# 70-462

Number: 70-462 Passing Score: 700 Time Limit: 120 min File Version: 1.0

grabbed most of them from upgrade exams

compared them to that pdf and there's quite a few discrepancies between them

# **Sections**

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### Exam A

#### **QUESTION 1**

You administer a Microsoft SQL Server 2012 instance.

After a routine shutdown, the drive that contains tempdb fails.

You need to be able to start the SQL Server. What should you do?

- A. Modify tempdb location in startup parameters.
- B. Start SQL Server in minimal configuration mode.
- C. Start SQL Server in single-user mode.
- D. Configure SQL Server to bypass Windows application logging.

Correct Answer: B Section: Exam A Explanation

## **Explanation/Reference:**

Reference: http://msdn.microsoft.com/en-us/library/ms186400.aspx Reference: http://msdn.microsoft.com/en-us/library/ms345408.aspx

### **QUESTION 2**

You administer a single server that contains a Microsoft SQL Server 2012 default instance.

You plan to install a new application that requires the deployment of a database on the server.

The application login requires sysadmin permissions.

You need to ensure that the application login is unable to access other production databases. What should you do?

- A. Use the SQL Server default instance and configure an affinity mask.
- B. Install a new named SQL Server instance on the server.
- C. Use the SQL Server default instance and enable Contained Databases.
- D. Install a new default SQL Server instance on the server.

Correct Answer: B Section: Exam A Explanation

### **Explanation/Reference:**

I would have gone with Contained Databases, but the application requires sysadmin permissions.

# **QUESTION 3**

You administer a Microsoft SQL Server 2012 Enterprise Edition server that uses 64 cores.

You discover performance issues when large amounts of data are written to tables under heavy system load.

You need to limit the number of cores that handle I/O.

What should you configure?

- A. Processor affinity
- B. Lightweight pooling
- C. Max worker threads
- D. I/O affinity

Correct Answer: D

Section: Exam A Explanation

### **Explanation/Reference:**

Reference: http://msdn.microsoft.com/en-us/library/ms189629.aspx

#### **QUESTION 4**

You administer a Microsoft SQL Server 2012 instance named SQL2012 that hosts an OLTP database of 1 terabyte in size.

The database is modified by users only from Monday through Friday from 09:00 hours to 17:00 hours.

Users modify more than 30 percent of the data in the database during the week. Backups are performed as shown in the following schedule:

| Туре         | Frequency   |  |
|--------------|---|--|
| Full         | Sunday at 20:00 hours                                     |  |
| Differential | Monday through Friday at 20:00 hours                      |  |
| Log          | Monday through Friday between 08:00 hours and 18:00 hours |  |

The Finance department plans to execute a batch process every Saturday at 09:00 hours.

This batch process will take a maximum of 8 hours to complete.

The batch process will update three tables that are 10 GB in size.

The batch process will update these tables multiple times.

When the batch process completes, the Finance department runs a report to find out whether the batch process has completed correctly.

You need to ensure that if the Finance department disapproves the batch process, the batch operation can be rolled back in the minimum amount of time.

What should you do on Saturday?

- A. Perform a differential backup at 08:59 hours.
- B. Record the LSN of the transaction log at 08:59 hours. Perform a transaction log backup at 17:01 hours.
- C. Create a database snapshot at 08:59 hours.
- D. Record the LSN of the transaction log at 08:59 hours. Perform a transaction log backup at 08:59 hours.
- E. Create a marked transaction in the transaction log at 08:59 hours. Perform a transaction log backup at 17:01 hours.
- F. Create a marked transaction in the transaction log at 08:59 hours. Perform a transaction log backup at 08:59 hours.

Correct Answer: C Section: Exam A Explanation

# **Explanation/Reference:**

### **QUESTION 5**

You administer a Microsoft SQL Server 2012 instance.

The instance contains a database that supports a retail sales application.

The application generates hundreds of transactions per second and is online 24 hours per day and 7 days

per week.

You plan to define a backup strategy for the database.

You need to ensure that the following requirements are met:

- No more than 5 minutes worth of transactions are lost.
- Data can be recovered by using the minimum amount of administrative effort.

What should you do? Choose all that apply.

- A. Configure the database to use the SIMPLE recovery model.
- B. Create a DIFFERENTIAL database backup every 4 hours.
- C. Create a LOG backup every 5 minutes.
- D. Configure the database to use the FULL recovery model.
- E. Create a FULL database backup every 24 hours.
- F. Create a DIFFERENTIAL database backup every 24 hours.

Correct Answer: BCDE Section: Exam A Explanation

# **Explanation/Reference:**

#### **QUESTION 6**

You administer a Microsoft SQL Server 2012 database that contains a table named OrderDetail.

You discover that the NCI\_OrderDetail\_CustomerID non-clustered index is fragmented.

You need to reduce fragmentation.

You need to achieve this goal without taking the index offline.

Which Transact-SQL batch should you use?

- A. CREATE INDEX NCI\_OrderDetail\_CustomerID ON OrderDetail.CustomerID WITH DROP EXISTING
- B. ALTER INDEX NCI\_OrderDetail\_CustomerID ON OrderDetail.CustomerID REORGANIZE
- C. ALTER INDEX ALL ON OrderDetail REBUILD
- D. ALTER INDEX NCI\_OrderDetail\_CustomerID ON OrderDetail.CustomerID REBUILD

Correct Answer: B Section: Exam A Explanation

# **Explanation/Reference:**

Reference: http://msdn.microsoft.com/en-us/library/ms188388.aspx

# **QUESTION 7**

You administer a Microsoft SQL Server database named Sales.

The database is 3 terabytes in size.

The Sales database is configured as shown in the following table.

| Filegroup | File  |
|-----------|---|
| PRIMARY   | Sales.mdf   |
| XACTIONS  | <ul><li>Sales_1.ndf</li><li>Sales_2.ndf</li><li>Sales_3.ndf</li></ul> |
| ARCHIVES  | SalesArch_1.ndf     SalesArch_2.ndf                                   |

You discover that all files **except** Sales\_2.ndf are corrupt. You need to recover the corrupted data in the minimum amount of time. What should you do?

- A. Perform a restore from a full backup.
- B. Perform a transaction log restore.
- C. Perform a file restore.
- D. Perform a filegroup restore.

Correct Answer: A Section: Exam A Explanation

## **Explanation/Reference:**

# **QUESTION 8**

You administer a Microsoft SQL Server 2012 server.

You plan to deploy new features to an application.

You need to evaluate existing and potential clustered and non-clustered indexes that will improve performance.

What should you do?

- A. Query the sys.dm\_db\_index\_usage\_stats DMV.
- B. Query the sys.dm\_db\_missing\_index\_details DMV.
- C. Use the Database Engine Tuning Advisor.
- D. Query the sys.dm\_db\_missing\_index\_columns DMV.

Correct Answer: C Section: Exam A Explanation

### **Explanation/Reference:**

Reference: http://msdn.microsoft.com/en-us/library/ms174202.aspx

# **QUESTION 9**

You administer a Microsoft SQL Server 2012.

A process that normally runs in less than 10 seconds has been running for more than an hour.

You examine the application log and discover that the process is using session ID 60.

You need to find out whether the process is being blocked. Which Transact-SQL statement should you use?

- A. EXEC sp\_who 60
- B. SELECT \* FROM sys.dm\_exec\_sessions WHERE sessionid = 60
- C. EXEC sp helpdb 60
- D. DBCC INPUTBUFFER (60)

Correct Answer: B Section: Exam A Explanation

### **Explanation/Reference:**

Reference: http://msdn.microsoft.com/en-us/library/ms174313.aspx Reference: http://msdn.microsoft.com/en-us/library/ms176013.aspx Reference: http://msdn.microsoft.com/en-us/library/ms178568.aspx Reference: http://msdn.microsoft.com/en-us/library/ms187730.aspx

### **QUESTION 10**

You create an availability group that has replicas named HA/Server01 and HA/Server02. Currently, HA/Server01 is the primary replica.

You have multiple queries that read data and produce reports from the database.

You need to offload the reporting workload to the secondary replica when HA/Server01 is the primary replica.

What should you do?

- A. Set the Availability Mode property of HA/Server02 to Asynchronous commit.
- B. Set the Readable Secondary property of HA/Server02 to Read-intent only.
- C. Set the Connections in Primary Role property of HA/Server01 to Allow read/write connections.
- D. Set the Availability Mode property of HA/Server01 to Asynchronous commit.

Correct Answer: B Section: Exam A Explanation

### **Explanation/Reference:**

Reference: http://msdn.microsoft.com/en-us/library/jj542414.aspx

#### **QUESTION 11**

You administer two Microsoft SQL Server 2012 servers.

Each server resides in a different, untrusted domain.

You plan to configure database mirroring.

You need to be able to create database mirroring endpoints on both servers.

What should you do?

- A. Configure the SQL Server service account to use Network Service.
- B. Use a server certificate.
- C. Use a database certificate.
- D. Configure the SQL Server service account to use Local System.

Correct Answer: B Section: Exam A Explanation

# **Explanation/Reference:**

#### **QUESTION 12**

You administer a Microsoft SQL Server 2012 instance that has several SQL Server Agent jobs configured.

When SQL Server Agent jobs fail, the error messages returned by the job steps do not provide the required detail.

The following error message is an example error message:

"The job failed. The Job was invoked by User CONTOSO\ServiceAccount. The last step to run was step 1 (Subplan\_1)."

You need to ensure that all available details of the job step failures for SQL Server Agent jobs are retained.

What should you do?

- A. Configure output files.
- B. Expand agent logging to include information from all events.
- C. Disable the Limit size of job history log feature.
- D. Configure event forwarding.

Correct Answer: B Section: Exam A Explanation

### **Explanation/Reference:**

Reference: http://msdn.microsoft.com/en-us/library/ms175488.aspx

#### **QUESTION 13**

You administer a Microsoft SQL Server 2012 instance. You need to configure a new database to support FILETABLES. What should you do? Choose all that apply.

- A. Disable FILESTREAM on the Database.
- B. Enable FILESTREAM on the Server Instance.
- C. Configure the Database for Partial Containment.
- D. Create a non-empty FILESTREAM file group.
- E. Enable Contained Databases on the Server Instance.
- F. Set the FILESTREAM directory name on the Database.

Correct Answer: BDF Section: Exam A Explanation

## **Explanation/Reference:**

Reference: http://msdn.microsoft.com/en-us/library/gg509097.aspx

#### **QUESTION 14**

You administer two instances of Microsoft SQL Server 2012. You deploy an application that uses a database on the named instance. The application is unable to connect to the database on the named instance. You need to ensure that the application can connect to the named instance. What should you do?

- A. Configure the application as data-tiered.
- B. Open port 1433 on the Windows firewall on the server.
- C. Configure the named SQL Server instance to use an account that is a member of the Domain Admins group.
- D. Start the SQL Server Browser Service.

Correct Answer: D Section: Exam A Explanation

### **Explanation/Reference:**

#### **QUESTION 15**

You administer a Microsoft SQL Server 2012 database. You configure Transparent Data Encryption (TDE) on the Orders database by using the following statements:

```
CREATE MASTER KEY ENCRYPTION BY PASSWORD = 'MyPassword1!'

CREATE CERTIFICATE TDE_Certificate WITH SUBJECT = 'TDE Certificate';

BACKUP CERTIFICATE TDE_Certificate TO FILE = ''d:\TDE_Certificate.cer'

WITH PRIVATE KEY (FILE = 'D:\TDE_Certificate.key', ENCRYPTION BY PASSWORD = 'MyPassword1!');

CREATE DATABASE ENCRYPTION KEY

WITH ALGORITHM = AES_256

ENCRYPTION BY SERVER CERTIFICATE TDE_Certificate;

ALTER DATABASE Orders SET ENCRYPTION ON;
```

You attempt to restore the Orders database and the restore fails. You copy the encryption file to the original location. A hardware failure occurs and so a new server must be installed and configured. After installing SQL Server to the new server, you restore the Orders database and copy the encryption files to their original location. However, you are unable to access the database. You need to be able to restore the database. Which Transact-SQL statement should you use before attempting the restore?

- A. ALTER DATABASE Master SET ENCRYPTION OFF;
- B. CREATE CERTIFICATE TDE\_Certificate FROM FILE = 'd:\TDE\_Certificate.cer'
  WITH PRIVATE KEY (FILE = 'D:\TDE\_Certificate.key', DECRYPTION BY PASSWORD =
  'MyPassword1!');
- C. CREATE CERTIFICATE TDE\_Certificate WITH SUBJECT = 'TDE Certificate'; USE Orders; CREATE DATABASE ENCRYPTION KEY WITH ALGORITHM = AES\_256 ENCRYPTION BY SERVER CERTIFICATE TDE\_Certificate;
- D. CREATE CERTIFICATE TDE\_Certificate FROM FILE = 'd:\TDE\_Certificate.cer';

Correct Answer: B Section: Exam A Explanation

### **Explanation/Reference:**

#### **QUESTION 16**

You administer a single server that contains a Microsoft SQL Server 2012 default instance on which several production databases have been deployed.

You plan to install a new ticketing application that requires the deployment of a database on the server.

The SQL login for this application requires sysadmin permissions.

You need to ensure that the login for the ticketing application cannot access other production databases.

What should you do?

- A. Use the SQL Server default instance and enable Contained Databases.
- B. Use the SQL Server default instance and configure a user-defined server role. Add the login for the ticketing application to this role.
- C. Install a new named SQL Server instance on the server.
- D. Install a new default SQL Server instance on the server.

Correct Answer: C Section: Exam A Explanation

### **Explanation/Reference:**

#### **QUESTION 17**

You administer a Microsoft SQL Server 2012 database.

The database contains a customer table created by using the following definition:

```
CREATE TABLE dbo.Customer
(CustomerID INT PRIMARY KEY,
CustomerName VARCHAR(100) NOT NULL,
CustomerAddress1 CHAR(200) NOT NULL,
CustomerAddress2 CHAR(200) NULL,
CustomerCity VARCHAR(100) NOT NULL,
CustomerPostalCode CHAR(5) NOT NULL);
```

You need to ensure that the minimum amount of disk space is used to store the data in the customer table.

What should you do?

- A. Implement row-level compression.
- B. Implement page-level compression.
- C. Convert all indexes to Column Store indexes.
- D. Implement Unicode compression.

Correct Answer: B Section: Exam A Explanation

### **Explanation/Reference:**

### **QUESTION 18**

You are creating an application that will connect to the AgentPortal database by using a SQL login named AgentPortalUser.

Stored procedures in the database will use sp\_send\_dbmail to send email messages.

You create a user account in the msdb database for the AgentPortalUser login.

You use the Database Mail Configuration Wizard to create a Database Mail profile.

Security has not been configured for the Database Mail profile.

You need to ensure that AgentPortalUser can send email messages.

What should you do?

- A. In the Database Mail Configuration Wizard, configure the Database Mail profile as a private profile for the AgentPortalUser account.
- B. Disable the guest user in the msdb database.
- C. Use the sysmail\_help\_profileaccount\_sp stored procedure to add accounts to the Database Mail profile.
- D. In the Database Mail Configuration Wizard, create an email account for each recipient's email address in the Database Mail profile.

Correct Answer: A Section: Exam A Explanation

#### **Explanation/Reference:**

Reference: http://msdn.microsoft.com/en-us/library/ms189635.aspx

#### **QUESTION 19**

You administer a Microsoft SQL Server 2012 default instance.

The instance is hosted by a server that has a local firewall configured.

The firewall only allows inbound connections on port 1433.

The server only hosts a single instance of SQL Server.

You need to ensure that the instance is configured to allow remote connections even if the SQL Server is unresponsive to client connections. What should you do? Choose all that apply.

- A. Enable inbound connections on TCP port 1434 in the Windows Firewall on the server.
- B. Execute the following Transact-SQL command: sp\_configure 'remote admin connections',
- C. Execute the Reconfigure command.
- D. Execute the following Transact-SQL command: sp\_configure 'remote access', 1
- E. Restart the SQL Server Agent Service.
- F. Enable inbound connections on TCP port 135 in the Windows Firewall on the server.

Correct Answer: ABC Section: Exam A Explanation

# **Explanation/Reference:**

Reference: http://msdn.microsoft.com/en-us/library/ms191464.aspx Reference: http://msdn.microsoft.com/en-us/library/ms190468.aspx

# **QUESTION 20**

You administer a Microsoft SQL Server database named Sales. The database is 3 terabytes in size. The Sales database is configured as shown in the following table:

| Filegroup | File                                |
|-----------|-------------------------------------|
| PRIMARY   | Sales.mdf                           |
| XACTIONS  | Sales_1.ndf                         |
|           | <ul> <li>Sales_2.ndf</li> </ul>     |
|           | <ul> <li>Sales_3.ndf</li> </ul>     |
| ARCHIVES  | SalesArch_1.ndf                     |
|           | <ul> <li>SalesArch_2.ndf</li> </ul> |

You discover that Sales\_2.ndf is corrupt. You need to recover the corrupted data in the minimum amount of time. What should you do?

- A. Perform a file restore.
- B. Perform a transaction log restore.
- C. Perform a restore from a full backup.

D. Perform a filegroup restore.

Correct Answer: A Section: Exam A Explanation

### **Explanation/Reference:**

According to these references, this answer looks correct.

Reference: http://technet.microsoft.com/en-us/library/ms187048.aspx Reference: http://msdn.microsoft.com/en-us/library/aa337540.aspx

Under the simple recovery model, the file must belong to a read-only filegroup.

Under the full or bulk-logged recovery model, before you can restore files, you must back up the active transaction log (known as the tail of the log). For more information, see Back Up a Transaction Log (SQL Server).

To restore a database that is encrypted, you must have access to the certificate or asymmetric key that was used to encrypt the database. Without the certificate or asymmetric key, the database cannot be restored. As a result, the certificate that is used to encrypt the database encryption key must be retained as long as the backup is needed. For more information, see SQL Server Certificates and Asymmetric Keys.

#### **QUESTION 21**

You administer a Microsoft SQL Server 2012 database that has Trustworthy set to On.

You create a stored procedure that returns database-level information from Dynamic Management Views.

You grant User1 access to execute the stored procedure.

You need to ensure that the stored procedure returns the required information when User1 executes the stored procedure.

You need to achieve this goal by granting the minimum permissions required.

What should you do? (Each correct answer presents a complete solution. Choose all that apply.)

- A. Create a SQL Server login that has VIEW SERVER STATE permissions. Create an application role and a secured password for the role.
- B. Modify the stored procedure to include the EXECUTE AS OWNER statement. Grant VIEW SERVER STATE permissions to the owner of the stored procedure.
- C. Create a SQL Server login that has VIEW SERVER STATE permissions. Modify the stored procedure to include the EXECUTE AS {newlogin} statement.
- D. Grant the db\_owner role on the database to User1.
- E. Grant the sysadmin role on the database to User1.

Correct Answer: BC Section: Exam A Explanation

#### **Explanation/Reference:**

According to these references, this answer looks correct.

# References:

http://msdn.microsoft.com/en-us/library/ms187861.aspx http://msdn.microsoft.com/en-us/library/ms191291.aspx

# **QUESTION 22**

You administer a Microsoft SQL Server 2012 instance that contains a financial database hosted on a storage area network (SAN).

The financial database has the following characteristics:

- A data file of 2 terabytes is located on a dedicated LUN (drive D).
- A transaction log of 10 GB is located on a dedicated LUN (drive E).
- Drive D has 1 terabyte of free disk space.

Drive E has 5 GB of free disk space.

The database is continually modified by users during business hours from Monday through Friday between 09:00 hours and 17:00 hours.

Five percent of the existing data is modified each day.

The Finance department loads large CSV files into a number of tables each business day at 11:15 hours and 15:15 hours by using the BCP or BULK INSERT commands.

Each data load adds 3 GB of data to the database.

These data load operations must occur in the minimum amount of time.

A full database backup is performed every Sunday at 10:00 hours.

Backup operations will be performed every two hours (11:00, 13:00, 15:00, and 17:00) during business hours.

You implement log shipping of the financial database to another SQL Server 2012 instance.

You decide to failover to this secondary database. You need to ensure that all transactions will be replicated to the secondary database.

Which backup option should you use?

- A. Differential
- B. Transaction Log
- C. FULL
- D. SIMPLE
- E. SKIP
- F. RESTART
- G. STANDBY
- H. CHECKSUM
- I. DBO ONLY
- J. COPY\_ONLY
- K. NORECOVERY
- L. NO CHECKSUM
- M. CONTINUE AFTER ERROR
- N. BULK LOGGED

Correct Answer: K Section: Exam A Explanation

### **Explanation/Reference:**

According to these references, this answer looks correct.

### References:

http://technet.microsoft.com/en-us/library/ms187103.aspx http://msdn.microsoft.com/en-us/library/ms191233.aspx http://msdn.microsoft.com/en-us/library/ms178117.aspx

# **QUESTION 23**

You administer all the deployments of Microsoft SQL Server 2012 in your company. You have two servers in the same data center that hosts your production database. You need to ensure that the database remains available if a catastrophic server failure or a disk failure occurs. You also need to maintain transactional consistency of the data across both servers. You need to achieve these goals without manual intervention. Which configuration should you use?

A. Two servers configured in a Windows Failover Cluster in the same data center

- SQL Server configured as a clustered instance
- B. SQL Server that includes an application database configured to perform transactional replication
- C. Two servers configured in the same data center
  A primary server configured to perform log-shipping every 10 minutes
  A backup server configured as a warm standby
- D. Two servers configured in different data centers SQL Server Availability Group configured in Synchronous-Commit Availability Mode One server configured as an Active Secondary
- E. Two servers configured in the same data center SQL Server Availability Group configured in Asynchronous-Commit Availability Mode One server configured as an Active Secondary
- F. Two servers configured in different data centers SQL Server Availability Group configured in Asynchronous-Commit Availability Mode
- G. SQL Server that includes an application database configured to perform snapshot replication
- H. Two servers configured on the same subnet SQL Server Availability Group configured in Synchronous-Commit Availability Mode

Correct Answer: H Section: Exam A Explanation

# **Explanation/Reference:**

Reference: http://msdn.microsoft.com/en-us/library/ff877931.aspx

#### Exam B

#### **QUESTION 1**

You administer a Microsoft SQL Server 2012 database.

You create an availability group named haContosoDbs.

Your primary replica is available at Server01\Contoso01.

You need to configure the availability group to have the highest availability.

You also need to ensure that no data is lost.

Which Transact-SQL statement should you use?

- A. ALTER AVAILABILITY GROUP haContosoDbs MODIFY REPLICA ON 'Server01
   \Contoso01'
  WITH (AVAILABILITY\_MODE = ASYNCHRONOUS\_COMMIT, FAILOVER\_MODE = AUTOMATIC)
- B. ALTER AVAILABILITY GROUP haContosoDbs MODIFY REPLICA ON 'Server01
   \Contoso01'
  WITH (AVAILABILITY\_MODE = SYNCHRONOUS\_COMMIT, FAILOVER\_MODE = MANUAL)
- C. ALTER AVAILABILITY GROUP haContosoDbs MODIFY REPLICA ON 'Server01
  \Contoso01'
  WITH (AVAILABILITY\_MODE = SYNCHRONOUS\_COMMIT, FAILOVER\_MODE = AUTOMATIC)
- D. ALTER AVAILABILITY GROUP haContosoDbs MODIFY REPLICA ON 'Server01
   \Contoso01'
   WITH (AVAILABILITY\_MODE = ASYNCHRONOUS\_COMMIT, FAILOVER\_MODE = MANUAL)

Correct Answer: C Section: Exam B Explanation

# **Explanation/Reference:**

# **QUESTION 2**

You administer several Microsoft SQL Server 2012 database servers.

Merge replication has been configured for an application that is distributed across offices throughout a wide area network (WAN).

Many of the tables involved in replication use the XML and varchar(max) data types. Occasionally, merge replication fails due to timeout errors.

You need to reduce the occurrence of these timeout errors. What should you do?

- A. Set the Merge agent on the problem subscribers to use the slow link agent profile.
- B. Create a snapshot publication, and reconfigure the problem subscribers to use the snapshot publication.
- C. Change the Merge agent on the problem subscribers to run continuously.
- D. Set the Remote Connection Timeout on the Publisher to 0.

Correct Answer: A Section: Exam B Explanation

# Explanation/Reference:

When replication is configured, a set of agent profiles is installed on the Distributor. An agent profile contains a set of parameters that are used each time an agent runs: each

agent logs in to the Distributor during its startup process and queries for the parameters in its profile. For merge subscriptions that use Web synchronization, profiles are downloaded and stored at the Subscriber. If the profile is changed, the profile at the Subscriber is updated the next time the Merge Agent runs. For more information about Web synchronization, see Web Synchronization for Merge Replication.

Replication provides a default profile for each agent and additional predefined profiles for the Log Reader Agent, Distribution Agent, and Merge Agent. In addition to the profiles provided, you can create profiles suited to your application requirements. An agent profile allows you to change key parameters easily for all agents associated with that profile. For example, if you have 20 Snapshot Agents and need to change the query timeout value (the **-QueryTimeout** parameter), you can update the profile used by the Snapshot Agents and all agents of that type will begin using the new value automatically the next time they run.

You might also have different profiles for different instances of an agent. For example, a Merge Agent that connects to the Publisher and Distributor over a dialup connection could use a set of parameters that are better suited to the slower communications link by using the **slow link** profile.

#### **QUESTION 3**

You create an availability group named HaContoso that has replicas named Server01/HA, Server02/HA, and Server03/HA.

Currently, Server01I/HA is the primary replica.

You need to ensure that the following requirements are met:

- Backup operations occur on Server02/HA.
- If Server02/HA is unavailable, backup operations occur on Server03/HA.
- Backup operations do not occur on Server01/HA.

How should you configure HaContoso?

- A. Set the backup preference of HaContoso to Prefer Secondary.
  - Set the backup priority of Server02/HA to 20.
  - Set the backup priority of Server03/HA to 10.
- B. Set the backup preference of HaContoso to Secondary only.
  - Set the backup priority of Server02/HA to 20.
  - Set the backup priority of Server03/HA to 10.
- C. Set the backup preference of HaContoso to Secondary only.
  - Set the backup priority of Server02/HA to 10.
  - Set the backup priority of Server03/HA to 20.
- D. Set the exclude replica of Server01/HA to true.
  - Set the backup priority of Server02/HA to 10.
  - Set the backup priority of Server03/HA to 20.

Correct Answer: B Section: Exam B Explanation

## **Explanation/Reference:**

Reference: http://msdn.microsoft.com/en-us/library/ff877884.aspx

#### **QUESTION 4**

You administer a Microsoft SQL Server 2012 instance that has several SQL Server Agent jobs configured.

When SQL Server Agent jobs fail, the error messages returned by the job steps are truncated. The following error message is an example of the truncated error message:

"Executed as user CONTOSO\ServiceAccount. ...0.4035.00 for 64-bit Copyright (C) Microsoft Corp 1984-2011. All rights reserved. Started 63513 PM Error 2012-06-23 183536.87 Code 0XC001000E Source

UserImport Description Code 0x00000000 Source Log Import Activity Descript... The package execution fa... The step failed."

You need to ensure that all the details of the job step failures are retained for SQL Server Agent jobs.

What should you do?

- A. Expand agent logging to include information from all events.
- B. Disable the Limit size of job history log feature.
- C. Configure event forwarding.
- D. Configure output files.

Correct Answer: D Section: Exam B Explanation

# **Explanation/Reference:**

### **QUESTION 5**

You administer a Microsoft SQL Server 2012 server that has SQL Server Integration Services (SSIS) installed.

You plan to deploy new SSIS packages to the server.

The SSIS packages use the Project Deployment Model together with parameters and Integration Services environment variables.

You need to configure the SQL Server environment to support these packages.

What should you do?

- A. Create SSIS configuration files for the packages.
- B. Create an Integration Services catalog.
- C. Install Data Quality Services.
- D. Install Master Data services.

Correct Answer: B Section: Exam B Explanation

# **Explanation/Reference:**

## **QUESTION 6**

You administer a Microsoft SQL Server 2012 server. When transaction logs grow, SQL Server must send an email message to the database administrators. You need to configure SQL Server to send the email messages. What should you configure?

- A. SQL Mail
- B. An Extended Events session
- C. Alerts and operators in SQL Server Agent
- D. Policies under Policy-Based Management

Correct Answer: C Section: Exam B Explanation

# **Explanation/Reference:**

#### **QUESTION 7**

You administer two instances of Microsoft SQL Server 2012.

You deploy an application that uses a database on the named instance.

The application is unable to connect to the database on the named instance.

You need to ensure that the application can connect to the named instance.

What should you do?

- A. Use the Data Quality Client to configure the application.
- B. Start the SQL Server Browser Service.
- C. Start the SQL Server Integration Services Service.
- D. Use the Master Data Services Configuration Manager to configure the application.

Correct Answer: B Section: Exam B Explanation

### **Explanation/Reference:**

The answer is either start the browser service or use the Master Data Services Configuration Manager to configure the application. I have left the answer the way I found it.

#### **QUESTION 8**

You administer a Microsoft SQL Server 2012 database.

The database has a table named Customers owned by UserA and another table named Orders owned by UserB.

You also have a stored procedure named GetCustomerOrderInfo owned by UserB.

GetCustomerOrderInfo selects data from both tables.

You create a new user named UserC. You need to ensure that UserC can call the GetCustomerOrderInfo stored procedure.

You also need to assign only the minimum required permissions to UserC.

Which permission or permissions should you assign to UserC? Choose all that apply.

- A. The Select permission on Customers
- B. The Execute permission on GetCustomerOrderInfo
- C. The Take Ownership permission on Customers
- D. The Control permission on GetCustomerOrderInfo
- E. The Take Ownership permission on Orders
- F. The Select permission on Orders

Correct Answer: AB Section: Exam B Explanation

# **Explanation/Reference:**

The question seems to be missing something. Or the original answer is incorrect. I've changed it to what I believe to be the correct answer. The original answer included "The Select permission on Orders.", but due to ownership chaining, you would only need to give Execute permissions to UserC to access the Orders table since UserB is the owner.

(BF) - need to test this

#### Reference:

http://msdn.microsoft.com/en-us/library/ms188676.aspx

http://stackoverflow.com/questions/2212044/sql-server-how-to-permission-schemas http://sqlservercentral.com/blogs/steve\_jones/2012/03/14/ownership-chains-in-sql-server

### **QUESTION 9**

You administer a Microsoft SQL Server 2012 database named ContosoDb.

The database contains a table named Suppliers and a column named IsActive in the Purchases schema.

You create a new user named ContosoUser in ContosoDb. ContosoUser has no permissions to the Suppliers table.

You need to ensure that ContosoUser can delete rows that are not active from Suppliers.

You also need to grant ContosoUser only the minimum required permissions. Which Transact-SQL statement should you use?

```
    A. GRANT DELETE ON Purchases.Suppliers TO ContosoUser
    B. CREATE PROCEDURE Purchases.PurgeInactiveSuppliers
        WITH EXECUTE AS USER = 'dbo'
        AS
        DELETE FROM Purchases.Suppliers WHERE IsActive = 0
        GO
        GRANT EXECUTE ON Purchases.PurgeInactiveSuppliers TO ContosoUser
    C. GRANT SELECT ON Purchases.Suppliers TO ContosoUser
    D. CREATE PROCEDURE Purchases.PurgeInactiveSuppliers
        AS
        DELETE FROM Purchases.Suppliers WHERE IsActive = 0
        GO
        GRANT EXECUTE ON Purchases.PurgeInactiveSuppliers TO ContosoUser
```

Correct Answer: B Section: Exam B Explanation

# **Explanation/Reference:**

Need to check these

Reference: http://msdn.microsoft.com/en-us/library/ms188354.aspx Reference: http://msdn.microsoft.com/en-us/library/ms187926.aspx

# **QUESTION 10**

You use a contained database named ContosoDb within a domain.

You need to create a user who can log on to the ContosoDb database.

You also need to ensure that you can port the database to different database servers within the domain without additional user account configurations.

Which type of user should you create?

- A. User mapped to a certificate
- B. SQL user without login
- C. Domain user
- D. SQL user with login

Correct Answer: C Section: Exam B Explanation

Explanation/Reference: Contained user

There are two types of users for contained databases.

# Contained database user with password

Contained database users with passwords are authenticated by the database.

## Windows principals

Authorized Windows users and members of authorized Windows groups can connect directly to the database and do not need logins in the **master** database. The database trusts the authentication by Windows.

### **QUESTION 11**

You administer a Microsoft SQL Server 2012 database that has multiple tables in the Sales schema.

Some users must be prevented from deleting records in any of the tables in the Sales schema.

You need to manage users who are prevented from deleting records in the Sales schema.

You need to achieve this goal by using the minimum amount of administrative effort. What should you do?

- A. Create a custom database role that includes the users. Deny Delete permissions on the Sales schema for the custom database role.
- B. Include the Sales schema as an owned schema for the db\_denydatawriter role. Add the users to the db\_denydatawriter role.
- C. Deny Delete permissions on each table in the Sales schema for each user.
- D. Create a custom database role that includes the users. Deny Delete permissions on each table in the Sales schema for the custom database role.

Correct Answer: A Section: Exam B Explanation

# **Explanation/Reference:**

Looks good.

## **QUESTION 12**

You are the lead database administrator (DBA) of a Microsoft SQL Server 2012 environment.

All DBAs are members of the DOMAIN\JrDBAs Active Directory group.

You grant DOMAIN\JrDBAs access to the SQL Server.

You need to create a server role named SpecialDBARole that can perform the following functions:

- View all databases.
- View the server state.
- Assign GRANT, DENY, and REVOKE permissions on logins.

You need to add DOMAIN\JrDBAs to the server role.

You also need to provide the least level of privileges necessary.

Which SQL statement or statements should you use? Choose all that apply.

- A. CREATE SERVER ROLE [SpecialDBARole] AUTHORIZATION setupadmin;
- B. ALTER SERVER ROLE [SpecialDBARole] ADD MEMBER [DOMAIN\JrDBAs];
- C. CREATE SERVER ROLE [SpecialDBARole] AUTHORIZATION securityadmin;
- D. GRANT VIEW DEFINITION TO [SpecialDBARole];
- E. CREATE SERVER ROLE [SpecialDBARole] AUTHORIZATION serveradmin;
- F. GRANT VIEW SERVER STATE, VIEW ANY DATABASE TO [SpecialDBARole];

Correct Answer: BCF

Section: Exam B Explanation

## **Explanation/Reference:**

#### **QUESTION 13**

You administer a Microsoft SQL Server 2012 database that has Trustworthy set to On.

You create a stored procedure that returns database-level information from Dynamic Management Views.

You grant User1 access to execute the stored procedure.

You need to ensure that the stored procedure returns the required information when User1 executes the stored procedure.

You need to achieve this goal by granting the minimum permissions required. What should you do? (Each correct answer presents a complete solution. Choose all that apply.)

- A. Create a SQL Server login that has VIEW SERVER STATE permissions. Create an application role and a secured password for the role.
- B. Modify the stored procedure to include the EXECUTE AS OWNER statement. Grant VIEW SERVER STATE permissions to the owner of the stored procedure.
- C. Create a SQL Server login that has VIEW SERVER STATE permissions.

  Modify the stored procedure to include the EXECUTE AS {newlogin} statement.
- D. Grant the db\_owner role on the database to User1.
- E. Grant the sysadmin role on the database to User1.

Correct Answer: BC Section: Exam B Explanation

#### **Explanation/Reference:**

Reference: http://msdn.microsoft.com/en-us/library/ms187861.aspx

### **QUESTION 14**

You are migrating a database named Orders to a new server that runs Microsoft SQL Server 2012.

You attempt to add the [Corpnet\User1] login to the database. However, you receive the following error message:

"User already exists in current database."

You need to configure the [Corpnet\User1] login to be able to access the Orders database and retain the original permissions.

You need to achieve this goal by using the minimum required permissions. Which Transact-SQL statement should you use?

```
A. DROP USER [User1];
   CREATE USER [Corpnet\User1] FOR LOGIN [Corpnet\User1];
   ALTER ROLE [db_owner] ADD MEMBER [Corpnet\User1];
B. ALTER SERVER ROLE [sysadmin] ADD MEMBER [Corpnet\User1];
C. ALTER USER [Corpnet\User1] WITH LOGIN [Corpnet\User1];
```

D. ALTER ROLE [db owner] ADD MEMBER [Corpnet\User1];

Correct Answer: C Section: Exam B Explanation

### **Explanation/Reference:**

Reference: http://msdn.microsoft.com/en-us/library/ms176060.aspx

#### **QUESTION 15**

You administer a Microsoft SQL Server 2012 database. You configure Transparent Data Encryption (TDE) on the Orders database by using the following statements:

```
CREATE MASTER KEY ENCRYPTION BY PASSWORD = 'MyPassword1!';

CREATE CERTIFICATE TDE_Certificate WITH SUBJECT = 'TDE Certificate';

BACKUP CERTIFICATE TDE_Certificate TO FILE = 'd:\TDE_Certificate.cer'

WITH PRIVATE KEY (FILE = 'd:\TDE_Certificate.key', ENCRYPTION BY PASSWORD = 'MyPassword1!');

CREATE DATABASE ENCRYPTION KEY

WITH ALGORITHM = AES_256

ENCRYPTION BY SERVER CERTIFICATE TDE_Certificate;

ALTER DATABASE Orders SET ENCRYPTION ON;
```

You attempt to restore the Orders database and the restore fails.

You copy the encryption file to the original location. A hardware failure occurs and so a new server must be installed and configured.

After installing SQL Server to the new server, you restore the Orders database and copy the encryption files to their original location. However, you are unable to access the database.

You need to be able to restore the database.

Which Transact-SQL statement should you use before attempting the restore?

```
A CREATE ASSEMBLY TDE Assembly
    FROM 'd:\TDE_Certificate.cer'
    WITH PERMISSION_SET = SAFE;
  CREATE CERTIFICATE TDE_Certificate
  FROM ASSEMBLY TDE_Assembly;
B. CREATE CERTIFICATE TDE_Certificate
  FROM EXECUTABLE FILE = 'd:\TDE_Certificate.cer'
C. CREATE CERTIFICATE TDE_Certificate
  FROM FILE = 'd:\TDE_Certificate.cer'
  WITH PRIVATE KEY (FILE = 'd:\TDE_Certificate.key', DECRYPTION BY PASSWORD
  'MyPassword1!');
D. DECLARE @startdate date
  SET @startdate = GETDATE()
  CREATE CERTIFICATE TDE_Certificate
  FROM FILE = 'd:\TDE_Certificate.cer'
  WITH START DATE = @startdate;
```

Correct Answer: C Section: Exam B Explanation

# **Explanation/Reference:**

Reference: http://msdn.microsoft.com/en-us/library/ff773063.aspx

# **QUESTION 16**

You administer a Microsoft SQL Server 2012 database.

You provide temporary securityadmin access to User1 to the database server.

You need to know if User1 adds logins to securityadmin. Which server-level audit action group should you use?

- A. SERVER STATE CHANGE GROUP
- B. SERVER\_PRINCIPAL\_IMPERSONATION\_GROUP
- C. SUCCESSFUL LOGIN GROUP
- D. SERVER\_ROLE\_MEMBER\_CHANGE\_GROUP

Correct Answer: D Section: Exam B Explanation

## Explanation/Reference:

Verified answer as correct.

Reference: http://technet.microsoft.com/en-us/library/cc280663.aspx

# SERVER STATE CHANGE GROUP

This event is raised when the SQL Server service state is modified. Equivalent to the Audit Server Starts and Stops Event Class.

# SERVER\_PRINCIPAL\_IMPERSONATION\_GROUP

This event is raised when there is an impersonation within server scope, such as EXECUTE AS <login>. Equivalent to the Audit Server Principal Impersonation Event Class.

### SUCCESSFUL LOGIN GROUP

Indicates that a principal has successfully logged in to SQL Server. Events in this class are raised by new connections or by connections that are reused from a connection pool. Equivalent to the Audit Login Event Class.

# SERVER\_ROLE\_MEMBER\_CHANGE\_GROUP

This event is raised whenever a login is added or removed from a fixed server role. This event is raised for the sp\_addsrvrolemember and sp\_dropsrvrolemember stored procedures. Equivalent to the Audit Add Login to Server Role Event Class.

#### **QUESTION 17**

You administer a Microsoft SQL Server 2012 instance.

You need to stop a blocking process that has an SPID of 64 without stopping other processes.

What should you do?

- A. Execute the following Transact-SQL statement: EXECUTE sp\_KillSPID 64
- B. Restart the SQL Server service.
- C. Execute the following Transact-SQL statement: KILL 64
- D. Execute the following Transact-SQL statement: ALTER SESSION KILL '64'

Correct Answer: C Section: Exam B Explanation

### **Explanation/Reference:**

Reference: http://msdn.microsoft.com/en-us/library/ms173730.aspx

### **QUESTION 18**

You administer a Microsoft SQL Server 2012 database.

Users report that an application that accesses the database displays an error, but the error does not provide

meaningful information.

No entries are found in the SQL Server log or Windows event logs related to the error.

You need to identify the root cause of the issue by retrieving the error message.

What should you do?

- A. Create an Extended Events session by using the sqlserver.error\_reported event.
- B. Create a SQL Profiler session to capture all ErrorLog and EventLog events.
- C. Flag all stored procedures for recompilation by using sp\_recompile.
- D. Execute sp\_who.

Correct Answer: A Section: Exam B Explanation

# **Explanation/Reference:**

Reference: http://msdn.microsoft.com/en-us/library/bb630282.aspx

Event sqlserver. error\_reported: This event gets fired every time that an error happens in the server

### **QUESTION 19**

You administer a Microsoft SQL Server 2012 server.

One of the databases on the server supports a highly active OLTP application.

Users report abnormally long wait times when they submit data into the application.

You need to identify which queries are taking longer than 1 second to run over an extended period of time. What should you do?

- A. Use SQL Profiler to trace all queries that are processing on the server. Filter queries that have a Duration value of more than 1,000.
- B. Use sp\_configure to set a value for blocked process threshold. Create an extended event session.
- C. Run the sp\_who command from a query window.
- D. Run the DBCC TRACEON 1222 command from a query window and review the SQL Server event log.
- E. Use the Job Activity monitor to review all processes that are actively running. Review the Job History to find out the duration of each step.

Correct Answer: D Section: Exam B Explanation

# **Explanation/Reference:**

Verified the SQL Profiler and DBCC answers as correct. However, while Profiler will show this information, the best practice with Profiler is to use it short-term. The question specifically states "over an extended period of time". That means Profiler wouldn't be the best tool for this scenario. Therefore, DBCC would be the best answer.

Reference: http://www.mssqltips.com/sqlservertip/2130/finding-sql-server-deadlocks-using-trace-flag-1222/Reference: http://msdn.microsoft.com/en-us/library/ms188396.aspx

#### **QUESTION 20**

You administer a Microsoft SQL Server 2012 database.

You need to ensure that the size of the transaction log file does not exceed 2 GB.

What should you do?

A. Execute sp\_configure 'max log size', 2G.

- B. use the ALTER DATABASE...SET LOGFILE command along with the maxsize parameter.
- C. In SQL Server Management Studio, right-click the instance and select Database Settings. Set the maximum size of the file for the transaction log.
- D. In SQL Server Management Studio, right-click the database, select Properties, and then click Files. Open the Transaction log Autogrowth window and set the maximum size of the file.

Correct Answer: D Section: Exam B Explanation

# **Explanation/Reference:**

Verified answer as correct.

#### **QUESTION 21**

You administer a Microsoft SQL Server 2012 server.

The MSSQLSERVER service uses a domain account named CONTOSO\SQLService.

You plan to configure Instant File Initialization.

You need to ensure that Data File Autogrow operations use Instant File Initialization.

What should you do? Choose all that apply.

- A. Restart the SQL Server Agent Service.
- B. Disable snapshot isolation.
- C. Restart the SQL Server Service.
- D. Add the CONTOSO\SQLService account to the Perform Volume Maintenance Tasks local security policy.
- E. Add the CONTOSO\SQLService account to the Server Operators fixed server role.
- F. Enable snapshot isolation.

Correct Answer: CD Section: Exam B Explanation

# **Explanation/Reference:**

Reference: http://msdn.microsoft.com/en-us/library/ms175935.aspx

Reference: http://www.mssqltips.com/sqlservertip/2752/effect-of-instant-file-initialization-within-sql-server/

### **How To Enable Instant File Initialization**

1. Open Local Security Policy and go to Local Policies --> User Rights Assignment.



- 2. Double click Perform Volume Maintenance Tasks and add your SQL Server database engine service account.
- 3. Restart the SQL Server service using SQL Server Configuration Manager and this setting should now be enabled.

### **QUESTION 22**

You administer a Microsoft SQL Server 2012 failover cluster that contains two nodes named Node A and Node B.

A single instance of SQL Server is installed on the cluster.

An additional node named Node C has been added to the existing cluster.

You need to ensure that the SQL Server instance can use all nodes of the cluster. What should you do?

- A. Run the New SQL Server stand-alone installation Wizard on Node C.
- B. Run the Add Node to SQL Server Failover Cluster Wizard on Node C.
- C. Use Node B to install SQL Server on Node C.
- D. Use Node A to install SQL Server on Node C.

Correct Answer: B Section: Exam B Explanation

### **Explanation/Reference:**

Verified answer as correct.

Reference: http://technet.microsoft.com/en-us/library/ms191545.aspx

To add a node to an existing SQL Server failover cluster, you must run SQL Server Setup on the node that is to be added to the SQL Server failover cluster instance. Do not run Setup on the active node.

The Installation Wizard will launch the SQL Server Installation Center. To add a node to an existing failover cluster instance, click Installation in the left-hand pane. Then, select **Add node to a SQL Server failover cluster**.

#### **QUESTION 23**

You administer a Microsoft SQL Server 2012 database. The database contains a Product table created by using the following definition:

```
CREATE TABLE dbo.Product
(ProductID INT PRIMARY KEY,
Name VARCHAR(50) NOT NULL,
Color VARCHAR(15) NOT NULL,
Size VARCHAR(5) NOT NULL,
Style CHAR(2) NULL,
Weight DECIMAL(8,2) NULL);
```

You need to ensure that the minimum amount of disk space is used to store the data in the Product table. What should you do?

- A. Convert all indexes to Column Store indexes.
- B. Implement Unicode Compression.
- C. Implement row-level compression.
- D. Implement page-level compression.

Correct Answer: D Section: Exam B Explanation

# **Explanation/Reference:**

Reference: http://msdn.microsoft.com/en-us/library/cc280449.aspx Reference: http://msdn.microsoft.com/en-us/library/cc280464.aspx Reference: http://msdn.microsoft.com/en-us/library/cc280576.aspx Reference: http://msdn.microsoft.com/en-us/library/ee240835.aspx

### Exam C

### **QUESTION 1**

You administer a Microsoft SQL Server 2012 server that hosts a transactional database and a reporting database.

The transactional database is updated through a web application and is operational throughout the day.

The reporting database is only updated from the transactional database.

The recovery model and backup schedule are configured as shown in the following table:

| Database               | Description   |  |
|------------------------|---|--|
| Transactional database | Recovery model:  Full  Backup schedule:  Full database backup: midnight, daily  Differential database backup: on the hour, every two hours starting at 02:00 hours except at 00:00 hours  Log backup: every half hour, except at the times of full and differential backups |  |
| Reporting database     | Recovery model:  • Simple Backup schedule:  |  |
|                        | <ul> <li>Full database backup: 01:00 hours daily</li> <li>Differential database backup: 13:00 hours daily</li> </ul>  |  |
|                        | Changes in data are updated from the transactional database to the reporting database at 00:30 hours and at 12:30   |  |
|                        | The update takes 15 minutes   |  |

The differential backup of the reporting database fails.

Then, the reporting database fails at 14:00 hours.

You need to ensure that the reporting database is restored.

You also need to ensure that data loss is minimal.

What should you do?

- A. Restore the latest full backup, and restore the latest differential backup. Then, restore the latest log backup.
- B. Perform a point-in-time restore. Restore the latest full backup.
- C. Restore the latest full backup, and restore the latest differential backup. Then, restore each log backup taken before the time of failure from the most recent differential

backup.

- D. Restore the latest full backup. Then, restore the latest differential backup.
- E. Restore the latest full backup. Then, restore each differential backup taken before the time of failure from the most recent full backup.
- F. Perform a page restore.
- G. Perform a partial restore.
- H. Restore the latest full backup.

Correct Answer: H Section: Exam C Explanation

# **Explanation/Reference:**

Original answer is H... but I don't particularly like any...

restore full on reporting and run update again

or use transactional full and 2 O'clock differential from Transaction db to restore the reporting db.

I'm going for something missing from question or answer

### **QUESTION 2**

You administer a Microsoft SQL Server 2012 server that hosts a transactional database and a reporting database.

The transactional database is updated through a web application and is operational throughout the day.

The reporting database is only updated from the transactional database.

The recovery model and backup schedule are configured as shown in the following table:

| Database               | Description  |  |
|------------------------|--|--|
| Transactional database | Recovery model:  • Full  Backup schedule:  • Full database backup: midnight, daily  • Differential database backup: on the hour, every two hours starting at 02:00 hours except at 00:00 hours  • Log backup: every half hour, except at the |  |
| Reporting database     | Recovery model:  Simple  |  |
|                        | Full database backup: 01:00 hours daily     Differential database backup: 13:00 hours daily  |  |
|                        | Changes in data are updated from the transactional database to the reporting database at 00:30 hours and at 12:30 hours     The update takes 15 minutes  |  |

At 14:00 hours, you discover that pages 71, 520, and 713 on one of the database files are corrupted on the **reporting** database.

You need to ensure that the databases are restored.

You also need to ensure that data loss is minimal.

What should you do?

- A. Perform a partial restore.
- B. Restore the latest full backup, and restore the latest differential backup. Then, restore each log backup taken before the time of failure from the most recent differential backup.
- C. Restore the latest full backup.
- D. Restore the latest full backup, and restore the latest differential backup. Then, restore the latest log backup.
- E. Perform a page restore.
- F. Restore the latest full backup. Then, restore each differential backup taken before the time of failure from the most recent full backup.
- G. Perform a point-in-time restore.
- H. Restore the latest full backup. Then, restore the latest differential backup.

Correct Answer: H Section: Exam C Explanation

# **Explanation/Reference:**

File restore

Restores a file or filegroup in a multi-filegroup database. Note that under the simple recovery model, the file must belong to a **read-only filegroup**. After a full file restore, a differential file backup can be restored.

# Page restore

Restores individual pages. Page restore is available only under the **full and bulk-logged** recovery models

# Piecemeal restore

Restores the database in stages, beginning with the primary filegroup and one or more secondary filegroups. A piecemeal restore begins with a RESTORE DATABASE using the PARTIAL option and specifying one or more secondary filegroups to be restored

#### **QUESTION 3**

You administer a Microsoft SQL Server 2012 server that hosts a transactional database and a reporting database.

The transactional database is updated through a web application and is operational throughout the day.

The reporting database is only updated from the transactional database.

The recovery model and backup schedule are configured as shown in the following table:

| Database               | Description  |
|------------------------|--|
| Transactional database | Recovery model:  • Full  Backup schedule:  • Full database backup: midnight, daily  • Differential database backup: on the hour, every two hours starting at 02:00 hours except at 00:00 hours  • Log backup: every half hour, except at the |
| Reporting database     | Recovery model:  • Simple  |
|                        | Backup schedule:   |
|                        | <ul> <li>Full database backup: 01:00 hours daily</li> <li>Differential database backup: 13:00 hours daily</li> </ul>   |
|                        | Data updates:  |
|                        | <ul> <li>Changes in data are updated from the transactional database to the reporting database at 00:30 hours and at 12:30 hours</li> <li>The update takes 15 minutes</li> </ul>   |

At 16:20 hours, you discover that pages 17, 137, and 205 on one of the database files are corrupted on the **transactional** database.

You need to ensure that the transactional database is restored.

You also need to ensure that data loss is minimal.

What should you do?

- A. Perform a partial restore.
- B. Restore the latest full backup, and restore the latest differential backup. Then, restore each log backup taken before the time of failure from the most recent differential backup.
- C. Perform a point-in-time restore.
- D. Restore the latest full backup.
- E. Restore the latest full backup, and restore the latest differential backup. Then, restore the latest log backup.
- F. Perform a page restore.
- G. Restore the latest full backup. Then, restore each differential backup taken before the time of failure from the most recent full backup.
- H. Restore the latest full backup. Then, restore the latest differential backup.

Correct Answer: F Section: Exam C Explanation

**Explanation/Reference:** 

# **Requirements for Restoring Pages**

# A page restore is subject to the following requirements:

- The databases must be using the full or bulk-logged recovery model. Some issues exist if you are using the bulk-logged model. For more information, see the following section.
- Pages in read-only filegroups cannot be restored. Trying to make a filegroup read-only will fail if there is a page restore going on at the same time in the filegroup.
- The restore sequence must start with a full, file, or filegroup backup.
- A page restore requires an unbroken chain of log backups up to the current log file, and they must all be applied so that the page is brought up to date with the current log file.
- As in a file-restore sequence, in each restore step, you can add more pages to the roll forward set.
- A database backup and page restore cannot be run at the same time.

# **Bulk-logged Recovery Model and Page Restore**

For a database that uses the bulk-logged recovery model, page restore has the following additional conditions:

- Backing up while filegroup or page data is offline is problematic for bulk-logged data, because the offline
  data is not recorded in the log. Any offline page can prevent backing up the log. In this cases, consider
  using DBCC REPAIR, because this might cause less data loss than restoring to the most recent backup.
- If a log backup of a bulk-logged database encounters a bad page, it fails unless WITH CONTINUE\_AFTER\_ERROR is specified.
- Page restore generally does not work with bulk-logged recovery. A best practice for performing page restore is to set the database to the full recovery model, and try a log backup. If the log backup works, you can continue with the page restore. If the log backup fails, you either have to lose work since the previous log backup or you have to try running DBCC must be run with the REPAIR ALLOW DATA LOSS option.

### **QUESTION 4**

You administer a Microsoft SQL Server 2012 server that hosts a transactional database and a reporting database.

The transactional database is updated through a web application and is operational throughout the day.

The reporting database is only updated from the transactional database.

The recovery model and backup schedule are configured as shown in the following table:

| Database               | Description  |
|------------------------|--|
| Transactional database | Recovery model:  • Full  Backup schedule:  • Full database backup: midnight, daily  • Differential database backup: on the hour, every two hours starting at 02:00 hours except at 00:00 hours  • Log backup: every half hour, except at the |
| Reporting database     | Recovery model:  • Simple  |
|                        | Backup schedule:   |
|                        | <ul> <li>Full database backup: 01:00 hours daily</li> <li>Differential database backup: 13:00 hours daily</li> </ul>   |
|                        | Data updates:  |
|                        | <ul> <li>Changes in data are updated from the transactional database to the reporting database at 00:30 hours and at 12:30 hours</li> <li>The update takes 15 minutes</li> </ul>   |

One of the hard disk drives that stores the **reporting** database fails at **16:40** hours.

You need to ensure that the reporting database is restored.

You also need to ensure that data loss is minimal.

What should you do?

- A. Restore the latest full backup. Then, restore each differential backup taken before the time of failure from the most recent full backup.
- B. Perform a partial restore.
- C. Restore the latest full backup, and restore the latest differential backup. Then, restore the latest log backup.
- D. Perform a point-in-time restore.
- E. Restore the latest full backup.
- F. Perform a page restore.
- G. Restore the latest full backup, and restore the latest differential backup. Then, restore each log backup taken before the time of failure from the most recent differential backup.
- H. Restore the latest full backup. Then, restore the latest differential backup.

Correct Answer: H Section: Exam C Explanation

Explanation/Reference:

#### Exam D

#### **QUESTION 1**

**DRAG DROP** 

You administer three Microsoft SQL Server 2012 servers named ServerA, ServerB, and ServerC.

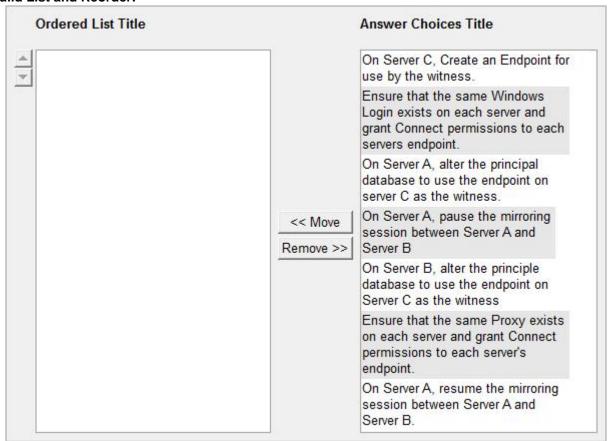
ServerA is the acting principal and ServerB is the mirror.

You need to add ServerC as a witness to the existing mirroring session between ServerA and ServerB.

You need to achieve this goal without delaying synchronization.

Which **three** actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

### **Build List and Reorder:**



# **Correct Answer:**

On Server C, Create an Endpoint for use by the witness.

Ensure that the same Windows Login exists on each server and grant Connect permissions to each servers endpoint.

On Server A, alter the principal database to use the endpoint on server C as the witness.

Section: Exam D Explanation

Explanation/Reference:

#### **QUESTION 2**

DRAG AND DROP

You administer several Microsoft SQL Server 2012 servers.

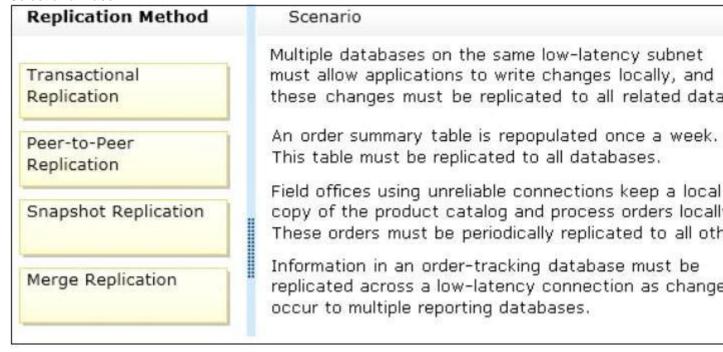
Your company has a number of offices across the world connected by using a wide area network (WAN).

Connections between offices vary significantly in both bandwidth and reliability.

You need to identify the correct replication method for each scenario.

What should you do? (To answer, drag the appropriate replication method or methods to the correct location or locations in the answer area. Each replication method may be used once, more than once, or not at all.)

#### Select and Place:



| Replication Method | Scenario   |
|--------------------|--|
|                    | Multiple databases on the same low-latency subnet<br>must allow applications to write changes locally, an<br>these changes must be replicated to all related da      |
|                    | An order summary table is repopulated once a wee<br>This table must be replicated to all databases.  |
|                    | Field offices using unreliable connections keep a loc<br>copy of the product catalog and process orders loc<br>These orders must be periodically replicated to all o |
|                    | Information in an order-tracking database must be replicated across a low-latency connection as chan occur to multiple reporting databases.                          |

Section: Exam D Explanation

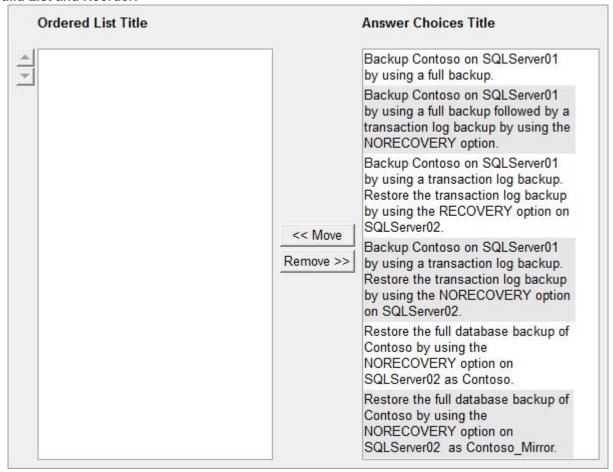
## Explanation/Reference:

Reference: http://msdn.microsoft.com/en-us/library/ms151198.aspx

#### **QUESTION 3**

You are a database administrator of a Microsoft SQL Server 2012 environment. The environment contains two servers named SQLServer01 and SQLServer02. The database Contoso exists on SQLServer01. You plan to mirror the Contoso database between SQLServer01 and SQLServer02 by using database mirroring. You need to prepare the Contoso database for database mirroring. Which three actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

# **Build List and Reorder:**



## **Correct Answer:**

Backup Contoso on SQLServer01 by using a full backup.

Restore the full database backup of Contoso by using the NORECOVERY option on SQLServer02 as Contoso.

Backup Contoso on SQLServer01 by using a transaction log backup. Restore the transaction log backup by using the NORECOVERY option on SQLServer02.

Section: Exam D Explanation

## **Explanation/Reference:**

#### **QUESTION 4**

You administer a Microsoft SQL Server 2012 environment that contains a production SQL Server 2005 instance named SQL2005 and a development SQL Server 2012 instance named SQL2012.

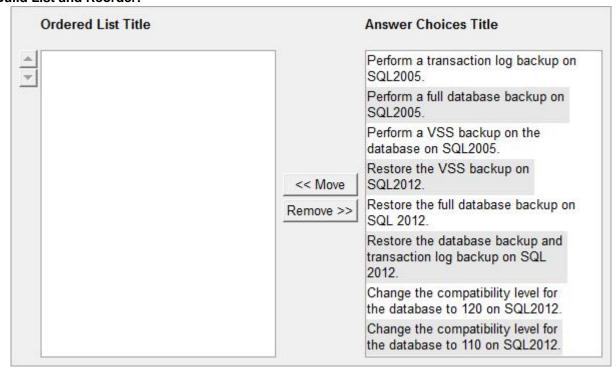
The development team develops a new application that uses the SQL Server 2012 functionality.

You are planning to migrate a database from SQL2005 to SQL2012 so that the development team can test their new application.

You need to migrate the database without affecting the production environment.

Which three actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

## **Build List and Reorder:**



## **Correct Answer:**

Perform a full database backup on SQL2005. Restore the full database backup on SQL 2012. Change the compatibility level for the database to 110 on SQL2012.

Section: Exam D Explanation

## **Explanation/Reference:**

Reference: http://msdn.microsoft.com/en-us/library/ms177429.aspx

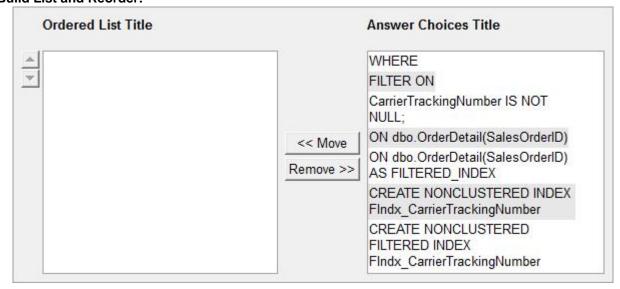
#### **QUESTION 5**

You administer a Microsoft SQL Server 2012 database. You use an OrderDetail table that has the following definition:

```
CREATE TABLE [dbo].[OrderDetail]
 ([SalesOrderID] [int] NOT NULL,
  [SalesOrderDetailID] [int] IDENTITY(1,1) NOT NULL,
  [CarrierTrackingNumber] [nvarchar](25) NULL,
  [OrderQty] [smallint] NOT NULL,
  [ProductID] [int] NOT NULL,
  [SpecialOfferID] [int] NULL,
  [UnitPrice] [money] NOT NULL);
```

You need to create a non-clustered index on the SalesOrderID column in the OrderDetail table to include only rows that contain a value in the CarrierTrackingNumber column. Which four Transact- SQL statements should you use? (To answer, move the appropriate statements from the list of statements to the answer area and arrange them in the correct order.)

## **Build List and Reorder:**



# **Correct Answer:**

CREATE NONCLUSTERED INDEX
FIndx\_CarrierTrackingNumber
ON dbo.OrderDetail(SalesOrderID)
WHERE
CarrierTrackingNumber IS NOT NULL;

Section: Exam D Explanation

# Explanation/Reference:

According to these references, this answer looks correct.

#### References:

http://msdn.microsoft.com/en-us/library/ms188783.aspx http://msdn.microsoft.com/en-us/library/ms189280.aspx

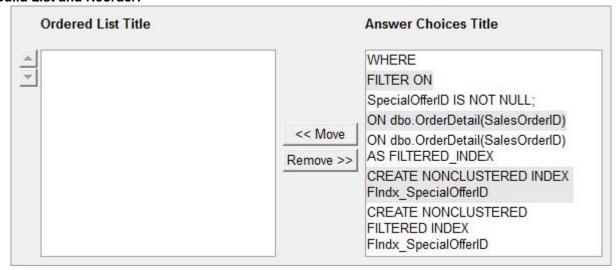
#### QUESTION 6

You administer a Microsoft SQL Server 2012 database. You use an OrderDetail table that has the following definition:

```
CREATE TABLE [dbo].[OrderDetail]
 ([SalesOrderID] [int] NOT NULL,
  [SalesOrderDetailID] [int] IDENTITY(1,1) NOT NULL,
  [CarrierTrackingNumber] [nvarchar](25) NULL,
  [OrderQty] [smallint] NOT NULL,
  [ProductID] [int] NOT NULL,
  [SpecialOfferID] [int] NULL,
  [UnitPrice] [money] NOT NULL);
```

You need to create a non-clustered index on the SalesOrderID column in the OrderDetail table to include only rows that contain a value in the SpecialOfferID column. Which four Transact-SQL statements should you use? (To answer, move the appropriate statements from the list of statements to the answer area and arrange them in the correct order.)

# **Build List and Reorder:**



## **Correct Answer:**

CREATE NONCLUSTERED INDEX
FIndx\_SpecialOfferID
ON dbo.OrderDetail(SalesOrderID)
WHERE
SpecialOfferID IS NOT NULL;

Section: Exam D Explanation

## **Explanation/Reference:**

According to these references, this answer looks correct.

#### References:

http://msdn.microsoft.com/en-us/library/ms188783.aspx http://msdn.microsoft.com/en-us/library/ms189280.aspx

### **QUESTION 7**

You administer a Microsoft SQL Server 2012 database. All database traffic to the SQL Server must be encrypted by using secure socket layer (SSL) certificates or the connection must be refused. Network administrators have deployed server certificates to the Windows store of all Windows servers on the network from a trusted Certificate Authority. This is the only Certificate Authority allowed to distribute certificates on the network.

You enable the Force Encryption flag for the MSSQLServer protocols, but client computers are unable to connect. They receive the following error message:

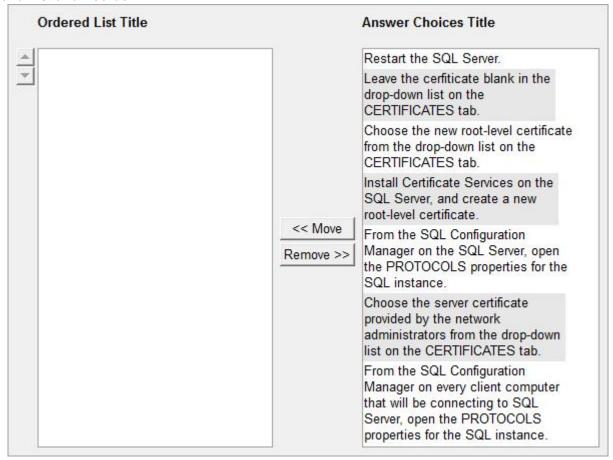
"A connection was successfully established with the server, but then an error occurred during the pre-login handshake, (provider: SSL Provider, error: 0 - The certificate chain was issued by an authority that is not trusted.) (Microsoft SQL Server)"

You notice the following entry in the SQL Server log:

"A self-generated certificate was successfully loaded for encryption."

You need to configure SQL Server to encrypt all client traffic across the network. You also need to ensure that client computers are able to connect to the server by using a trusted certificate. Which three actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

## **Build List and Reorder:**



# **Correct Answer:**

From the SQL Configuration Manager on the SQL Server, open the PROTOCOLS properties for the SQL instance.

Choose the server certificate provided by the network administrators from the drop-down list on the CERTIFICATES tab.

Restart the SQL Server.

Section: Exam D Explanation

# **Explanation/Reference:**

Reference: http://thesqldude.com/2012/04/21/setting-up-ssl-encryption-for-sql-server-using-certificates-issues-tips-tricks/

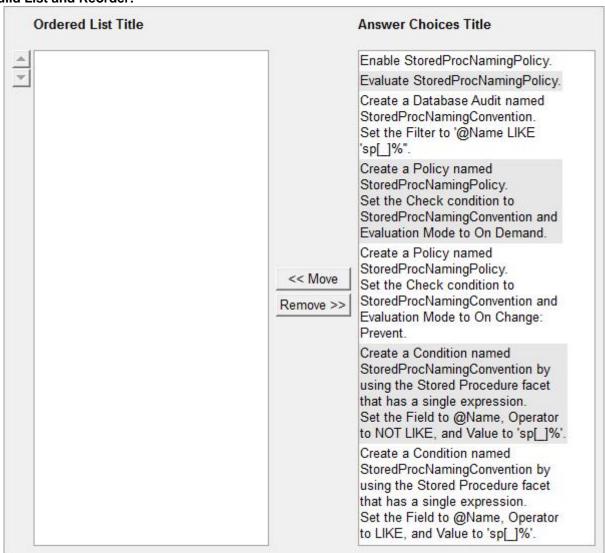
#### **QUESTION 8**

You administer a Microsoft SQL Server 2012 server that has multiple databases.

You need to ensure that users are **unable** to create stored procedures that begin with sp\_.

Which three actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

# **Build List and Reorder:**



# **Correct Answer:**

Create a Condition named
StoredProcNamingConvention by using the
Stored Procedure facet that has a single
expression.
Set the Field to @Name, Operator to LIKE, and
Value to 'sp[\_]%'.
Create a Policy named
StoredProcNamingPolicy.
Set the Check condition to
StoredProcNamingConvention and Evaluation
Mode to On Change: Prevent.
Enable StoredProcNamingPolicy.

Section: Exam D Explanation

# **Explanation/Reference:**

Reference: http://msdn.microsoft.com/en-us/library/bb510667.aspx

Policies are created and managed by using Management Studio. The process includes the following steps:

- 1. Select a Policy-Based Management facet that contains the properties to be configured.
- 2. Define a condition that specifies the state of a management facet.
- 3. Define a policy that contains the condition, additional conditions that filter the target sets, and the evaluation mode.
- 4. Check whether an instance of SQL Server is in compliance with the policy.

#### **Evaluation modes**

There are four evaluation modes, three of which can be automated:

- On demand. This mode evaluates the policy when directly specified by the user.
- On change: prevent. This automated mode uses DDL triggers to prevent policy violations.

#### Important

If the nested triggers server configuration option is disabled, On change: prevent will not work correctly. Policy-Based Management relies on DDL triggers to detect and roll back DDL operations that do not comply with policies that use this evaluation mode. Removing the Policy-Based Management DDL triggers or disabling nest triggers, will cause this evaluation mode to fail or perform unexpectedly.

- On change: log only. This automated mode uses event notification to evaluate a policy when a relevant change is made.
- On schedule. This automated mode uses a SQL Server Agent job to periodically evaluate a policy.

### **QUESTION 9**

DRAG AND DROP

You administer a Microsoft SQL Server 2012 server.

A variety of issues occur from time to time in the production environment.

You need to identify the appropriate tool for each issue.

Which tool or tools should you use? (To answer, drag the appropriate tool or tools to the correct issue or issues in the answer area. Each tool may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)

# Select and Place:

| ocicci and i lacc.          |   |  |  |
|-----------------------------|---|--|--|
| Tool                        | Issue   |  |  |
| DBCC CHECKDB                | You want to verify network utilization.   |  |  |
| Performance Monitor         | You suspect that a process is being blocked.  |  |  |
| sys.dm_exec_requests<br>DMV | You need to validate the integrity of the database.                                 |  |  |
| SQL Server error log        | A SQL Agent job fails on a specific step, and you<br>need the details of that step. |  |  |
| Job History                 | SQL Server will not start.  |  |  |
|                             |   |  |  |



Section: Exam D Explanation

# **Explanation/Reference:**

# **QUESTION 10**

DRAG AND DROP

You administer a Microsoft SQL Server database that is used by an application.

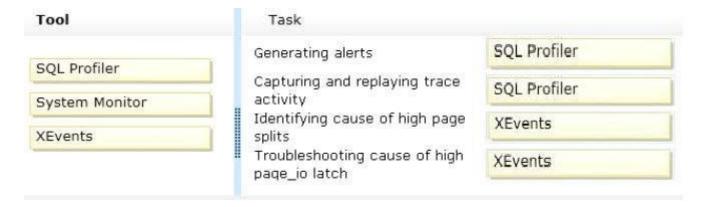
Users of the application report performance issues.

You need to choose the appropriate tool for performance-tuning of SQL Server databases.

Which tool or tools should you use? (To answer, drag the appropriate tool or tools to their corresponding task or tasks in the answer area. Each tool may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)

# **Select and Place:**

| Tool                        | Task  |  |  |
|-----------------------------|---|--|--|
| SQL Profiler System Monitor | Generating alerts  Capturing and replaying trace activity  Identifying cause of high page |  |  |
| XEvents                     | splits Troubleshooting cause of high page_io latch  |  |  |



Section: Exam D Explanation

# **Explanation/Reference:**

Verified answer as correct.

Reference: http://msdn.microsoft.com/en-us/library/bb630282.aspx Reference: http://msdn.microsoft.com/en-us/library/ms191246.aspx Reference: http://msdn.microsoft.com/en-us/library/ms181091.aspx

#### **QUESTION 11**

You administer a single Microsoft SQL Server instance on a two-node failover cluster that has nodes named Node A and Node B.

The instance is currently running on Node A.

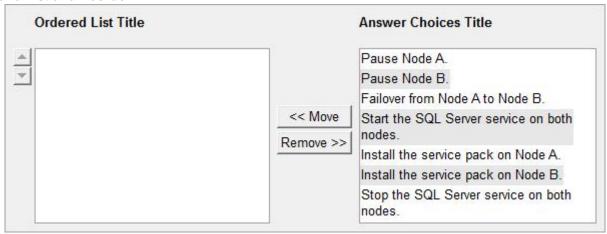
You want to patch both Node A and Node B by using the most recent SQL Server Service Pack.

You need to ensure that the following requirements are met:

- Both nodes receive the update.
- Downtime is minimized.
- No data is lost.

Which three actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

#### **Build List and Reorder:**



Install the service pack on Node B.
Failover from Node A to Node B.
Install the service pack on Node A.

Section: Exam D Explanation

## **Explanation/Reference:**

Reference: http://technet.microsoft.com/en-us/library/ms191009.aspx Reference: http://technet.microsoft.com/en-us/library/ms191295.aspx

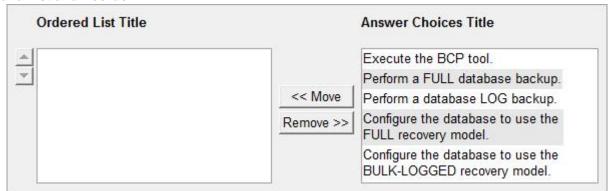
## **QUESTION 12**

You administer a Microsoft SQL Server 2012 database. The database uses SQL Server Agent jobs to perform regular FULL and LOG backups. The database uses the FULL recovery model. You plan to perform a bulk import of a very large text file. You need to ensure that the following requirements are met during the bulk operation:

- The database transaction log is minimally affected.
- The database is online and all user transactions are recoverable.
- All transactions are fully recoverable prior to the import.

Which three actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

#### **Build List and Reorder:**



## **Correct Answer:**

Perform a database LOG backup.
Configure the database to use the BULK-LOGGED recovery model.
Execute the BCP tool.

Section: Exam D Explanation

# **Explanation/Reference:**

## **QUESTION 13**

You administer a Microsoft SQL Server database.

You want to import data from a text file to the database.

You need to ensure that the following requirements are met:

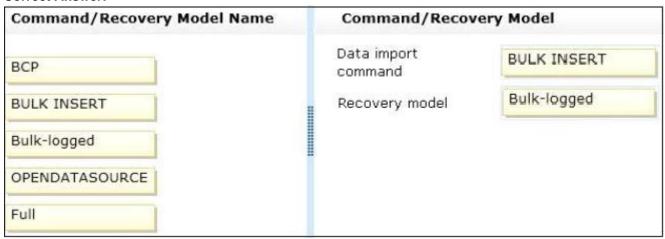
- Data import is performed by using a stored procedure.
- Data is loaded as a unit and is minimally logged.

Which data import command and recovery model should you choose? (To answer, drag the appropriate data import command or recovery model to the appropriate location or locations in the answer area. Each data import command or recovery model may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)

#### Select and Place:

| Command/Recovery Model Name |   | Command/Recovery Model |  |  |
|-----------------------------|---|------------------------|--|--|
| ВСР                         |   | Data import command    |  |  |
| BULK INSERT                 | ı | Recovery model         |  |  |
| Bulk-logged                 |   |                        |  |  |
| OPENDATASOURCE              |   |                        |  |  |
| Full                        |   |                        |  |  |

#### **Correct Answer:**



Section: Exam D Explanation

# **Explanation/Reference:**

# **QUESTION 14**

You administer a Microsoft SQL Server 2012 database.

The database is backed up according to the following schedule:

- Daily full backup at 23:00 hours.
- Differential backups on the hour, except at 23:00 hours.
- Log backups every 10 minutes from the hour, except on the hour.

The database uses the Full recovery model.

A developer accidentally drops a number of tables and stored procedures from the database between 22:40 hours and 23:10 hours.

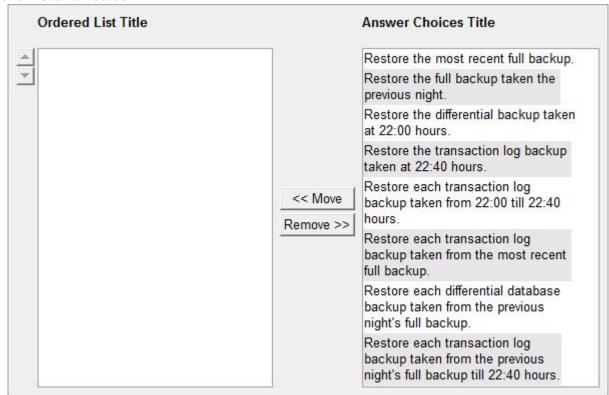
You perform a database restore at 23:30 hours to recover the dropped table.

You need to restore the database by using the minimum amount of administrative effort.

You also need to ensure minimal data loss.

Which three actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

## **Build List and Reorder:**



# **Correct Answer:**

Restore the full backup taken the previous night. Restore the differential backup taken at 22:00 hours.

Restore each transaction log backup taken from 22:00 till 22:40 hours.

Section: Exam D Explanation

## **Explanation/Reference:**

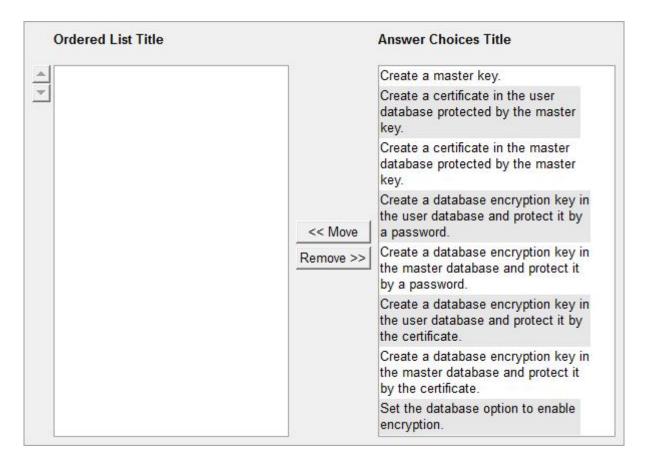
# **QUESTION 15**

You administer a Microsoft SQL Server 2012 instance that contains a database of confidential data.

You need to encrypt the database files at the page level.

You also need to encrypt the transaction log files.

Which four actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)



Create a master key.

Create a certificate in the master database protected by the master key.

Create a database encryption key in the user database and protect it by the certificate.

Set the database option to enable encryption.

Section: Exam D Explanation

# Explanation/Reference:

Reference: http://msdn.microsoft.com/en-us/library/bb510663.aspx Reference: http://msdn.microsoft.com/en-us/library/bb934049.aspx

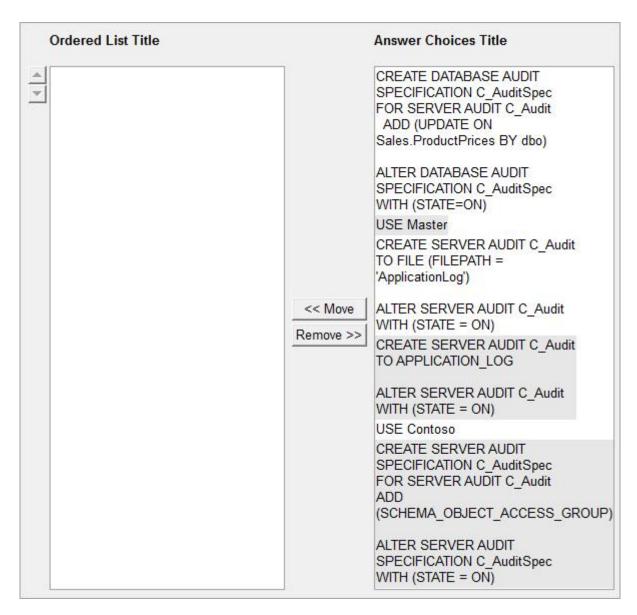
# **QUESTION 16**

You administer a Microsoft SQL Server 2012 server that has a database named Contoso.

The Contoso database has a table named ProductPrices in a schema named Sales.

You need to create a script that writes audit events into the application log whenever data in the ProductPrices table is updated.

Which four Transact-SQL statements should you use? (To answer, move the appropriate statements from the list of statements to the answer area and arrange them in the correct order.)



CREATE SERVER AUDIT C\_Audit
TO APPLICATION\_LOG

ALTER SERVER AUDIT C\_Audit
WITH (STATE = ON)
USE Contoso
CREATE DATABASE AUDIT SPECIFICATION
C\_AuditSpec
FOR SERVER AUDIT C\_Audit
ADD (UPDATE ON Sales ProductPrices BY dbo)

ALTER DATABASE AUDIT SPECIFICATION

C\_AuditSpec WITH (STATE=ON)

USE Master

Section: Exam D Explanation

### **Explanation/Reference:**

Reference: http://msdn.microsoft.com/en-us/library/cc280386.aspx

Reference: http://msdn.microsoft.com/en-us/library/cc280448.aspx Reference: http://msdn.microsoft.com/en-us/library/cc280404.aspx

#### **QUESTION 17**

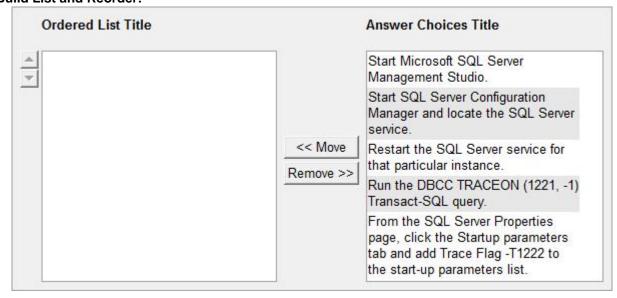
You administer a Microsoft SQL Server 2012 database.

Your database is experiencing deadlock issues.

You need to be able to monitor deadlocks.

Which three actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

#### **Build List and Reorder:**



## **Correct Answer:**

Start SQL Server Configuration Manager and locate the SQL Server service.
From the SQL Server Properties page, click the Startup parameters tab and add Trace Flag -T1222 to the start-up parameters list.
Restart the SQL Server service for that particular instance.

Section: Exam D Explanation

# **Explanation/Reference:**

## **QUESTION 18**

You administer a Microsoft SQL Server database.

Service accounts for SQL Agent are configured to use a local user.

A Microsoft SQL Server Integration Services (SSIS) job step has been created within a SQL Server Agent job.

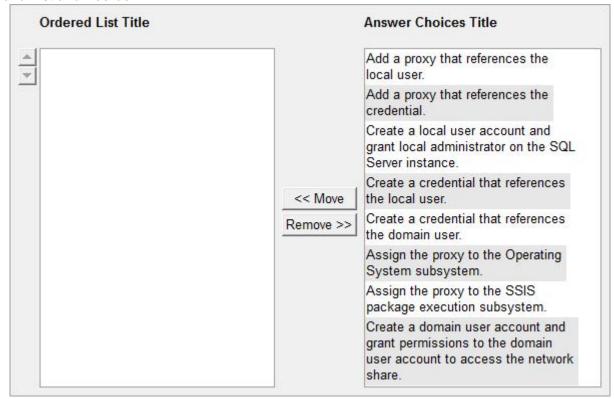
The SSIS package accesses a network share when exporting data from a SQL Server database.

When you execute the SQL Server Agent job, it fails due to a permissions failure on a share on a remote server.

You need to ensure that the SQL Server Agent job can execute the SSIS package.

Which four actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

#### **Build List and Reorder:**



# **Correct Answer:**

Create a domain user account and grant permissions to the domain user account to access the network share.

Create a credential that references the domain user.

Add a proxy that references the credential.

Assign the proxy to the SSIS package execution subsystem.

Section: Exam D Explanation

### **Explanation/Reference:**

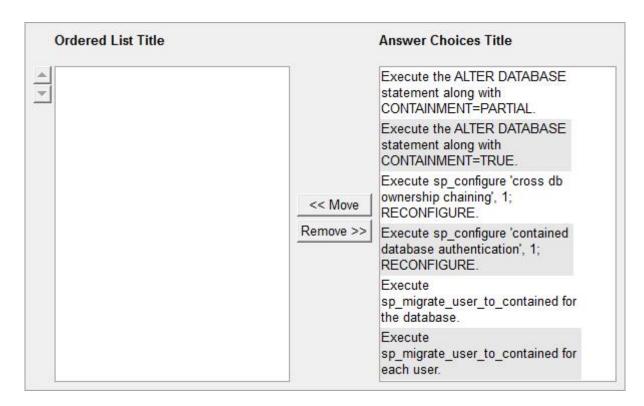
## **QUESTION 19**

You administer a Microsoft SQL Server 2012 database.

You need to convert the database to a contained database.

You also need to ensure that all users are converted to contained users.

Which three actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)



Execute sp\_configure 'contained database authentication', 1; RECONFIGURE.

Execute the ALTER DATABASE statement along with CONTAINMENT=PARTIAL.

Execute sp\_migrate\_user\_to\_contained for each user.

Section: Exam D Explanation

## **Explanation/Reference:**

Reference: http://msdn.microsoft.com/en-us/library/ff929071.aspx

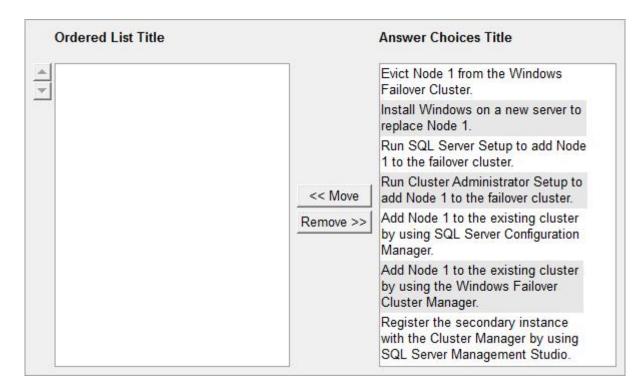
# **QUESTION 20**

You administer a Microsoft SQL Server 2012 clustered instance that has two nodes named Node 1 and Node 2.

Node 1 fails and the cluster fails over to Node 2.

You need to replace Node 1 and add it to the cluster.

Which four actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)



Evict Node 1 from the Windows Failover
Cluster.
Install Windows on a new server to replace
Node 1.
Add Node 1 to the existing cluster by using the
Windows Failover Cluster Manager.
Run SQL Server Setup to add Node 1 to the
failover cluster.

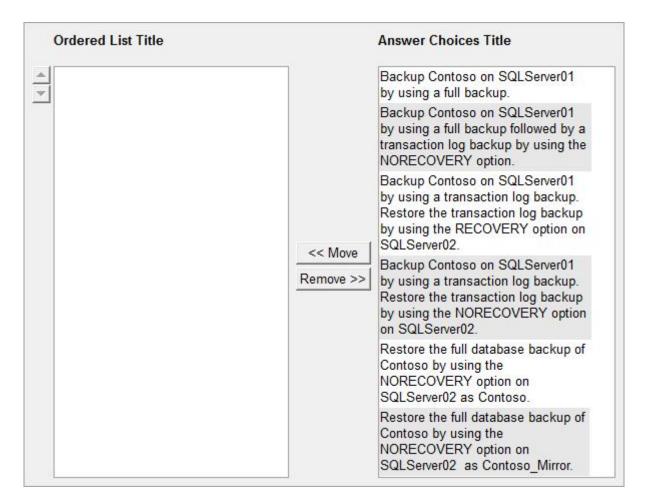
Section: Exam D Explanation

## **Explanation/Reference:**

Reference: http://technet.microsoft.com/en-us/library/ms181075.aspx

### **QUESTION 21**

You are a database administrator of a Microsoft SQL Server 2012 environment. The environment contains two servers named SQLServer01 and SQLServer02. The database Contoso exists on SQLServer01. You plan to mirror the Contoso database between SQLServer01 and SQLServer02 by using database mirroring. You need to prepare the Contoso database for database mirroring. Which three actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)



Backup Contoso on SQLServer01 by using a full backup.

Restore the full database backup of Contoso by using the NORECOVERY option on SQLServer02 as Contoso.

Backup Contoso on SQLServer01 by using a transaction log backup. Restore the transaction log backup by using the NORECOVERY option on SQLServer02.

Section: Exam D Explanation

# **Explanation/Reference:**

According to these references, this answer looks correct.

## References:

http://msdn.microsoft.com/en-us/library/ms190941.aspx http://msdn.microsoft.com/en-us/library/ms189852.aspx

## **QUESTION 22**

**HOTSPOT** 

You administer a Microsoft SQL Server 2012 database. The database contains a table that has the following definition:

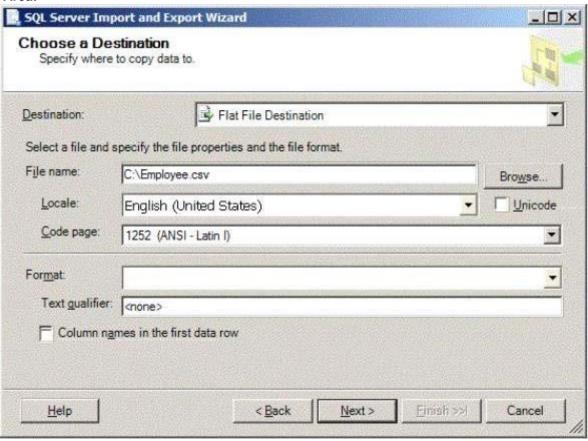
```
CREATE TABLE [Sales].[Customer](
  [CustomerID] int NOT NULL,
  [CustomerName] nvarchar(50) NOT NULL,
  [TerritoryID] int NULL,
  [LastContactDate] datetimeoffset NULL,
  [CustomerType] nchar(1) NOT NULL,
  [Notes] varchar(250) NULL
)
```

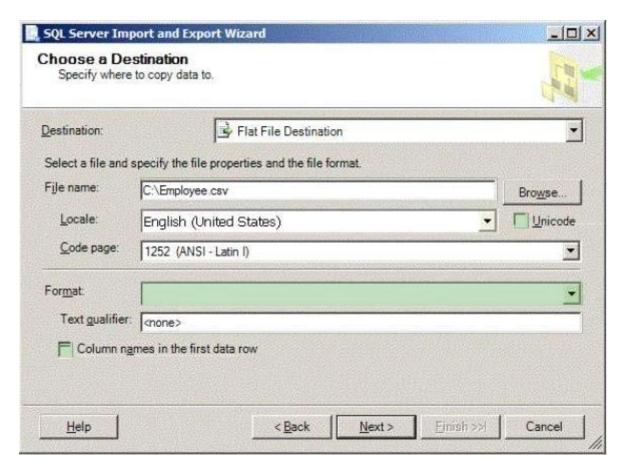
You want to export data from the table to a flat file by using the SQL Server Import and Export Wizard. You need to ensure that the following requirements are met:

- The first row of the file contains the first row of data.
- Each record is of the same length.
- The date follows the U.S. date format.
- The file supports international characters.

What should you do? (To answer, simply select the option or options in the answer area that you would configure.)

## **Hot Area:**





Section: Exam D Explanation

# **Explanation/Reference:**

Verified answer as correct.

## References:

http://msdn.microsoft.com/en-us/library/ms178804.aspx http://msdn.microsoft.com/en-us/library/ms187828.aspx

#### Exam E

#### **QUESTION 1**

You administer a Microsoft SQL Server 2012 instance that contains a financial database hosted on a storage area network (SAN).

The financial database has the following characteristics:

- A data file of 2 terabytes is located on a dedicated LUN (drive D).
- A transaction log of 10 GB is located on a dedicated LUN (drive E).
- Drive D has 1 terabyte of free disk space.
- Drive E has 5 GB of free disk space.

The database is continually modified by users during business hours from Monday through Friday between 09:00 hours and 17:00 hours.

Five percent of the existing data is modified each day.

The Finance department loads large CSV files into a number of tables each business day at 11:15 hours and 15:15 hours by using the BCP or BULK INSERT commands.

Each data load adds 3 GB of data to the database.

These data load operations must occur in the minimum amount of time.

A full database backup is performed every Sunday at 10:00 hours.

Backup operations will be performed every two hours (11:00, 13:00, 15:00, and 17:00) during business hours.

You need to ensure that your backup will continue if any invalid checksum is encountered.

Which backup option should you use?

- A. STANDBY
- B. Differential
- C. FULL
- D. CHECKSUM
- E. BULK\_LOGGED
- F. CONTINUE\_AFTER\_ERROR
- G. SIMPLE
- H. DBO\_ONLY
- I. COPY\_ONLY
- J. SKIP
- K. RESTART
- L. Transaction log
- M. NO CHECKSUM
- N. NORECOVERY

Correct Answer: F Section: Exam E Explanation

## **Explanation/Reference:**

Verified answer as correct.

Reference: http://msdn.microsoft.com/en-us/library/ms186865.aspx

Reference: http://msdn.microsoft.com/en-us/library/microsoft.sqlserver.management.smo.

backuprestorebase.continueaftererror.aspx

### **QUESTION 2**

You administer a Microsoft SQL Server 2012 instance that contains a financial database hosted on a

storage area network (SAN).

The financial database has the following characteristics:

- A data file of 2 terabytes is located on a dedicated LUN (drive D).
- A transaction log of 10 GB is located on a dedicated LUN (drive E).
- Drive D has 1 terabyte of free disk space.
- Drive E has 5 GB of free disk space.

The database is continually modified by users during business hours from Monday through Friday between 09:00 hours and 17:00 hours.

Five percent of the existing data is modified each day.

The Finance department loads large CSV files into a number of tables each business day at 11:15 hours and 15:15 hours by using the BCP or BULK INSERT commands.

Each data load adds 3 GB of data to the database.

These data load operations must occur in the minimum amount of time.

A full database backup is performed every Sunday at 10:00 hours.

Backup operations will be performed every two hours (11:00, 13:00, 15:00, and 17:00) during business hours.

On Wednesday at 10:00 hours, the development team requests you to refresh the database on a development server by using the most recent version.

You need to perform a full database backup that will be restored on the development server.

Which backup option should you use?

- A. NORECOVERY
- B. FULL
- C. NO\_CHECKSUM
- D. CHECKSUM
- E. Differential
- F. 8ULK\_LOGGED
- G. STANDBY
- H. RESTART
- I. SKIP
- J. Transaction log
- K. DBO ONLY
- L. COPY ONLY
- M. SIMPLE
- N. CONTINUE AFTER ERROR

Correct Answer: J Section: Exam E Explanation

## **Explanation/Reference:**

Verified answer as correct.

Reference: http://msdn.microsoft.com/en-us/library/ms191495.aspx Reference: http://msdn.microsoft.com/en-us/library/ms186858.aspx

#### **QUESTION 3**

You administer a Microsoft SQL Server 2012 instance that contains a financial database hosted on a storage area network (SAN).

The financial database has the following characteristics:

- A data file of 2 terabytes is located on a dedicated LUN (drive D).
- A transaction log of 10 GB is located on a dedicated LUN (drive E).
- Drive D has 1 terabyte of free disk space.
- Drive E has 5 GB of free disk space.

The database is continually modified by users during business hours from Monday through Friday between 09:00 hours and 17:00 hours.

Five percent of the existing data is modified each day.

The Finance department loads large CSV files into a number of tables each business day at 11:15 hours and 15:15 hours by using the BCP or BULK INSERT commands.

Each data load adds 3 GB of data to the database.

These data load operations must occur in the minimum amount of time.

A full database backup is performed every Sunday at 10:00 hours.

Backup operations will be performed every two hours (11:00, 13:00, 15:00, and 17:00) during business hours.

You need to ensure that the minimum amount of data is lost.

Which recovery model should the database use?

- A. FULL
- B. DBO ONLY
- C. CONTINUE\_AFTER\_ERROR
- D. CHECKSUM
- E. NO\_CHECKSUM
- F. SIMPLE
- G. Transaction log
- H. SKIP
- I. RESTART
- J. COPY ONLY
- K. NORECOVERY
- L. BULK\_LOGGED
- M. Differential
- N. STANDBY

Correct Answer: L Section: Exam E Explanation

# **Explanation/Reference:**

I'd still prefer bulk logged

Reference: http://msdn.microsoft.com/en-us/library/ms189275.aspx

# **QUESTION 4**

You administer a Microsoft SQL Server 2012 instance that contains a financial database hosted on a storage area network (SAN).

The financial database has the following characteristics:

- A data file of 2 terabytes is located on a dedicated LUN (drive D).
- A transaction log of 10 GB is located on a dedicated LUN (drive E).
- Drive D has 1 terabyte of free disk space.
- Drive E has 5 GB of free disk space.

The database is continually modified by users during business hours from Monday through Friday between 09:00 hours and 17:00 hours.

Five percent of the existing data is modified each day.

The Finance department loads large CSV files into a number of tables each business day at 11:15 hours and 15:15 hours by using the BCP or BULK INSERT commands.

Each data load adds 3 GB of data to the database.

These data load operations must occur in the minimum amount of time.

A full database backup is performed every Sunday at 10:00 hours. Backup operations will be performed every two hours (11:00, 13:00, 15:00, and 17:00) during business hours.

You need to ensure that the backup size is as small as possible.

Which backup should you perform every two hours?

- A. BULK\_LOGGED
- B. NO CHECKSUM
- C. FULL
- D. RESTART
- E. CHECKSUM
- F. STANDBY
- G. DBO.ONLY
- H. NORECOVERY
- I. SIMPLE
- J. Transaction log
- K. Differential
- L. CONTINUE\_AFTER\_ERROR
- M. COPY\_ONLY
- N. SKIP

Correct Answer: J Section: Exam E Explanation

# **Explanation/Reference:**

Verified answer as correct.

Reference: http://msdn.microsoft.com/en-us/library/ms186865.aspx Reference: http://msdn.microsoft.com/en-us/library/ms191429.aspx Reference: http://msdn.microsoft.com/en-us/library/ms179478.aspx

## Exam F

#### **QUESTION 1**

You administer a Microsoft SQL Server 2012 database named Contoso on a server named Server01.

You need to write messages to the Application Log when users are added to or removed from a fixed server role in Server01.

What should you create?

- A. a Database Audit Specification
- B. a Policy
- C. an Alert
- D. a SQL Profiler Trace
- E. a Resource Pool
- F. an Extended Event session
- G. a Server Audit Specification

Correct Answer: G Section: Exam F Explanation

# **Explanation/Reference:**

# **QUESTION 2**

You administer a Microsoft SQL Server 2012 database named Contoso on a server named Server01.

You need to be notified immediately when fatal errors occur on Server01.

What should you create?

- A. an Alert
- B. a Server Audit Specification
- C. an Extended Event session
- D. a Resource Pool
- E. a Policy
- F. a SQL Profiler Trace
- G. a Database Audit Specification

Correct Answer: A Section: Exam F Explanation

# **Explanation/Reference:**

## **QUESTION 3**

You administer a Microsoft SQL Server 2012 database named Contoso on a server named Server01.

You need to diagnose deadlocks that happen when executing a specific set of stored procedures by recording events and playing them back on a different test server.

What should you create?

- A. an Extended Event session
- B. a Policy
- C. a Database Audit Specification
- D. an Alert

- E. a Server Audit Specification
- F. a SQL Profiler Trace
- G. a Resource Pool

Correct Answer: F Section: Exam F Explanation

# **Explanation/Reference:**

# **QUESTION 4**

You administer a Microsoft SQL Server 2012 database named Contoso on a server named Server01.

You need to prevent users from disabling server audits in Server01.

What should you create?

- A. an Alert
- B. a Resource Pool
- C. an Extended Event session
- D. a Database Audit Specification
- E. a SQL Profiler Trace
- F. a Server Audit Specification
- G. a Policy

Correct Answer: G Section: Exam F Explanation

Explanation/Reference:

#### Exam G

#### **QUESTION 1**

You administer a SQL Server 2012 server that contains a database named SalesDb.

SalesDb contains a schema named Customers that has a table named Regions.

A user named UserA is a member of a role named Sales.

UserA is granted the Select permission on the Regions table.

The Sales role is granted the Select permission on the Customers schema.

You need to ensure that the Sales role, including UserA, is disallowed to select from any of the tables in the Customers schema.

Which Transact-SQL statement should you use?

```
A. REVOKE SELECT ON Schema::Customers FROM UserA
B. DENY SELECT ON Object::Regions FROM UserA
C. EXEC sp_addrolemember 'Sales', 'UserA'
D. DENY SELECT ON Object::Regions FROM Sales
E. REVOKE SELECT ON Object::Regions FROM UserA
F. DENY SELECT ON Schema::Customers FROM Sales
G. DENY SELECT ON Schema::Customers FROM UserA
H. EXEC sp_droprolemember 'Sales', 'UserA'
I. REVOKE SELECT ON Object::Regions FROM Sales
J. REVOKE SELECT ON Schema::Customers FROM Sales
```

Correct Answer: F Section: Exam G Explanation

# **Explanation/Reference:**

References:

http://msdn.microsoft.com/en-us/library/ms188369.aspx http://msdn.microsoft.com/en-us/library/ms187750.aspx http://msdn.microsoft.com/en-us/library/ff848791.aspx

## **QUESTION 2**

You administer a SQL Server 2012 server that contains a database named SalesDb.

SalesDb contains a schema named Customers that has a table named Regions.

A user named UserA is a member of a role named Sales.

UserA is granted the Select permission on the Regions table.

The Sales role is granted the Select permission on the Customers schema.

You need to ensure that UserA is disallowed to select from any of the tables in the Customers schema.

Which Transact-SQL statement should you use?

```
A. DENY SELECT ON Object::Regions FROM UserA
B. DENY SELECT ON Object::Regions FROM Sales
C. REVOKE SELECT ON Schema::Customers FROM Sales
D. REVOKE SELECT ON Schema::Customers FROM UserA
E. REVOKE SELECT ON Object::Regions FROM Sales
F. REVOKE SELECT ON Object::Regions FROM UserA
```

```
    G. DENY SELECT ON Schema::Customers FROM Sales
    H. DENY SELECT ON Schema::Customers FROM UserA
    I. EXEC sp_addrolemember 'Sales', 'UserA'
    J. EXEC sp droprolemember 'Sales', 'UserA'
```

Correct Answer: H Section: Exam G Explanation

## **Explanation/Reference:**

http://msdn.microsoft.com/en-us/library/ms188369.aspx http://msdn.microsoft.com/en-us/library/ms187750.aspx http://msdn.microsoft.com/en-us/library/ff848791.aspx

## **QUESTION 3**

You administer a SQL 2012 server that contains a database named SalesDb.

SalesDb contains a schema named Customers that has a table named Regions.

A user named UserA is a member of a role named Sales.

UserA is granted the Select permission on the Regions table.

The Sales role is granted the Select permission on the Customers schema.

You need to remove the Select permission for UserA on the Regions table.

You also need to ensure that UserA can still access all the tables in the Customers schema, including the Regions table, through the Sales role permissions.

Which Transact-SQL statement should you use?

- A. DENY SELECT ON Object::Regions FROM UserA
  B. DENY SELECT ON Schema::Customers FROM UserA
- C. EXEC sp\_addrolemember 'Sales', 'UserA'
- D. REVOKE SELECT ON Object::Regions FROM UserA
- E. REVOKE SELECT ON Object::Regions FROM Sales
- F. EXEC sp\_droproiemember 'Sales', 'UserA'
- G. REVOKE SELECT ON Schema::Customers FROM UserA
- H. DENY SELECT ON Object::Regions FROM Sales
- | DENY SELECT ON Schema::Customers FROM Sales
- J. REVOKE SELECT ON Schema::Customers FROM Sales

Correct Answer: D Section: Exam G Explanation

### **Explanation/Reference:**

http://msdn.microsoft.com/en-us/library/ms188369.aspx http://msdn.microsoft.com/en-us/library/ms187750.aspx http://msdn.microsoft.com/en-us/library/ff848791.aspx

# **QUESTION 4**

You administer a SQL Server 2012 server that contains a database named SalesDb.

SalesDb contains a schema named Customers that has a table named Regions.

A user named UserA is a member of a role named Sales.

UserA is granted the Select permission on the Regions table and the Sales role is granted the Select permission on the Customers schema.

You need to ensure that the Sales role, including UserA, is disallowed to select from the Regions table.

Which Transact-SQL statement should you use?

- A. REVOKE SELECT ON Schema::Customers FROM UserA
- B. REVOKE SELECT ON Object::Regions FROM UserA
- C. EXEC sp\_addrolemember 'Sales', 'UserA'
- D. DENY SELECT ON Schema::Customers FROM Sales
- E. EXEC sp\_droprolemember 'Sales', 'UserA'
- F. REVOKE SELECT ON Schema::Customers FROM Sales
- G. DENY SELECT ON Object::Regions FROM UserA
- H. REVOKE SELECT ON Object::Regions FROM Sales
- | DENY SELECT ON Schema::Customers FROM UserA
- J. DENY SELECT ON Object:: Regions FROM Sales

Correct Answer: J Section: Exam G Explanation

# **Explanation/Reference:**

http://msdn.microsoft.com/en-us/library/ms188369.aspx http://msdn.microsoft.com/en-us/library/ms187750.aspx http://msdn.microsoft.com/en-us/library/ff848791.aspx

#### Exam H

#### **QUESTION 1**

You administer all the deployments of Microsoft SQL Server 2012 in your company.

You need to ensure that an OLTP database that includes up-to-the-minute reporting requirements can be off-loaded from the primary database to another server.

You also Need to be able to add indexes to the secondary database.

Which configuration should you use?

- A. Two servers configured in different data centers
  - SQL Server Availability Group configured in Synchronous-Commit Availability Mode
  - One server configured as an Active Secondary
- B. Two servers configured in the same data center
  - SQL Server Availability Group configured in Asynchronous-Commit Availability Mode
  - One server configured as an Active Secondary
- C. Two servers configured in the same data center
  - A primary server configured to perform log-shipping every 10 minutes
  - A backup server configured as a warm standby
- D. Two servers configured in different data centers
  - SQL Server Availability Group configured in Asynchronous-Commit Availability Mode
- E. Two servers configured on the same subnet
  - SQL Server Availability Group configured in Synchronous-Commit Availability Mode
- F. SQL Server that includes an application database configured to perform transactional replication
- G. SQL Server that includes an application database configured to perform snapshot replication
- H. Two servers configured in a Windows Failover Cluster in the same data center
  - SQL Server configured as a clustered instance

Correct Answer: F Section: Exam H Explanation

## **Explanation/Reference:**

I'm not answering as I dont have any idea (original is F)

## **QUESTION 2**

You administer all the deployments of Microsoft SQL Server 2012 in your company.

You need to ensure that data changes are sent to a non-SQL Server database server in near real time.

You also need to ensure that data on the primary server is unaffected.

Which configuration should you use?

A. • SQL Server that includes an application database configured to perform

#### transactional replication

- B. Two servers configured in different data centers
  - SQL Server Availability Group configured in Asynchronous-Commit Availability Mode
- C. Two servers configured in different data centers
  - SQL Server Availability Group configured in Synchronous-Commit Availability Mode
  - One server configured as an Active Secondary
- D. SQL Server that includes an application database configured to perform snapshot replication
- E. Two servers configured in the same data center
  - SQL Server Availability Group configured in Asynchronous-Commit Availability Mode
  - One server configured as an Active Secondary
- F. Two servers configured on the same subnet
  - SQL Server Availability Group configured in Synchronous-Commit Availability Mode
- G. Two servers configured in a Windows Failover Cluster in the same data center
  - SQL Server configured as a clustered instance
- H. Two servers configured in the same data center
  - A primary server configured to perform log-shipping every 10 minutes
  - A backup server configured as a warm standby

Correct Answer: A Section: Exam H Explanation

#### **Explanation/Reference:**

Original Answer is A and I'll agree as it's the only one using Transactional Replication.

Must be to do with "You need to ensure that data changes are sent to a **non-SQL Server** database server in

near real time. "

# **QUESTION 3**

You administer all the deployments of Microsoft SQL Server 2012 in your company.

A database contains a large product catalog that is updated periodically.

You need to be able to send the entire product catalog to all branch offices on a monthly basis.

Which configuration should you use?

- A. Two servers configured in the same data center
  - A primary server configured to perform log-shipping every 10 minutes
  - A backup server configured as a warm standby
- B. SQL Server that includes an application database configured to perform transactional replication
- C. Two servers configured in the same data center
  - SQL Server Availability Group configured in Asynchronous-Commit Availability Mode

- One server configured as an Active Secondary
- D. Two servers configured in a Windows Failover Cluster in the same data center
  - SQL Server configured as a clustered instance
- E. SQL Server that includes an application database configured to perform snapshot replication
- F. Two servers configured in different data centers
  - SQL Server Availability Group configured in Synchronous-Commit Availability Mode
  - One server configured as an Active Secondary
- G. Two servers configured on the same subnet
  - SQL Server Availability Group configured in Synchronous-Commit Availability Mode
- H. Two servers configured in different data centers
  - SQL Server Availability Group configured in Asynchronous-Commit Availability Mode

Correct Answer: E Section: Exam H Explanation

# **Explanation/Reference:**

I think that i'll stick with "E" as that was the original answer and "You need to be able to send the **entire product catalog to all branch offices on a monthly basis.** " definatly sounds like it wants snapshot

#### **QUESTION 4**

You administer all the deployments of Microsoft SQL Server 2012 in your company.

You need to ensure that an OLTP database that uses a storage area network (SAN) remains available if any of the servers fail.

You also need to minimize the amount of storage used by the database.

Which configuration should you use?

- A. Two servers configured in different data centers
  - SQL Server Availability Group configured in Synchronous-Commit Availability Mode
  - One server configured as an Active Secondary
- B. SQL Server that includes an application database configured to perform transactional replication
- C. Two servers configured in the same data center
  - SQL Server Availability Group configured in Asynchronous-Commit Availability Mode
  - One server configured as an Active Secondary
- D. Two servers configured in different data centers
  - SQL Server Availability Group configured in Asynchronous-Commit Availability Mode
- E. Two servers configured in the same data center
  - A primary server configured to perform log-shipping every 10 minutes
  - A backup server configured as a warm standby

- F. Two servers configured on the same subnet
  - SQL Server Availability Group configured in Synchronous-Commit Availability Mode
- G. SQL Server that includes an application database configured to perform snapshot replication
- H. Two servers configured in a Windows Failover Cluster in the same data center
  - SQL Server configured as a clustered instance

Correct Answer: H Section: Exam H Explanation

# **Explanation/Reference:**

I'll stick with "H" as that seems the logical choice.