configure Active Directory to implement the new password policy for the HR department. What should you do?

A. Create a new child domain named hr.ad.margiestravel.com in the existing forest. Move the resources from the HR OU to this new domain. Add the appropriate security settings in the Default Domain Policy for this new domain.
B. Add the appropriate security settings to the current Default Domain Policy.
C. Add the appropriate security settings to the local security policy of Certkiller A.
D. Set the SQL server check_policy and check_expiration options to On when creating all user accounts.

Answer: A

Topic 5, Certkiller .com, Scenario (8 Questions)

BACKGROUND

Certkiller Overview

Certkiller ,Inc.,is a technical content development company that creates documentation and training materials for various software vendors.The company currently has 26 full-time employees at its central office in Seattle,and uses more than 100 external contract writers who work from home in various locations around the would.

Planned Changes

The company plans to implement a new, Web service-based solution that will facilitate the process by which remote contract writers submit work.
Currently,all work is submitted by e-mail as Microsoft Word document attachments, and it is stored in file shares on a file server named FP2.The new solution will allow work to be submitted to a Web service in WordML format and then stored in an xml column in a new database named Certkiller _projects.
The Web service will be hosted on an existing Web server in the perimeter network,and it will use impersonation to access the database server.A design for the new application solution is shown in the following diagram.

Problem Statements
Management has requested a review of the company's current security policies and wants improvement of the policies as much as possible order protect company data from unauthorized access or accidental deletion.

EXISTING DATA ENVIRONMENT
Databases
Certkiller , Inc .,currently has a single SQL Server 2005 database named Certkiller _biz,which is used to store the company's financial and personnel data.
All objects in the Certkiller _biz database are owned by dbo.

Database Servers
Two database servers are located in the Seattle office: a primary server named SQL 1 on which the Certkiller _biz database is stored,and a warm standby server named Certkiller B to which the Certkiller _biz database is copied using log shipping.
In the event of a server failure,the Certkiller _biz database on Certkiller B can be brought online manually,and the client application can be easily configured to use the standby server.
The hardware on both servers significantly exceeds th current requirements for database performance.

Database Client Computers
The Certkiller biz database is accessed by a managed client/server application that uses ADO.NET 2.0 to connect to the database server.

EXISTING INFRASTRUCTURE
Network Infrastructure
The network consists of teo subnets as shown in the following diagram.

The network contains the servers that are described in the following table.

Server name	Server role
FP1	File and print server
FP2	File and print server
CertKiller1	SQL Server computer
CertKiller2	SQL Server computer
DC1	Domain controller
ISA1	Firewall server
ISA2	Firewall server
IIS1	Web server
EXCH1	Mail server

Directory Services Infrastructure

The Certkiller .com network consists of single Active Directory domain named Certkiller .com. The relevant organizational units (OUs), user accounts, and global groups in the domain are shown in the following diagram.

The accounts for contract writers are defined in the ContractorAccts OU.All other user accounts are defined in the Users container.

BUSINESS REQUIREMENTS
General Requirements
The new Certkiller _projects database will contain data for all current projects and archived content from previously completed projects.Writers can submit multiple revisions of a document,and all versions of the document must be maintained while the project is active.The final version is handed off to the customer at project completion.
Writers and project managers must be able to use the data in archived projects to retrieve copies of documents that have been handed off to customers.

Availability
The current availability strategr for the Certkiller _biz database is considered adequate and must not be changed However,the Certkiller _projects database must provide a level of availability that ensures that the database is automatically made fully available as quickly as possible in the event of a server failure or a storage array failure.In addition,the risk of data loss must minimized.
No new hardware can be purchased for the availability solution.However,FP2 ,which is currently used to store project documents ,will be decommissioned when the new application is implemented and can be used if necessary.
Occasionally, a large amount of data must be manually inserted into the Certkiller _biz database through a custom bulk load operation that requires the database to fail over to the warm standby server that is used for log shipping.

Recoverability
All system and user databases will be backed up using a combination of full ,partial,and transaction log lackups.A recovery plan must be created that specifies the steps that are necessary to use these backups when recovering from a server failure.
If the Certkiller _projects database is corrupted or destroyed,the recovery strategy must be optimized to ensure that the filegroups containing current project data are recovered and made available as quickly as possible.
In addition to the regularly scheduled backups,the Certkiller _biz database must be recoverable to its previous state if an error occurs during the manual bulk load process.

TECHNICAL REQUIREMENTS
Security
Only the database administrator should be able to manage logins in the Certkiller _biz database.
The database administrator and the project managers must be able to manage SQL Server logins and users for access to the new Certkiller _projects database.
Employee salary information, which will be stored in the Certkiller _biz database,must be protected from unauthorized access.
All traffic to and from the HTTP endpoint that is used by the Certkiller _projects database must be encrypted by using SSL.
The principle of least privilege should be applied troughout the solution so that users are granted only the permissions that they actually require.

Maintainability
To minimize management overhead,the company's database administrator wants to minimize the number of separate database servers.Multiple servers can be used to provide enhanced availability.but the day-to-day maintenance of the databases should be focused on a single server whenever possible.
The planned Certkiller _projects database must use the full recovery model,and must contain threee filegroups as shown in the following table.

Topic 5, Certkiller .com (8 Questions)

QUESTION 1
You need to specify the changes to the existing firewall configuration settings that are required by the HTTP endpoint that will be used by the Certkiller _projects database. What should you do?

A. Create a Web publishing rule on ISA2 that allows HTTP traffic on port 5017 from IIS1 to the SQL Server computer.
B. Create a Web publishing rule on ISA1 that allows HTTP traffic on port 5017 from IIS1 to the SQL Server computer.
C. Create a Web publishing rule on ISA2 that allows HTTPS traffic on port 5017 from IIS1 to the SQL Server computer.
D. Create a Web publishing rule on ISA1 that allows HTTPS traffic on port 5017 from IIS1 to the SQL Server computer.

Answer: D

QUESTION 2
There are currently no permissions set on the following four objects in the Certkiller _biz database: Sales.Customersa table containing customer dataSales.CustomerContactsa table containing customer contact dataSales.ContactLista view that retrieves customer data from the Sales.Customers and Sales.CustomerContacts tablesSales.GetContacta stored procedure that retrieves data from the Sales.ContactList view You need to permit the sales_employee database role to retrieve data by using the Sales.GetContact stored procedure. Which action or actions should you perform? (Choose all that apply.)

A. Grant the SELECT permission on the Sales.Customers object to the sales_employee role.
B. Grant the SELECT permission on the Sales.CustomerContacts object to the sales_employee role.
C. Grant the SELECT permission on the Sales.ContactList object to the sales_employee role.
D. Grant the EXECUTE permission on the Sales.GetContact object to the sales_employee role.

Answer: D

QUESTION 3
You plan to use a managed assembly in the Certkiller _projects database that includes a method to save the contents of an xml column as a local file. You need to import the assembly without granting it unnecessary permissions. Which permission level should you assign to the assembly?

A. EXTERNAL_ACCESS
B. the default permission level
C. SAFE
D. UNSAFE

Answer: A

QUESTION 4
You need to design a high-availability strategy for the Certkiller _projects database. Your design must fulfill all business and technical requirements. Which strategy should you use?

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

Answer: C

QUESTION 5
You are creating a management plan for the Certkiller _biz database. You need to specify the steps that must be performed to fail over to the secondary server in order to take the primary server offline for planned maintenance. The primary server will resume its role after the maintenance task has been completed. Which step or steps should you specify? (Choose all that apply.)

A. Create a full database backup of the database on the primary server.
B. Back up the active transaction log on the primary server.
C. Restore the database on the secondary server from the most recent full backup that was taken on the primary server.
D. Apply, in sequence, existing unapplied transaction log backups to the secondary server.

Answer: B,D

QUESTION 6
You are creating a management plan for the Certkiller _biz database. You need to specify the action that must be taken before manually inserting data through a bulk load process. Your plan must fulfill the availability and recoverability business requirements, and it also must require minimal administrative effort. Which action should you specify?

A. Create a full backup.
B. Create a differential backup.
C. Configure replication.
D. Create a database snapshot.

Answer: B

Explanation: A differential backup meets the requirements.
Scenario texts:
"Database Servers
Two database servers are located in the Seattle office: a primary server named Certkiller A on which the Certkiller _biz database is stored,and a warm standby server named Certkiller B to which the Certkiller _biz database is copied using log shipping."
"Availability
The current availability strategy for the Certkiller _biz database is considered adequate and must not be changed However, the Certkiller _projects database must provide a level of availability that ensures that the database is automatically made fully available as quickly as possible in the event of a server failure or a storage array failure. In addition,the risk of data loss must minimized.
"
Not D: To "Create a database snapshot"; requires database mirroring. Certkiller _biz used log shipping not mirroring.

QUESTION 7
You are designing the data archiving strategy for the Certkiller _projects database. You need to identify the data that should be archived when a project is completed. Your design must ensure that minimal storage space is used, and it must fulfill the business requirements for the solution. What should you do?

A. Archive all versions of all documents that belong to the completed project.
B. Archive the earliest version of all documents that belong to the completed project.
C. Archive the most recent version of all documents that belong to the completed project.
D. Archive the earliest and most recent versions of the documents that belong to the completed project.

Answer: C

QUESTION 8
You are designing security for the HTTP endpoint for the Certkiller _projects application. You need to identify which login or logins should be granted the CONNECT permission on the HTTP endpoint. Which login or logins should you use? (Choose all that apply.)

A. BUILTIN\UsersA local Windows group containing the Certkiller \DomainUsers domain global group
B. ContractWritersA local Windows group containing the Certkiller \Contractors

domain global group
C. PMsA local Windows group containing the Certkiller \ProjectManagers domain global group
D. EdsA local Windows group containing the Certkiller \Editors domain global group

Answer: C, D

Explanation:
From the scenario:
#1
"Planned Changes
The company plans to implement a new, Web service-based solution that will facilitate the process by which remote contract writers submit work."
#2
"The Web service will be hosted on an existing Web server in the perimeter network,and it will use impersonation to access the database server.A design for the new application solution is shown in the following diagram.

"
The diagram shows the Contract Writes going thru a Web Service and accessing the SQL server via an Impersonated caller.
It also shows, the Project Mangers and the Editors accessing the SQL server via ADO.NET.

Topic 6, Contoso, Scenario

BACKGROUND

Company Overview

Contoso, Ltd., provides database hosting services for companies in the health care industry. The company is now offering a new hosting service based on SQL Server 2005. The company will also offer various hosting service options that customers can purchase, which will provide high availability, recoverability, and other features.
The company has a single office. Customers connect to the company network through

private WAN connections and also over the Internet.

Planned Changes
The company plans to implement new SQL Server 2005 computers to host customer database. These servers will all run Windows Server 2003 Enterprise Edition and SQL Server 2005 Enterprise Edition.

Problem Statement
A threat analysis was run on a SQL Server 2005 computer named Certkiller A. The report
that was generated after that threat analysis states that the server is at risk for SQL injection attacks.

EXISTING DATA ENVIRONMENT
Currently, Contoso, Ltd., has a database named Customers that is used to track customers. This database exists on a SQL Server 2005 computer named Certkiller A. Internal users access this database through a Web services application that allows users to provide details that are used to build ad hoc queries that are sent to the SQL Server computer.

BUSINESS REQUIREMENTS
General Requirements
Each customer can host up to 10 databases. All databases for a given customer are always hosted on the same server.
Some customers will provide access to their databases through customer-developed Web applications. These applications accept data on a Web page and insert the data into the customer's database. The Web applications always connect to the appropriate SQL server computer through a private WAN link that is not accessible from the Internet.
One customer has a table named Patient, which holds patient information. Any optimization that occurs on the table should not affect current indexes. The SQL script that is used to create this table is shown in the following code segment.

```
CREATE TABLE Patients
(Patient ID int IDENTITY PRIMARY KEY CLUSTERED
, PatientName nvarchar (35)
, Address nvarchar (50)
, City nvarchar ()
, Region nvarchar (35)
, PostalCode nvarchar (35)
. Phone nvarchar (25))
```

The most common query to this table looks up the patient's name.
Customers are required to retain patient records, including details of all transactions with patients, for four years. However, customers want patients who have been inactive for one year to be removed from their database.

Performance
The company wants to maintain a minimal number of SQL Server 2005 instances and

servers.
No company testing or development is allowed to occur on servers that host customer databases.

Availability
Some customers require high-availability solutions. When a customer is moved from a standard system to a high-availability solution, a short period of downtime is acceptable. Different solutions will be considered based on customer requirements.
A customer named Certkiller , Inc., needs a high-availability solution that will provide automatic failover.
Some customers require that their databases be replicated to a server that is located in another facility. These customers provide a dedicated high-speed WAN connection to the alternate facility, and they provide their own SQL Server computer at that facility. These customers might also make data modifications on the server at the alternate facility, and these changes must be replicated on the Contoso, Ltd., server. In the event that changes conflict, both server must retain the most recent change, regardless of which server the change was made to.

Recoverability
Some customers require a tape backup of their databases to be sent to the customer's office on a regular basis. The backup on this tape must be able to restore a single database without the use of any additional tapes or backups.
All databases that are hosted on company servers must receive a full backup each Saturday night, differential backups on other night, and transaction log backups once per hour. Backups must be made to a storage area network (SAN) that is located at the company office. After the Saturday night full backup, all differential and transaction log backups are deleted. After each night's differential backup, all transaction log backups are deleted. Customers can request that their database or databases be restored from these backups.

TECHNICAL REQUIREMENTS
Security
Customers must be able to configure their own SQL Server logins, and customers must have no access to other customers' databases. Customers also want to minimize the amount of administrative time that is required to configure logins and other settings.
Some customers want to be able to access their databases by using only their own Active Directory domain accounts. These customers already maintain their own Active Directory domains.
Each SQL Server computer will run Windows Firewall. Written company policy requires the firewall to open the minimum number of ports that will allow the firewall to function properly.
Healthcare industry regulations state that patient information that is maintained in a database must be protected from disclosure to unauthorized individuals in the event that the database file or storage device is stolen or compromised.
Written company policy states that minimum permissions should always be used.

Maintainability
Customer will use SQL Server Management Studio to administer their database and other SQL Server configuration settings. Administration should take place on a different port than the one that is used for data access.

Topic 6, Contoso (10 Questions)

QUESTION 1
You need to design a hosting service option for customers who want to access their databases by using their own Active Directory domain accounts. What should you do?

A. Design a hosting service option that duplicates each customers domain user account as SQL Server login account.
B. Design a hosting service option that provides VPN-based connectivity from each customers network to the SQL Server computer that hosts that customers database or databases.
C. Design a hosting service option that provides a dedicated server to each customer. Join that server to that customers Active Directory domain.
D. Design a hosting service option that configures a unique instance of SQL Server 2005 for each customer. Configure that instance to use Integrated Windows authentication.

Answer: C

QUESTION 2
You need to make recommendations for maximizing the performance of queries based on patient names from the Patient table. What should you do?

A. Recommend that an index should be created on the patient name and ID columns, and that the index fill factors should be set at 10%.
B. Recommend that a nonclustered index should be created on only the patient name column.
C. Recommend that a clustered index should be created on the patient name column.
D. Recommend that a nonclustered index, which uses the INCLUDE clause for all columns, should be created on the patient name column.

Answer: B

QUESTION 3
You need to make recommendations or design changes to ensure that patient information is protected while it is stored in the database. What should you do?

A. Recommend that customers should configure column-level encryption for all columns that contain patient information.
B. Specify that a server administrator must encrypt all database files by using the Windows Encrypting File System (EFS).
C. Recommend that all customer connections to SQL Server computers should be made

by means of an IPSec tunnel.
D. Specify that all SQL Server computers must contain IPSec-enabled network adapters.

Answer: A

QUESTION 4
You need to make recommendations for the archiving of data for inactive patients. What should you recommend?

A. Header information for inactive patients should be moved to an archive table within the customers database.
B. All data for inactive patients should be moved to a different database that has the same database schema as the customers database.
C. Transaction details for inactive patients should be exported to a file.
D. Transaction details for inactive patients should be moved to an archive table within the same database.

Answer: B

QUESTION 5
You need to design a hosting service option for customers who require periodic delivery of database tape backups. How should you design the hosting service option?

A. Create a full copy-only database backup to tape on a regular basis.
B. Perform a backup of the full-text catalog to tape on a regular basis.
C. Back up all customer transaction log files every hour.
D. Create differential database backups to tape on a regular basis.

Answer: A

QUESTION 6
DRAG DROP
Your boss, Mrs. Certkiller, wants you to design a recovery plan to use in the event that the SAN-based backups are required to restore a database.
What should you do?
Select and order the appropriate actions.

Actions, Select from these	Routing terms, place here
Restore the most recent fulll backup for the database.	*Place first action here*
Restore all differential backups for the database	*Place section action, if any, here*
Restore the most recent differential backup for the database.	*Place third action, if any, here*
Restore the most recent transaction log backup for the database.	*Place fourth action, if any, here*
Restore all transaction log backups since the most recent differential backup.	*Place 5th action, if any, here*

Answer:

Actions, Select from these	Routing terms, place here
	Restore the most recent fulll backup for the database.
Restore all differential backups for the database	Restore the most recent differential backup for the database.
	Restore all transaction log backups since the most recent differential backup.
Restore the most recent transaction log backup for the database.	*Place fourth action, if any, here*
	Place 5th action, if any, here

QUESTION 7
You need to design a strategy for identifying the number of instances that any one SQL Server 2005 computer will support. What should you do?

A. Specify that each server must have one instance for each customer.
B. Specify that each server must each have only one instance.
C. Specify that each server must have one instance for each database that is hosted on that server.
D. Specify that each server must have one instance for each customer who has one or more databases that are hosted on that server.

Answer: D

QUESTION 8
You need to ensure that customers will be able to administer their databases and other SQL Server settings. What should you do for each customer?

A. Place the appropriate database user accounts into the customer db_datareader and db_datawriter fixed database roles.
B. For each customer, place the appropriate logins into the sysadmin fixed server role.
C. For each customer, create a local Windows user account on the appropriate SQL Server computer and place the account into the local Administrators group.
D. For each customer, create a local Windows user account on the appropriate SQL Server computer and place the account into the local Server Operators group.

Answer: B

QUESTION 9
You need to design a high-availability hosting service solution for the company that fulfills their business requirements. What should you do?

A. Design a hosting service option that replicates each of their customer databases to a subscription SQL Server computer. Use the same subscription server for all highly available customer databases.
B. Design a hosting service option that provides redundant power supplies, network adapters, and cooling fans in the server that hosts the customer databases.
C. Design a hosting service option that places the customer databases on a RAID-1 volume.
D. Design a hosting service option that places the customer databases on a RAID-5 volume.
E. Design a hosting service option that places the customer databases in a clustered instance of SQL Server 2005.

Answer: E

QUESTION 10
You need to make recommendations to help customers who use Web applications mitigate potential SQL Server security risks. What should you do?

A. Recommend that data on the customers SQL Server computer should be encrypted.
B. Recommend that the customers SQL Server computer should be placed behind a hardware firewall.
C. Recommend that the customers Web server should be placed behind a firewall.
D. Recommend that the customers Web application should access data only through stored procedures.

Answer: D

Topic 7, Coho Vineyard & Winery, Scenario

BACKGROUND

Company Overview

Coho Vineyard & Winery began as a small business that supplied wine to local retailers

and restaurants. The company has grown substantially, and it now sells wine to customers all over the world.
The company is based in California. The main office is located in San Francisco, and the vineyard is 60 miles to the north.
Users at the vineyard access the Sales database by using an ASP.NET Web application. Customers order cases of wine by mailing or faxing a sales order form,and the details are entered manually into the database.

Planned Changes
The accompany recently decided to create a customer relationship management (CRM) application that will use a SQL Server 2005 database. Customer data that is currently held in the Sales database will moved to the new CRM database ,and a stored procedure will be added to the Sales database to retrieve customer data from the CRM database by using the security credentials of the original caller.
The CRM database will be to all company operations. The most frequently accessed table will be the CustomerData.Customers table. The definition of this table is shown in the following code statement.

```
CREATE TABLE CustomerData.Customers
(
Customer ID int PRIMARY KEY CLUSTERED,
FirstName nvarchar (25) NOT NULL,
LastName nvarchar (25) NULL,
MiddleName nvarchar'?¬25'NULL
)
```

During the company's growth, small deparemental databases have been created to store specific kinds of data. The company plans to migrate these databases to SQL Server 2005 and centralize them into a single data center that will include the Sales and CRM databases.
The company recently created a central ITdepartment. The IT department has deployed a Windows Server Update Services(WSUS) server named WSUS1 to keep all computers in the main office up-to-date with the latest service packs and patches. All computers in the main office will be configured to download from this server.

Problem statements
The company uses log shipping to provide a redundant copy of the Sales database on second server. This secondary server must be configured to allow the swapping of log shipping roles. The two servers have not previously swapped log shipping server roles.

EXISTING DATA ENVIRONMENT
Databases
The Sales database is configured for log shipping.The risk of minor data loss in the event of server failure is tolerable because sales orders can be manually re-entered rom the paper forms.
There are three smail departmental databases. Each of these databases has only a small number of users. These databases are described in the following table.

Database	Description
DeliveryVans	An MSDE database that contains details about the company' s fleet of delivery vans. It is used by the shipping department to track vehicle service history.
AirlinePreferences	A Microsoft Access database that is used by the administration department when booking business traver for executives.
SeasonalContractors	A Microsoft Excel spreadsheet that contains contact details for temporary workers who are employed for the harvest season.

Database Servers
Currently there are three production SQL Server computers named Certkiller A, Certkiller B, and Certkiller C.
. Certkiller A hosts the Sales database
. Certkiller B is used as a standby server for log shipping
. Certkiller C is configured as a monitor server for log shipping
Certkiller B will be used to host the CRM database.
Three will be used to host the CRM database.
Three test servers named Certkiller TST1, Certkiller TST2, and Certkiller TST3 are configured identically to the respective production servers. Transact-SQL scripts that duplicate core functionality are stored on the three test servers.These scripts can be used to test new code or configurations before deployment to the production environment.
The WSUS configuration includes the WSUS computer groups shown is the following table.

Computer group	Members
SQL Production	CertKiller1 CertKiller2 CertKiller3
SQL Test	CertKillerTEST1 CertKillerTEST2 CertKillerTEST3

Database Client Computers
An ASP.NET application is used to interact with the Sales database. This application can be accessed from computers on the main office network and over the Internet by authenticated users at the vineyard.
The code in the ASP.NET application runs as a domain account named COHO\SalewWed uses Windows authentication to connect to the Sales database.
One of the most commonly used pages in the ASP.NET application retrieves order details by appending the OrderID value that is entered into a text box to the following string:'?SELECT*FROM SalesData.Order WHERER OrderID='?

EXISTING INFRASTRUCTURE
Network Infrastructure
All servers run Microsoft Windows Server 2003 ,and all client computers run Windows

XP Professional.The network is configured as shown in the following diagram.

Directory Services Infrastructure
The company network consists of a single Active Directory domain. A Group Policy object (GPO) based on the WSUS administrative template has been created and assigned to all computers.

BUSINESS REQUIREMENTS
General Requirements
Sales order records have a status field,which can have one of the following settings:
. 1 (received)
. 2(being processed)
. 3(delayed)
. 4(completed)
Atrigger is used to set the status to 4 when delivery is completed.Users can retrieve and update incomplete orders through a view ,but they must not be able to complete orders through the view.
Individual order records can be retrieved by data through a stored procedure.However, as more sales orders have been added, the size of the SalesData.Orders table has increased.The server administrator has requrested that a data archiving solution be created so that records for orders that are older than six months are removed from thd bable. However,the archived records must still be stored in the same database,and users must be able to retrieve and update them.

Availability
The CRM database must be protected by a high-availability strategy that minimizes the risk of data loss in the event of a server failure and that provides automatic failover.Failover must take no longer than it currently does.NO additional hardware can be purchased for the high-availability strategy.

Recoverability
The departmental databases can be adequately protected with a full backup once each day.,but the Sales and CRM databases must be dacked up accrding to the schedule shown in the following table.

Backup name	Backup type	Time
FullBackup	Full	0:00 midnight
LogBackup1	Log	04:00
LogBackup2	Log	08:00
DiffBackup1	Differential	12:00 noon
LogBackup3	Log	16:00
LogBackup4	Log	20:00

TECHNICAL REQUIREMENTS

Security

Database backups must be performed by the same users that back up the Windows Server 2003 computers.For this purpose a login for the Backup Operators local group will be created as standard in each SQL Server instance.
The risk of SQL injection attack through the ASP.NET application must be minimized.
All SQL Server services must run using service accounts that have only the minimum privileges.
All database users must have only the minimum permissions required to perform their job.

Maintainability

Departmental databases must continue to be maintained by an appropriate departmental employee.but all server-level operations must be managed by the IT department.
The number of SQL Server instances must be kept to a minimum in order to reduce server management overhead.
The service accounts that are used by all database services must be managed centrally.
All aervice pack and patches must be applied as quickly as possible,but only after compatibility with production server configuration is successfully tested.
All service pack and patches must be applied as quickly as possible ,but only after compatibility with production server configuration is successfully tested.

Performance

To minimize the impact of page splits during online transaction processing (OLTP) operations, all indexes in the Sales and CRM databases must be created with a fill factor of 75 percent.

Topic 7, Coho Vineyard & Winery (9 Questions)

QUESTION 1

You need to configure the Sales database to fulfill the backup requirements. Which Transact-SQL statement should you use?

A. ALTER DATABASE Sales SET RECOVERY SIMPLE
B. EXEC sp_dboption 'autoclose', 1
C. ALTER DATABASE Sales SET RECOVERY FULL
D. EXEC sp_dboption 'trunc. log on chkpt.', 1

Answer: C

QUESTION 2

You are configuring Certkiller A so that the distributed query in the Sales database can

access data in the CRM database on Certkiller B. You create a linked server for Certkiller B, and you create a linked server login that uses impersonation. Now, you need to ask the network administrator to configure Certkiller
A. Which two tasks should you
ask the administrator to perform? (Each correct answer presents part of the solution. Choose two.)

A. Add the user account that is used by the SQL Server service to the local Administrators group.
B. Enable the Do not trust this user for delegation Active Domain property for the user account that is used by the SQL Server service.
C. Create a Service Principal Name (SPN) for the user account that is used by the SQL Server service.
D. Enable the Trusted for delegation Active Domain property for the user account that is used by the SQL Server service.

Answer: C,D

QUESTION 3
You design the view through which users can retrieve and update active orders in the Sales database as shown in the following code segment. CREATE VIEW OrderData.ActiveOrdersASSELECT OrderID, OrderDate, CustomerID, StatusFROM OrdersWHERE Status IN (1, 2, 3) You need to modify the view definition to enforce the business requirements for updating order status. What should you do?

A. Add a WITH ENCRYPTION clause.
B. Add a WITH SCHEMABINDING clause.
C. Add a WITH VIEW_METADATA clause.
D. Add a WITH CHECK OPTION clause.

Answer: D

QUESTION 4
DRAG DROP
Your boss, Mrs. Certkiller, wants you to document the steps that are necessary to ensure that the servers in the data center are updated when service packs and patches become available. Mrs. Bills wants to ensure that the risk of service interruption due to update incompatibilities is minimized.
You need to identify the steps that your patch management should include to install and verify compatible updates.
What should you do?
Select and order the appropriate actions.

Actions, Select from these	Routing terms, place here
Use the WSUS console to approvie compatible updates for the SQL Production computer group	Place first action here
On each SQL Server 2005 computer download SQL Server updates from the Microsoft SQL Server Web site	Place second action if any, here
Use the WSUS console to approvie updates for the SQL Test computer group.	Place third action, if any, here
Use the WSUS Group Policy template to disable client-side targeting.	Placea fourth ction, if any, here
Run the validation scripts on the test servers to verify correct operation.	Placea 5th ction, if any, here
Use the WSUS console to verify that updates have been installed on the test servers.	Place 6th action if any, here
Use the WSUS console to verify that updates have been installed on the production servers.	Placea 7th ction, if any, here

Answer:

Actions, Select from these	Routing terms, place here
	Use the WSUS console to approvie updates for the SQL Test computer group.
On each SQL Server 2005 computer download SQL Server updates from the Microsoft SQL Server Web site	Use the WSUS console to verify that updates have been installed on the test servers.
	Run the validation scripts on the test servers to verify correct operation.
Use the WSUS Group Policy template to disable client-side targeting.	Use the WSUS console to approvie compatible updates for the SQL Production computer group
	Use the WSUS console to verify that updates have been installed on the production servers.
	Place 6th action if any, here
	Placea 7th ction, if any, here

Explanation:
Give the following scenario texts:
Given the following text:

Three test servers named CERTKILLER1,CERTKILLER2,and CERTKILLER3 are configured identically to the respective production servers. Transact-SQL scripts that duplicate core functionality are stored on the three test servers.These scripts can be used to test new code or configurations before deployment to the production environment.

All service pack and patches must be applied as quickly as possible ,but only after compatibility with production server configuration is successfully tested.

Testing in change in a Test environment before applying them to a Production environment minimizes risk and thus it's widely accepted as a Best Practice.
The Test environment server configuration mirrors the Production environment server configuration.

QUESTION 5
You are planning the configuration of Certkiller
A. You need to use the most appropriate
Windows account for the SQL Server service. Which account should you use?

A. a domain user account
B. a local user account
C. the NETWORK SERVICE account
D. the LOCAL SYSTEM account

Answer: A

QUESTION 6
DRAG DROP
Your boss, Mrs. Certkiller, wants you to restore data from a backup. The data files in the Sales database were lost at 17:00. The transaction log is still available. You back up the transaction log to a backup named Tailbackup, using the NO_TRUNCATE option. The regularly scheduled backups are also available.
You need to identify which backups to restore and the correct order which they must be restored in order to minimize the number of restore operations.
What should you do?
Select and order the appropriate backups.

Answer:

QUESTION 7

You need to implement a high-availability solution for the CRM database to fulfill the availability requirements. Which high-availability technology should you use?

A. database mirroring
B. database snapshot

C. replication
D. log shipping

Answer: A

QUESTION 8
You plan to create a unique nonclustered index on the CustomerID, LastName, and FirstName columns of the CustomerData.Customers table in the CRM database. To aid in estimating the space requirements for the index, you identify the following variables: Estimated number of rowsClustered index key Number of columns in the indexFixed data sizeNumber of variable-length columnsAverage variable-length data size You need to identify the most significant additional variable that will increase the estimated index size. Which additional variable should you identify?

A. current number of rows
B. null bitmap
C. fill factor
D. automatically generated uniqueifier value

Answer: C

QUESTION 9
You need to identify the most appropriate archiving strategy for the SalesData.Orders table in the Sales database. The archiving strategy must have the minimum impact on performance. What should you do?

A. Create a table named ArchivedData.Orders. Partition the SalesData.Orders table and its indexes, and use MERGE, SPLIT, and SWITCH functions every three months to move old order data into ArchivedData.Orders.
B. Create a table named ArchivedData.Orders. Every three months use an INSERT statement to copy data from the SalesData.Orders table into ArchivedData.Orders, and then use a DELETE statement to remove archived data from SalesData.Orders.
C. Create a database snapshot of the Sales database every three months, and then use a DELETE statement to remove archived data from the SalesData.Orders table.
D. Back up the Sales database to tape every three months, and then use a DELETE statement to remove archived data from the SalesData.Orders table.

Answer: A

QUESTION 10
DRAG DROP
You plan to use certificate-based authentication for database mirroring of the CRM database between a principal database on Certkiller 2 and a mirror database on Certkiller 3. You plan to create the objects shown in the following table.

Server	Object type	Object name

Certkiller 2	Certificate	Certkiller 2MirrorCert
Certkiller 2	Login	MirroringLogin
Certkiller 2	Mirroring endpoint	MirroringEndpoint
Certkiller 3	Certificate	Certkiller 3MirrorCert
Certkiller 3	Login	MirroringLogin
Certkiller 3	Mirroring endpoint	MirroringEndpoint

You plan to export the Certkiller 2MirrorCert certificate and copy it to Certkiller 3, and you plan to export the Certkiller 3MirrorCert certificate and copy it to Certkiller 2.
You need to associate the certificates with the appropriate endpoints and logins.
What should you do?
Drag Drop question

Answer:

QUESTION 11
You are reviewing the code that is used to retrieve order data in the ASP.NET Web application. You need to update the application to meet the security requirements. What should you do?

A. Create a view to retrieve the order data, and replace the table name with the view name in the ASP.NET code.
B. Create an HTTP endpoint that has BATCHES enabled, and modify the ASP.NET code

to connect to the HTTP endpoint.
C. Create a SQL Server login that has a complex password, and modify the ASP.NET code to connect by using the SQL Server login.
D. Create a stored procedure to retrieve the order data, and modify the ASP.NET code to call the stored procedure by using parameters.

Answer: D

QUESTION 12
You need to migrate the DeliveryVans, AirlinePreferences, and SeasonalContractors databases into the data center. What should you do?

A. Install a separate instance of SQL Server 2005 for each of the databases on a single server.
B. Create a SQL Server database for each of the databases in a single instance of SQL Server 2005.
C. Import the data from each of the databases into a single database in an instance of SQL Server 2005.
D. Install a default instance of SQL Server 2005 on three separate servers. Use one server for each of the databases.

Answer: B

Topic 8, Southridge Video, Scenario

Company Overview
Southridge Video is a video rental company. The company has a main office and 250 video rental locations in North America. It also rents videos over the Internet, with delivery by mail.

Planned Changes
The company plans to develop a new mission-critical accounts database at the main office to maintain account information for the Internet rentals business. This database must automatically fail over when the primary server fails. In addition, the company wants to configure an additional server so that incorrect updates and deletions can be corrected using the information on the additional server. No single server failure should prevent the ability to correct data errors. Four new server computers will be available for this mission-critical accounts database.
A new replication system will be implemented so that store employees can view the list of videos that are available at other company stores within 20 miles. Store employees should be able to update only their own store's records.

Problem Statements
The database named rental_history is extremely large and is becoming slower as it increases in size. Investigation revealed that the appropriate indexes already exist in this database. The most common report includes the customer name and city from the customer table; the store name, city, and store number from the store table; the rental date from the rental table; and the video name and genre from the videotitle table. Query

statistics indicate that the joins that are required to run the other common reports, which frequently include fields from all tables, are negatively affecting the performance on this database. The rental_history database does not allow any changes to the data. There is ample time to import the data once per month.

EXISTING DATA ENVIRONMENT

Database Servers

Southridge Video recently upgraded all of their SQL Server 2000 computers to SQL Server 2005 running on Microsoft Windows Server 2003. The SQL Server computers are described in the following table.

Server	Location	Database	Function
CertKillerA	Main office	**acct1**	Holds secure financial information
CertKillerB	Main office	**internet_rentals**	Holds information on Internet requests and current rentals
		rental_history	Readonly database that holds all historical data from the **internet_rentals** and all **store_*nnn*_rentals** databases
SQL*nnn* (where *nnn* is the store's ID)	All stores	**store_*nnn* _rentals**	Each store has its own SQL Server computer and database to track its respective video details, availability, and rentals. All database object definitions are identical and are named by the corporate store ID.
		store_*nnn*_accts	Each store has its own **accounts** database to track customer accounts.

All store SQL Server computers are configured for SQL Server and Windows Authentication mode. Certkiller A and Certkiller B are configured for only Windows Authentication mode.

All store SQL Server computers have used the same password for the sa login ID for the past two years to facilitate access by any of five mobile database administrators who are responsible solely for managing the store servers.

Some nonutilized production level servers can be used if required.

Database

The largest table on Certkiller A has a clustered index and is approximately 2 GB in size. No changes have been made to the default settings for the tempdb database on Certkiller A.

Currently, each store_nnn_rentals database is configured to use a single filegroup.
Queries in the internet_rentals database are frequently sorted by the videotitle column.

Database Client Computers
Client computers in the stores and in the main office run either Windows XP Professional, Windows 2000 Professional, Windows NT Workstation 4.0, or Windows 98. All client computers must be able to function with all servers. Upgrading the client computers is currently not possible.

EXISTING INFRASTRUCTURE
Network Infrastructure
All stores and the main office are connected by high-speed networks.

Active Directory Infrastructure
The Southridge Video network consists of a single Active Directory domain named ad.southridgevideo.com. All user accounts and servers exist in this domain.
Windows user accounts are used to grant access to the SQL Server computers.
A Windows group named SQLManagers has login privileges on Certkiller A and Certkiller B and is a member of the sysadmin role on these two SQL Server.

Recoverability
All rental stores currently perform full backups nightly and transaction log backups four times per day on the store_nnn_rentals database.
The internet_rentals database has full backups nightly and transaction log backups every hour, on the hour, from 08:00 to 17:00. At 12:00 noon a differential backup is performed.

Security
The SQL Server Agent service on Certkiller A is currently running as a domain account named SQL Server that is a member of the local administrators group and is a member of the sysadmin role.

BUSINESS REQUIREMENTS
General Requirements
Development, testing, and error checking must not be performed on the main production database.

Performance
The process of building indexes should be optimized for best performance.
The company plans to use the SORT_IN_TEMPDB option when creating all indexes.
The purchase of new hard disks has been approved to support this plan.
The internet_rentals database is a very busy database. To improve performance, a separate read-only version of the database should be created to run reports and perform data analysis. This version must be kept synchronized with the writeable version of the internet_rentals database with as latency as possible.

Availability

All databases must be able to withstand a single drive failure.
The information in the read-only copy of the internet_rentals database must be available even when the internet_rentals database fails.

Recoverability
The four busiest stores have had server failures that caused business to cease until the database could be brought back online. Lost revenues have been significant enough for the company to decide that these servers must be available 24 hours a day, seven days a week, and must automatically fail over in the event of a server failure. All user and system databases on these servers should be fault tolerant. Performance must be maintained or improved, even when a single server fails.
A database recovery policy must be created. This policy should include steps to be performed on a regular basis to ensure successful database restores. It should also include documentation regarding the different types of restores that are possible and the costs and benefits of each type of restore.

TECHNICAL REQUIREMENTS
Security
Windows Authentication mode is now required on all corporate SQL Server computers.
All accounts should have only the minimum permissions that are necessary.
The rental_agents Windows group should have read'insert, and update permissions on 10 of the tables in the internet_rentals database. No other permissions are required.
Database administrators who work in the main office must be able to create and manage databases and manage all server settings and security, including logins on Certkiller A and Certkiller B. Only these database administrators should be able to change server settings and create database objects on servers in the main office.
Any changes that are made to database objects or the SQL Server configuration on any server must generate an e-mail message that is sent to managers and that includes the Windows account name of the user who made the change.
The five mobile database administrators who manage the servers in the stores must be able to create and manage databases and to manage all SQL Server settings and security, including logins, on all store SQL Server computers.
Reads and writes of sensitive data in several tables in the acct1 database should be tracked with as little effect on performance as possible.
All data retrieved from Certkiller A must be encrypted while on the network.

Maintainability
Certkiller A must forward SQL Server events to Certkiller B.

Topic 8, Southridge Video (12 Questions)

QUESTION 1
You need to create the database recovery policy. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. For each physical database, test the restore process in the existing physical location.

B. Test online restores to your production databases at different hours to verify restore times and functionality on a busy server.
C. Based on different data loss scenarios, confirm the amount of time each type of restore will take by restoring to a nonproduction server.
D. Document the restore processes for recovering to a specific time or transaction while testing the restores.

Answer: C,D

QUESTION 2
You need to review the current storage system and decide on the best configuration for the tempdb database on Certkiller A to improve tempdb performance. Your solution must ensure that company requirements and policies are fulfilled. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Create a RAID-1 set, and move tempdb to this drive set.
B. Create a RAID-0 set, and move tempdb to this drive set.
C. Set the starting size of tempdb to 3 GB.
D. Create a RAID-0 set, and move tempdb and the user database with the largest index to this drive set.
E. Disable automatic file growth on tempdb.

Answer: A,C

QUESTION 3
You need to secure the Windows account that is being used by the SQL Server Agent service on Certkiller A, and you want to use the minimum amount of administrative effort. You remove the account named SQLService from the local administrators group on Certkiller
A. What should you do next?

A. Run the SQL Server Agent service as the built-in local system account.
B. Run the SQL Server Agent service as the network service account.
C. Grant the SQLService account all necessary rights and permissions on the SQL Server directory structure and registry.
D. Add the SQLService account to the SQLServer2005SQLAgentUser$InstanceName group.

Answer: D

QUESTION 4
DRAG DROP
Your boss, Mrs. Certkiller, wants you to resolve a potential loss of data. Jack discovered that all inserts and updates in the internet_rentals database from the last two days were lost due to an inadvertent deletion at 11:45. It is now 11.59.
You need to do a point-in-time restore to recover the lost data. You want to limit the

amount of data loss after the restore is completed. Your database, transaction log, and all backups are available. You take the database offline.
What should you do next?
Select and order the appropriate actions.

Actions, Select from these	Routing terms, place here
Restore the most recent full backup, and use the WITH NORECOVERY option	*Place first action here*
Restore all but the final transaction log backups that have occured since the most recent differential backup, and use the WITH NORECOVERY option,	*Place second action, if any, here*
Restore the final transaction log backup, and use the WITH RECOVERY and STOPAT options.	*Place third action, if any, here*
Back up the active portion of the transaction log.	*Place fourth action, if any, here*
Restore the most recent differential backup, and use the WITH NORECOVERY option.	*Place 5th action, if any, here*
Restore all but the final transaction log backups that have occured since the most recent full backup, and use the WITH NORECOVERY option.	*Place 6th action, if any, here*

Answer:

Actions, Select from these	Routing terms, place here
	Back up the active portion of the transaction log.
Restore all but the final transaction log backups that have occured since the most recent differential backup, and use the WITH NORECOVERY option,	Restore the most recent full backup, and use the WITH NORECOVERY option
	Restore all but the final transaction log backups that have occured since the most recent differential backup, and use the WITH NORECOVERY option,
	Restore the final transaction log backup, and use the WITH RECOVERY and STOPAT options.
Restore the most recent differential backup, and use the WITH NORECOVERY option.	*Place 5th action, if any, here*
	Place 6th action, if any, here

Explanation:

The issue with this question is that we are missing some key data, namely are the times given question on a 24 or 12 hour clock:

Your boss, Mrs. Jack Bill, wants you to resolve a potential loss of data. Jack discovered that all inserts and updates in the internet_rentals database from the last two days were lost due to an inadvertent deletion at 11:45. It is now 11:59.

Given the ambiguity of the clock there are a few different means:

Question time	12 hr	24 hr
11:45	11:45 am or 11:45 pm	11:45 (11:45 am)
11:59	11:59 am or 11:59 pm	11:59 (11:59 am)

Given the following text on page 85:

The internet_rentals database has full backups nightly and transaction log backups every hour, on the hour, from 08:00 to 17:00. At 12:00 noon a differential backup is performed.

I assume the following backup plan

24 hr	**Backup command**
1	none
2	none
3	none
4	none
5	none
6	none
7	none
8	Transaction log
9	Transaction log
10	Transaction log
11	Transaction log
12	Transaction log & Differential
13	Transaction log
14	Transaction log
15	Transaction log
16	Transaction log
17	Transaction log
18	Full - maybe; no exact time given
19	Full - maybe; no exact time given
20	Full - maybe; no exact time given
21	Full - maybe; no exact time given
22	Full - maybe; no exact time given
23	Full - maybe; no exact time given

I will give 2 different answers, one for 11:45 am (11:45 24hr) and another for 11:45 pm (23:45 24hr).

1) Answer for 11:45 am (11:45 24hr) scenario:
FIRST:
Backup the active portion of the transaction log.
SENCOND:
Restore the most recent full backup, and use the WITH NORECOVERY option.
THIRD:
Restore all but the final transaction log backups that have occurred since the most recent FULLbackup, and use the WITH NORECOVERY option.
FOURTH:
Restore the final truncation log backup, and use the WITH RECOVERY and STOPAT options.
2) Answer for 11:45 pm (23:45 24hr)) scenario:
FIRST:
Backup the active portion of the transaction log.
SENCOND:
Restore the most recent full backup, and use the WITH NORECOVERY option.
THIRD:
Restore the most recent differential backup, and use the WITH NORECOVERY option
FOURTH:
Restore all but the final transaction log backups that have occurred since the most recent DIFFERENTIAL backup, and use the WITH NORECOVERY option.
FIFTH:
Restore the final truncation log backup, and use the WITH RECOVERY and STOPAT options.

QUESTION 5
A rental agent named Eric is a member of the Windows rental_agents group. He was inadvertently given more permissions than he should have as a member of the rental_agents group. You confirm that the other rental agents do not have excessive permissions. You use the EXECUTE AS statement to impersonate Eric, and you run six different SQL commands in the internet_rentals database. You need to identify which of the commands have results that show excessive permissions for Eric. Which two commands should you identify? (Each correct answer presents part of the solution. Choose two.)

A. SELECT name FROM sys.tables WHERE HAS_PERMS_BY_NAME(name, 'OBJECT', 'SELECT') = 1;returns 10 rows
B. SELECT HAS_DBACCESS('internet_rentals');returns a value of 1
C. SELECT HAS_PERMS_BY_NAME('sa', 'LOGIN', 'IMPERSONATE'); returns a value of 0
D. SELECT IS_SRVROLEMEMBER ('serveradmin');returns a value of 1
E. SELECT name FROM sys.tables WHERE HAS_PERMS_BY_NAME(name, 'OBJECT', 'DELETE') = 1; returns 10 rows

Answer: D,E

QUESTION 6
You need to implement encryption for Certkiller A based on the companys technical requirements. What should you do?

A. Implement the Server (Request Security) IPSec policy on Certkiller A.
B. Enable encrypted connections for the SQL Server instance with the ForceEncryption option enabled.
C. Create the acct1 database, and encrypt all data.
D. Enforce the use of Kerberos authentication on Certkiller A.

Answer: B

QUESTION 7
You need to define an authentication system for the main office database administrators. The setup should require the minimum amount of administrative effort. The authentication environment must fulfill the companys security requirements. What should you do?

A. Create a SQL Server login with Windows Authentication for each main office database administrator. Add all of these logins to the db_owner role in each database.
B. Create a SQL Server login with SQL Server Authentication for each main office database administrator. Add all of these logins to the sysadmin role.
C. Create a Windows global group named DBAdmins. Add each main office database administrators Windows user account to the Windows DBAdmins group. Create a SQL Server login with Windows Authentication for the group. Add the group to the serveradmin fixed server role.
D. Add each main office database administrators Windows user account to the Windows SQLManagers group.

Answer: D

QUESTION 8
You need to strengthen the security settings and standards for the store SQL Server computers. Your solution must fulfill the companys security and manageability requirements. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Add the user accounts of the mobile database administrators to the Windows SQLManagers group. Create a SQL Server login for that group to each stores SQL Server computer. Add that group to the sysadmin fixed server role.
B. Create a domain global group for the user accounts of the mobile database administrators. Add the group to each stores SQL Server computer. Add the group to the sysadmin fixed server role.
C. Add the user accounts of the mobile database administrators to the Windows SQLManagers group.Add the group to each stores SQL Server computer.Add the group

to the serveradmin server role.
D. Change all store SQL Server computers to Windows Authentication.
E. Create a domain global group for the user accounts of the mobile database administrators.Add the group to each stores SQL Server computer.Add the group to the serveradmin fixed server role.

Answer: C,E

QUESTION 9
You need to design a high-availability solution for the four busiest stores. You want to use as few servers as possible, and you need to fulfill the companys performance requirements. What should you do?

A. Create a failover cluster with three cluster nodes, and two virtual servers on two Windows Clustering groups.
B. Create a failover cluster with two cluster nodes, and two virtual servers on two Windows Clustering groups.
C. Configure log shipping for the four store_nnn_rentals databases.
D. Create a database mirror for each of the four store_nnn_rentals databases, and configure each mirrored database to use a witness server and full transaction safety.

Answer: A

QUESTION 10
You need to make recommendations for tracking usage on the acct1 database to fulfill the companys security requirements. What should you recommend?

A. Set up the Security Audit event category in SQL Trace to track the Audit Schema Object Access event class.
B. Create DDL triggers on all sensitive tables.
C. Set up the Security Audit event category in SQL Trace to track the Audit Database Object Management event class.
D. Create DML triggers on all sensitive tables.

Answer: A

QUESTION 11
You need to implement the new read-only copy of the internet_rentals database on SQL2 according to the companys performance and availability requirements. What should you do?

A. Install a new SQL Server 2005 computer. Create a new database on that server, and configure snapshot replication between internet_rentals and the new database.
B. Install a new SQL Server 2005 computer. Create a new database on that server, and configure merge replication between internet_rentals and the new database.
C. Create a new database on SQL2. Configure transactional replication between

internet_rentals and the new database.
D. Install a new SQL Server 2005 computer. Create a new database on that server, and configure transactional replication between internet_rentals and the new database.
E. Install a new instance of SQL Server 2005 on SQL2. Create a new database, and configure transactional replication between internet_rentals and the new database.

Answer: D

QUESTION 12
You need to improve the performance for the following query in the internet_rentals database. SELECT videotitle, upc_no, retailprice FROM srvideo.videotitle WHERE releasedate BETWEEN '05-01-2005' AND '05-30-2005' The scripts that were originally used to create the existing table and indexes that are used in the query are shown in the following code segment. create table srvideo.videotitle (videoid int IDENTITY(1,1) primary key nonclustered videotitle nvarchar(100) not null , description nvarchar(255) null , videolanguage nvarchar(50) null , releasedate datetime null , isbn nvarchar(25) , upc_no nvarchar(25) , format nvarchar(25) , cost money , retailprice money) go create clustered index cl_videotitle on srvideo.videotitle (videotitle); You must not diminish the performance on other SELECT queries that are regularly performed. What should you do?

A. Create a nonclustered index on the retailprice column. Add the releasedate and videotitle columns as included columns.
B. Add a clustered index on the releasedate column.
C. Create a nonclustered index on the releasedate column. Add the videotitle, upc_no, and retailprice columns as included columns.
D. Create a nonclustered index on the releasedate column.

Answer: C

Topic 9, Consolidated Messenger, Scenario

Company Overview
Consolidated Messenger coordinates package deliveries throughout the United States.The company partners with multiple regional delivery companies to distribute packages of all sizes to both business and residential addresses.
The company is located in Chicago.Its regional delivery partners are located throughout the United States.The company partners with multiple regional delivery companies to distribute packages of all sizes to both business and residential addresses.
The company is located in Chicago.Its regional delivery partners are located throughout the United States.

Planned Changes
Specifications are being written for a new application to manage employee benefits for Consolidated Messenger.This application will use the users' Active Directory credentials to authenticate the users to SQL Server .Some of the benefits data is sensitive and should be viewable only from the benefits management application.However,users are allowed

to view other,less sensitive benefits data when they use Microsoft Access to issue ad hoc queries against the benefits data.
In order to reduce expenses , the Promotions database and the Partners database will be consolidated onto a single SQL Server computer.Both of these databases are accessed by employees of the regional delivery companies by using SQL Server-authenticated logins.All users who have access to the Promotions database con access the Partners database ,but not all users of the Partners database are allowed to access the Promotions databsase.This SQL Server computer should have the fewest number of instances possible while still meeting these requirements.

Problem Statements
Users report that browser response time is slow in the Shipment Tracking application,which uses the Tracking database .The Shipment Tracking application uses a large number of globlal temporary tables.Application diagnostics show that the delays are caused by performance issues in the database server named Certkiller 1.Results of running the performance MMC snap-in (PerfMon) reveal high values for following counters in the tempdb database on Certkiller 1:
. Log Flush Waits/sec
. Log Growths
The main tables in the Orders database on a server named Certkiller 5 frequently experience heavy data modification and heavy report generation concurrently.leading to performance problems for the reports due to excessive blocking.
EXISTING DATA ENVIRONMENT
Database Servers
The SQL Server computers,all of which are running SQL Server 2005 , are shown in the following table

Server	Operating system	Database (size)
CertKiller1	Windows Server 2003	**Tracking** (500 GB)
CertKiller2	Windows Server 2003	**Promotions** (30 GB)
CertKiller3	Windows 2000 Advanced Server	**Partners** (50 GB)
CertKiller4	Windows Server 2003	**ExtraNet** (100 GB)
CertKiller5	Windows Server 2003	**Orders** (150 GB)
CertKiller6	Windows Server 2003	**CRM** (250 GB)
CertKiller7	Windows Server 2003	**ERP** (100 GB)
CertKiller8	Windows Server 2003	Reporting Services (SSRS) databases

Databases
The Orders application connects to Certkiller 5 by using a single SQL Server-authenticated login named OrdersApp
The Orders database uses data encryption, event notification,DDL triggers, CLR stored procedures, and snapshot isolation. The database master key for the Orders database is encrypted using the service master key for Certkiller 5.
The size of tempdb on Certkiller 1 is 50 MB when the server starts, but it typically increases to approximately 1.5 GB ,growing 50 MB at a time. This database currently has a single data file.
The CRM database currently holds all historical customer data from the seven most recent completed fiscal years plus the current year to date.

EXISTING INFRASTRUCTURE

Network Infrastructure

Consolidated Messenger's WAN is configured to allow browser-based extranet access for its regional delivery partners The network is configured as shown is the following diagram

Server Infrastructure

As shown in the following table, the listed protocols are enabled for inbound connections to the servers in the perimeter network.

Server Name	Protocols
ISA1	HTTP (TCP port 80) HTTPS (TCP port 443) SQL Server (TCP port 1433)
Web1	HTTP (TCP port 80) HTTPS (TCP port 443) SMB (TCP ports 139 and 445)
CertKiller4	SMB (TCP ports 139 and 445) SQL Server (TCP port 1433)

BUSINESS REQUIREMENTS

General Requirements

Applications that are run by the regional delivery partners must be able to access and update data that is held in the Tracking database.

For research purposes, customer information must be kept in the CRM database for two years. For auditing purposes, the company is required to retain monthly copies of CRM data for at least five years, This auditing requirement is the only reason older data must be retained, because data older than two years will most likely never be needed. However, if the older data is ever needed, it must be made available, in its entirety, in a database other than CRM so that it can be examined separately from the current data.

Availability

Certkiller 6 has storage area network (SAN) storage ,and Certkiller 6 supports CRM, which is a critical application that must be available with minimal downtime

. Certkiller 7 supports the ERP application ,and also needs to be available with minimal

downtime.
The following availability requirements have been identified for Certkiller 6 and Certkiller 7.
. Any failover from one SQL Server computer to another should happen automatically.
. Each of the servers must be available at an IP address that is the same before and after a failover event.
. The failure of Certkiller 6 or the failure of Certkiller 7 should not cause performance degradation for the other server.
. Special data copy operations or other special processing should not be required prior to the initiation of the failover
. SQL Server Agent jobs must resume running ,with no human intervention, after a failover event.
The reports that run against the Orders data must be able to access information that is no more than five minutes out of date, and the reports must display committed data only. Some of these reports take 15 to 30 minutes to run.
Recoverability
A process must be designed to restore a copy of the Orders database to another SQL Server instance at the ned of each month. This copy of the Orders database will be used to run end-of-month accounting reports.
To simplify recovery operations,no more than five restore operations must be required in the event of any type of data loss in the CRM database.

TECHNICAL REQUIREMENTS
Security
The company's written security policy states that credit card information that is stored in the Orders database should be viewable only within the Orders application.
In the ExtraNet and Partners databases,individual users must log in to SQL Server by using SQL Server-authenticated logins ,Password expiration must be enforced on all accounts that can access databases.
The company's written security policy states that incoming connections to the perimeter network ,and all connections from the regional delivery companies, are allowed over HTTP and HTTPS, but not over any other protocols

Performance
For performance reasons ,the regional delivery companies's applications must be able to retrieve and update data by using a local copy o the Trcking database,which synchronizes back to the central Tracking database.

Interoperability
Some values in the Tracking database must be populated by reading the Windows registry on a Microsoft Windows Server 2003 application server named AppServer1, which is located in Chicago. These values must be populated once per hour in order to keep shipment tracking information up-to-date.

Topic 9, Consolidated Messenger, (7 Questions)

QUESTION 1
You need to implement a high-availability solution for Certkiller 6 and Certkiller 7, fulfilling the availability requirements at the minimum expense. What should you do?

A. Use log shipping.
B. Use database mirroring.
C. Use a three-node failover cluster.
D. Use a four-node failover cluster.

Answer: C

QUESTION 2
You need to design a method for improving performance for the reports that are run against the Orders database. What should you do?

A. Run the reporting queries by using the NOLOCK query hint.
B. Run the reporting queries by using the SERIALIZABLE transaction isolation level.
C. Use log shipping to copy the Orders data to a different SQL Server computer, and ensure that the reporting queries are run against the copied data.
D. Set up continuous replication to copy the reporting data to a different SQL Server computer, and ensure that the reporting queries are run against the copied data.

Answer: D

QUESTION 3
You need to design the consolidation strategy for the Promotions and Partners databases. You want to choose a strategy that results in the best database performance while maintaining the permissions of end users in each database. What consolidation strategy should you choose?

A. Place each database in a separate instance running on Certkiller 1.
B. Place each database in a separate instance running on Certkiller 2.
C. Place both databases in a single instance running on Certkiller 1.
D. Place both databases in a single instance running on Certkiller 3.

Answer: C

QUESTION 4
You need to design the data archiving solution for the CRM database. You want to ensure that the solution requires the minimum amount of administrative effort to implement and that it fulfills the research and auditing requirements. Which action should you specify to occur at the end of each month?

A. Reorganize the CRM database so that the older data and the newer data are kept on different table partitions.
B. Export the CRM data to a Microsoft Excel spreadsheet and keep each spreadsheet for

five years. After creating each spreadsheet, delete the older data from the CRM database.
C. Use SQL Server Reporting Services (SSRS) to print a copy of the older CRM data, and keep each report for five years. After printing each report, delete the older data from the CRM database.
D. Create a full backup of the CRM database and keep each backup for five years. After creating each backup, delete the older data from the CRM database.

Answer: D

QUESTION 5
You need to modify the recovery plan for the CRM database to fulfill the companys business requirements. What should you do?

A. Add differential backups every three hours.
B. Change the full backups to run every night.
C. Change the log backups to run twice per hour.
D. Change the log backups to run once every two hours.
E. Replace the nightly differential backups with full backups.

Answer: A

QUESTION 6
You are reviewing the backup plan for the SQL Server instance on Certkiller 5. The plan was written before the release of SQL Server 2005. You discover that the plan includes only database backups and log backups. You need to ensure that the functionality of the databases on Certkiller 5 is fully protected by backups. Which two backups should you add to the plan? (Each correct answer presents part of the solution. Choose two.)

A. backups for the database master keys
B. backups of the event notification definitions
C. backups for the service master key for Certkiller 5
D. backups of the registry keys for the SQL Server instance

Answer: A,C

QUESTION 7
You need to ensure that the regional delivery companies can access the tracking data. What should you do?

A. Use Remote Desktop to connect client computers at the delivery companies to the network in the Chicago office.
B. Use an HTTP endpoint and SOAP to enable stored procedures that can view and update the central tracking data.
C. Publish the tracking data to the delivery companies by using merge replication with Web synchronization.

D. Publish the tracking data to the delivery companies by using transactional replication with immediate updating subscribers.

Answer: C

Topic 10, Trey Research, Scenario

BACKGROUND

Company Overview

Trey Research is a nonprofit organization that provides research support to many organizations in the United States.
The company has a single office ,which is located in Chicago.

Planned Changes

The company plans to implement a new SQL Server 2005 failover cluster. This cluster will have one instance for each of three databases that are currently on a mainframe computer. The three databases are named Research., Parts, and Engineering. These databases will hold mission-critical data. The configuration will use a four-node failover cluster to provide an N+1 configuration. This cluster will named SQLCLUST.
When these databases are moved to SQLCLUST, a new identity column will be added to most tables in all of the databases to create a surrogate primary key. When the databases move to production, the aeed value should be reset for all identity columns.
New Web services-based applications will be designed to access the Parts, Engineering, Customer, and Bids databases. Users will access these applications by using their Windows credentials.
The company plans to reduce database administration cost by consolidating existing SQL Server computers. The company wants to minimize the number of SQL Server computers and SQL Server instances.
The company plans to create a Bid_Archive database. All rows that contain information on completed bids that do not result in a new extended contract should be moved immediately from the Bids database to Bid_Archive.This information should be available for data retrievasl, but changes should not be made to the Bid_Archive database.

EXISTING DATA ENVIRONMENT

Databases

Trey Research currently has eight databases, as shown in the following table.

Database	Data stored
Customer	All information on customers and current contracts
Contractor	Information on subcontractors and billing
Accounting	Customer billing, accounts payable, and payroll
HR	All current and past employee information including benefits, retirements, and annual reviews
Bids	Future projects and bids
Engineering	Information used for tracking engineering processes
Research	General research and development (R&D) information including schedules and project guidelines
Parts	Information for tracking individual parts and part properties

Data in the Contractor database in read far more frequently than it is modified.
The Bid_Tracking table in the Bids database includes a Completed column that is set to 1 when the bid is no longer active.The table also has a Successful column that is set to 1 when the bid results in a new or extended contract.

Database Servers
The company has three existing SQL Server 2005 computers running with default instances, which contain the databases shown in the following table.

Server name	Databases	Current free server capacity
CertKillerA	Accounting, HR	70 percent
CertKillerB	Customer, Bids	70 percent
CertKillerC	Contractor	80 percent

Database Client Computers
Active Directory Infrastructure
The Trey Research network consists of a single Active Directory domain. All users use Windows user accounts to access SQL Server.

BUSINESS REQUIREMENTS
General Requirements
The company will store completed annual performance review forms in the HR database, Each review form will be larger than 9,000 characters. The column that holds the review form should be able to handle multiple languages and alphabets to support expected international growth in the future. The company wants this data to be accessible in a single column.
The accounting managers must be able to view the current state of the data in the Accounting database at the close of any given day during last seven days. They should be able to undo changes if necessary. Although a single field will not be updated more than once per day, it might be updated on several consecutive days.

Performance
To improve the performance on the Customer database , the company wants to move all information to a Customer_Archive database that will be available for running long reports that are currently causing contention problems. Management wants to minimize network traffic between the Customer database and the distribution database. In addition, management wants to use the Customer_Archive database as an added layer of fault tolerance.Although additional servers are available, management prefers to use existing servers.

Availability
The Customer database must not fail when a single hard disk on the server fails. The solution must support hot-swappable drives. Additional hardware is available to support this solution.

Recoverability
The Customer database receives numerous changes daily during the business hours of 09:00 to 17:00. The majority of these changes occur the afternoon hours. Very few changes are made outside of business hours. Business requirements allow for up to one hour of data loss. No more than six backups should be required for any recovery.After performance of different backup scenarios was tested, company policy was revised to state that full database backups should not be performed during business hours nad differential backups should be performed only once during business hours.

TECHNICAL REQUIREMENTS
Security
The administrators of the Accounting and HR databases are members of a domain global group named Certkiller A_DBA.
These administrators are responsible for managing all databases and SQL Server configurations on Certkiller A.
Users who are members of the DBAdmins global group are responsible for managing the SQL Server instances on Certkiller B and Certkiller C
The central IT department manages the physical computers and the Windows operating systems on which the SQL Server computers reside. Members of the DBAdmins group do not have Windows administrative privileges.
All employee user accounts should be assigned only the minimum permissions that the employees need in order to perform their jobs.
The company's written security policy states that when users of one database need access to another database on a separate SQL Server computer or SQL Server inwtance, delegation should be used.

Services should not be installed unless absolutely necessary.
Currently, all employees in the human resources (HR) department need read access to every table in the HR database Hiring managers need to be able to read, add ,delete, and modify data in five tables in the HR database . The company plans to add additional tables to which only a few HR employees should have read access .In addition ,there will

be future employees who will need read access to only one table.
The company is deploying a new custom application to manage the replication for the new Customer_Archive database. The company plans to use common language runtime (CLR) in tegration and CLR stored procedures in the Customer database to provide limited and controlled access to the shares and files on Certkiller B.
All assemblies should be created with dbo as the owner.

Maintainability
SQL Server Agent jobs will be scheduled on all servers for maintenance.Alerts will be sent by using Database Mail. No messages will be sent by using Net send. SQL Server computers will have a limited number of Windows shares available for replication and management

Interoperability
All namespaces that are used for Web services applications must be reserved so that another program on the computer cannot reserve the same, even if the SQL Server service is not running.

Topic 10, Trey Research (11 Questions)

QUESTION 1
You need to set up the Bid_Archive database. What should you do?

A. Configure merge replication to move the data between the Bids and Bid_Archive databases.
B. Set up DML triggers to move rows from the Bids database to the Bid_Archive database when the Completed column in the Bid_Tracking table is set to 1 and the Successful column is set to 0.
C. Configure snapshot replication to move all data from the Bids to the Bid_Archive database.
D. Create a job that is scheduled to run every hour to check for rows in the Bid_Tracking table where the Completed column is set to 1 and the Successful column is set to 0.

Answer: B

QUESTION 2
You need to identify the combinations of the Windows operating system and SQL Server 2005 version that will be the most appropriate for the new R&D configuration, which will include the Research, Parts, and Engineering databases. Which two combinations will be the most appropriate? (Each correct answer presents a complete solution. Choose two.)

A. Windows Server 2003 Enterprise Edition with SQL Server 2005 Enterprise Edition
B. Windows Server 2003 Datacenter Edition with SQL Server 2005 Enterprise Edition
C. Windows Server 2003 Standard Edition with SQL Server 2005 Enterprise Edition
D. Windows Server 2003 Enterprise Edition with SQL Server 2005 Standard Edition

Answer: A,D

QUESTION 3
Your account name is Pat and you are a member of the db_owner database role. You have the permissions that are required to create the assembly for the new custom application that manages the replication for the Customer database. You need to minimize the attack surface on the server, while creating the assembly for the CLR to use. You need to ensure that your solution fulfills the companys security requirements. Which two options should you use? (Each correct answer presents part of the solution. Choose two.)

A. WITH PERMISSION_SET = External_Access
B. WITH PERMISSION_SET = Unsafe
C. WITH PERMISSION_SET = Safe
D. AUTHORIZATION dbo
E. AUTHORIZATION Pat

Answer: A,D

Explanation:
D: Case study text: All assemblies should be created with dbo as the owner.

QUESTION 4
You are a member of the DBAdmins group. You need to configure the HTTP endpoints for the new Web services application that will access the Customer database. You want to accomplish this goal by using the minimum amount of administrative effort, while fulfilling the companys technical requirements. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Install Internet Information Services (IIS) 6.0 on Certkiller B.
B. Create an implicit namespace reservation while executing the CREATE ENDPOINT command.
C. Ask the Windows administrator to create an explicit namespace reservation for the HTTP endpoint.
D. Assign the Control permission on the endpoint to all users that will use the Web services application.
E. Assign the Connect permission on the endpoint to all users that will use the Web services application.

Answer: C,E

QUESTION 5
You need to define the data type and the table options for a new column named AnnualReview in the HR database. Which two options should you select? (Each correct answer presents part of the solution. Choose two.)

A. Use the text data type.
B. Use the nvarchar(max) data type.
C. Use the varchar(max) data type.
D. Set the large value types out of row option to Off.
E. Set the large value types out of row option to On.
F. Set the text in row option to Off.
G. Set the text in row option to 7000.

Answer: B,E

QUESTION 6
DRAG DROP
Your boss, Mrs. Certkiller, wants you to design the backup schedule for the Customer database.
Not all locations have to be filled.

Answer:

QUESTION 7
You need to design the consolidation plan for Certkiller A, Certkiller B, and Certkiller C. You need to identify the appropriate combination of SQL Server instances and SQL Server 2005 computers that are needed to fulfill the companys consolidation plans and security requirements. Which combination should you use?

A. one SQL Server 2005 computer with one instance
B. two SQL Server 2005 computers, each with two instances
C. two SQL Server computers, one with one instance and one with three instances
D. one SQL Server 2005 computer with two instances

Answer: D

QUESTION 8
You need to review the list of expected services for SQLCLUST and disable any nonessential services. Which two services should be disabled? (Each correct answer presents part of the solution. Choose two.)

A. Cluster service
B. World Wide Web Publishing service
C. SQL Server Agent service
D. Messenger service
E. Server service

Answer: B,D

QUESTION 9
You configure the new server named SQLCLUST with test versions of the Research, Engineering, and Parts databases. The data in these databases is for test purposes only and is not current. You need to move the new Research, Engineering, and Parts databases from the test stage to the production stage as efficiently as possible. Prior to making the databases available to users, which three actions should you perform? (Each correct answer presents part of the solution. Choose three.)

A. Use the DELETE statement to remove all test data from the three databases.
B. Run scripts on the production server to build all tables, views, and stored procedures.
C. Schedule one or more jobs to move all data from the mainframe computer databases to the new databases.
D. Build all indexes, and update the statistics on all tables.
E. Manually move all data from the mainframe computer to the new databases by using the SELECT INTO command.

Answer: B,C,D

QUESTION 10
You need to configure the security for the HR database to support current security needs, while minimizing the impact of future security changes that might be caused by user and table additions. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

A. Grant the SELECT permission on all current tables to the public database role.
B. Create an HR_Readers role, add all employees in the HR department to this role, and grant the SELECT permission on all current tables to this role.
C. Add all employees to the db_datareader database role.
D. Add all hiring managers to the db_datawriter database role.
E. Create a Hiring_Managers role, add all hiring managers to this role, and grant the role the SELECT, INSERT, UPDATE, and DELETE permissions on the five tables the hiring managers need to manage.

Answer: B,E

QUESTION 11
You need to design a solution to allow the accounting managers to review accounting changes in compliance with the companys business requirements. What should you do?

A. Set up snapshot replication to a new database named Accounting_Changes. Schedule the snapshot to be sent at close of business every Friday.
B. Set up transactional replication to a new database named Accounting_Changes. Create a job to remove all rows that have an inserted date that is more than eight days old.

C. Create a job to create a database snapshot at close of business every Friday. Create another job to remove snapshots that are more than two weeks old.
D. Create a job to create a database snapshot at close of business daily. Create another job to remove snapshots that are more than eight days old.

Answer: D