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Microsoft

70-462 PRACTICE EXAM

Microsoft Administering Microsoft SQL Server 2012 Databases Exam

Product Questions: 272

Version: 16.0

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 centersSQL Server Availability Group configured in Synchronous-Commit Availability ModeOne server configured as an Active Secondary
- B. Two servers configured in the same data centerSQL Server Availability Group configured in Asynchronous-Commit Availability ModeOne server configured as an Active Secondary
- C. Two servers configured in the same data centerA primary server configured to perform log-shipping every 10 minutesA backup server configured as a warm standby
- D. Two servers configured in different data centersSQL Server Availability Group configured in Asynchronous-Commit Availability Mode
- E. Two servers configured on the same subnetSQL 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 centerSQL Server configured as a clustered instance

Answer: 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 centersSQL Server Availability Group configured in Asynchronous-Commit Availability Mode
- C. Two servers configured in different data centersSQL Server Availability Group configured in Synchronous-Commit Availability ModeOne 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 centerSQL Server Availability Group configured in Asynchronous-Commit Availability ModeOne server configured as an Active Secondary
- F. Two servers configured on the same subnetSQL Server Availability Group configured in Synchronous-Commit Availability Mode
- G. Two servers configured in a Windows Failover Cluster in the same data centerSQL Server configured as a clustered instance

- H. Two servers configured in the same data centerA primary server configured to perform log-shipping every 10 minutesA backup server configured as a warm standby

Answer: A

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 centerA primary server configured to perform log-shipping every 10 minutesA 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 centerSQL Server Availability Group configured in Asynchronous-Commit Availability ModeOne server configured as an Active Secondary
- D. Two servers configured in a Windows Failover Cluster in the same data centerSQL 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 centersSQL Server Availability Group configured in Synchronous-Commit Availability ModeOne server configured as an Active Secondary
- G. Two servers configured on the same subnetSQL Server Availability Group configured in Synchronous-Commit Availability Mode
- H. Two servers configured in different data centersSQL Server Availability Group configured in Asynchronous-Commit Availability Mode

Answer: E

Question: 4

Note: This question is part of a series of questions that use the same set of answer choices. An answer choice may be correct for more than one question in the series.

You administer all the deployments of Microsoft SQL Server 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 centersSQL Server Availability Group configured in Synchronous-Commit Availability ModeOne 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 centerSQL Server Availability Group configured in Asynchronous-Commit Availability ModeOne server configured as an Active Secondary
- D. Two servers configured in different data centersSQL Server Availability Group configured in Asynchronous-Commit Availability Mode
- E. Two servers configured in the same data centerA primary server configured to perform log-shipping every 10 minutesA backup server configured as a warm standby
- F. Two servers configured on the same subnetSQL 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 centerSQL Server configured as a clustered instance

Answer: H

Question: 5

Note: This question is part of a series of questions that use the same set of answers choices. An answer choice may be correct for more than one question in the series.

You administer a Microsoft SQL Server 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	<p>Recovery model:</p> <ul style="list-style-type: none"> Full <p>Backup schedule:</p> <ul style="list-style-type: none"> 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	<p>Recovery model:</p> <ul style="list-style-type: none"> Simple <p>Backup schedule:</p> <ul style="list-style-type: none"> Full database backup: 01:00 hours daily Differential database backup: 13:00 hours daily <p>Data updates:</p> <ul style="list-style-type: none"> 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

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.
- C. Restore the latest full backup.
- D. 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.
- E. Restore the latest full backup. Then, restore the latest differential backup.
- 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 page restore.
- H. Perform a partial restore.

Answer: C

Question: 6

Note: This question is part of a series of questions that use the same set of answers choices. An answer choice may be correct for more than one question in the series.

You administer a Microsoft SQL Server 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	<p>Recovery model:</p> <ul style="list-style-type: none"> • Full <p>Backup schedule:</p> <ul style="list-style-type: none"> • 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	<p>Recovery model:</p> <ul style="list-style-type: none"> • Simple <p>Backup schedule:</p> <ul style="list-style-type: none"> • Full database backup: 01:00 hours daily • Differential database backup: 13:00 hours daily <p>Data updates:</p> <ul style="list-style-type: none"> • 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 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.

Answer: H

Explanation:

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: 7

Note: This question is part of a series of questions that use the same set of answers choices. An answer choice may be correct for more than one question in the series.

You administer a Microsoft SQL Server 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	<p>Recovery model:</p> <ul style="list-style-type: none"> • Full <p>Backup schedule:</p> <ul style="list-style-type: none"> • 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	<p>Recovery model:</p> <ul style="list-style-type: none"> • Simple <p>Backup schedule:</p> <ul style="list-style-type: none"> • Full database backup: 01:00 hours daily • Differential database backup: 13:00 hours daily <p>Data updates:</p> <ul style="list-style-type: none"> • 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 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.

Answer: F

Explanation:

Requirements for Restoring Pages

A page restore is subject to the following requirements:

Bulk-logged Recovery Model and Page Restore

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

Question: 8

Note: This question is part of a series of questions that use the same set of answers choices. An answer choice may be correct for more than one question in the series.

You administer a Microsoft SQL Server 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	<p>Recovery model:</p> <ul style="list-style-type: none"> • Full <p>Backup schedule:</p> <ul style="list-style-type: none"> • 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	<p>Recovery model:</p> <ul style="list-style-type: none"> • Simple <p>Backup schedule:</p> <ul style="list-style-type: none"> • Full database backup: 01:00 hours daily • Differential database backup: 13:00 hours daily <p>Data updates:</p> <ul style="list-style-type: none"> • 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

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.

Answer: H

Question: 9

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.)

On ServerC, create an endpoint for use by the witness.

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

On ServerA, alter the principal database to use the endpoint on ServerC as the witness.

On ServerA, pause the mirroring session between ServerA and ServerB.

On ServerB, alter the principal database to use the endpoint on ServerC as the witness.

Ensure that the same Proxy exists on each server and grant Connect permissions to each server's endpoint.

On ServerA, resume the mirroring session between ServerA and ServerB.



Answer:

On ServerC, create an endpoint for use by the witness.

On ServerC, create an endpoint for use by the witness.

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

On ServerA, alter the principal database to use the endpoint on ServerC as the witness.

On ServerA, pause the mirroring session between ServerA and ServerB.

On ServerB, alter the principal database to use the endpoint on ServerC as the witness.

Ensure that the same Proxy exists on each server and grant Connect permissions to each server's endpoint.

On ServerA, resume the mirroring session between ServerA and ServerB.

Question: 10

You administer a Microsoft SQL Server database.

You create an availability group named haContosoDbs. Your primary replica is available at Server01\Contoso01.

You need to configure the availability group to prevent data loss. In the event of a database failure, the designated secondary database must come online automatically.

Which Transact-SQL statement should you use?

- A. ALTER AVAILABILITY GROUP haContosoDbsMODITY REPLICA ON 'Server01'\Contoso01'WITH (AVAILABILITY_MODE=ASYNCHRONOUS_COMMIT, FAILOVER_MODE=AUTOMATIC)
- B. ALTER AVAILABILITY GROUP haContosoDbsMODIFY REPLICA ON 'Server01'\Contoso01'WITH (AVAILABILITY_MODE=ASYNCHRONOUS_COMMIT, FAILOVER_MODE=MANUAL)
- C. ALTER AVAILABILITY GROUP haContosoDbsMODITY REPLICA ON 'Server01'\Contoso01'WITH (AVAILABILITY_MODE=SYNCHRONOUS_COMMIT, FAILOVER_MODE=AUTOMATIC)
- D. ALTER AVAILABILITY GROUP haContosoDbsMODIFY REPLICA ON 'Server01'\Contoso01'WITH (AVAILABILITY_MODE=SYNCHRONOUS_COMMIT, FAILOVER_MODE=MANUAL)

Answer: C

Question: 11

DRAG DROP

You administer several Microsoft SQL Server 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.)

a. Each replication method may be used once, more than once, or not at all.)

Replication Method	Scenario
Transactional Replication	Multiple databases on the same low-latency subnet must allow applications to write changes locally, and these changes must be replicated to all related databases.
Peer-to-Peer Replication	An order summary table is repopulated once a week. This table must be replicated to all databases.
Snapshot Replication	Field offices using unreliable connections keep a local copy of the product catalog and process orders locally. These orders must be periodically replicated to all other offices.
Merge Replication	Information in an order-tracking database must be replicated across a low-latency connection as changes occur to multiple reporting databases.

Answer:

Replication Method	Scenario	
	Multiple databases on the same low-latency subnet must allow applications to write changes locally, and these changes must be replicated to all related databases.	Peer-to-Peer Replication
	An order summary table is repopulated once a week. This table must be replicated to all databases.	Snapshot Replication
	Field offices using unreliable connections keep a local copy of the product catalog and process orders locally. These orders must be periodically replicated to all other offices.	Merge Replication
	Information in an order-tracking database must be replicated across a low-latency connection as changes occur to multiple reporting databases.	Transactional Replication

Question: 12

You administer several Microsoft SQL Server 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.

Answer: A

Explanation:

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: 13

DRAG DROP

You administer two Microsoft SQL Server 2012 servers named ServerA and ServerB. You use a database named AdventureWorks.

You need to prepare the AdventureWorks database for database mirroring. ServerB will act as the mirror in a mirroring partnership along with ServerA.

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.)

Back up AdventureWorks on ServerA by using a full backup.

Back up AdventureWorks on ServerA by using a full backup followed by a transaction log backup by using the **NORECOVERY** option.

Back up AdventureWorks on ServerA by using a transaction log backup. Restore the transaction log backup by using the **RECOVERY** option on ServerB.

Back up AdventureWorks on ServerA by using a transaction log backup. Restore the transaction log backup by using the **NORECOVERY** option on ServerB.

Restore the full database backup of AdventureWorks by using the **NORECOVERY** option on ServerB as AdventureWorks.

Restore the full database backup of AdventureWorks by using the **RECOVERY** option on ServerB as AdventureWorks_Mirror.



Answer:

Back up AdventureWorks on ServerA by using a full backup followed by a transaction log backup by using the **NORECOVERY** option.

Back up AdventureWorks on ServerA by using a transaction log backup. Restore the transaction log backup by using the **RECOVERY** option on ServerB.

Back up AdventureWorks on ServerA by using a full backup.

Restore the full database backup of AdventureWorks by using the **NORECOVERY** option on ServerB as AdventureWorks.

Back up AdventureWorks on ServerA by using a transaction log backup. Restore the transaction log backup by using the **NORECOVERY** option on ServerB.

Restore the full database backup of AdventureWorks by using the **RECOVERY** option on ServerB as AdventureWorks_Mirror.



Question: 14

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

Currently, Server01/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.

Answer: B

Question: 15

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 failed. A... 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.

Answer: D

Question: 16

DRAG DROP

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.)

- Perform a transaction log on SQL2005.
- Perform a full database on SQL2005.
- Perform a VSS backup on the database on SQL2005.
- Restore the VSS backup on SQL2012.
- Restore the database backup and transaction log backup on SQL2012.
- Change the compatibility level of the database to 120 on SQL2012.
- Change the compatibility level of the database to 110 on SQL2012.



Answer:

Perform a transaction log on SQL2005.	Perform a full database on SQL2005.
Perform a VSS backup on the database on SQL2005.	Restore the database backup and transaction log backup on SQL2012.
Restore the VSS backup on SQL2012.	Change the compatibility level of the database to 110 on SQL2012.
Change the compatibility level of the database to 120 on SQL2012.	

Question: 17

DRAG DROP

You administer three Microsoft SQL Server 2008 R2 instances.

Database mirroring is configured in High-Safety mode with Automatic Failover between the following three servers:
SQL1 is the Principal server.

SQL2 is the mirror server.

SQL3 is the witness server.

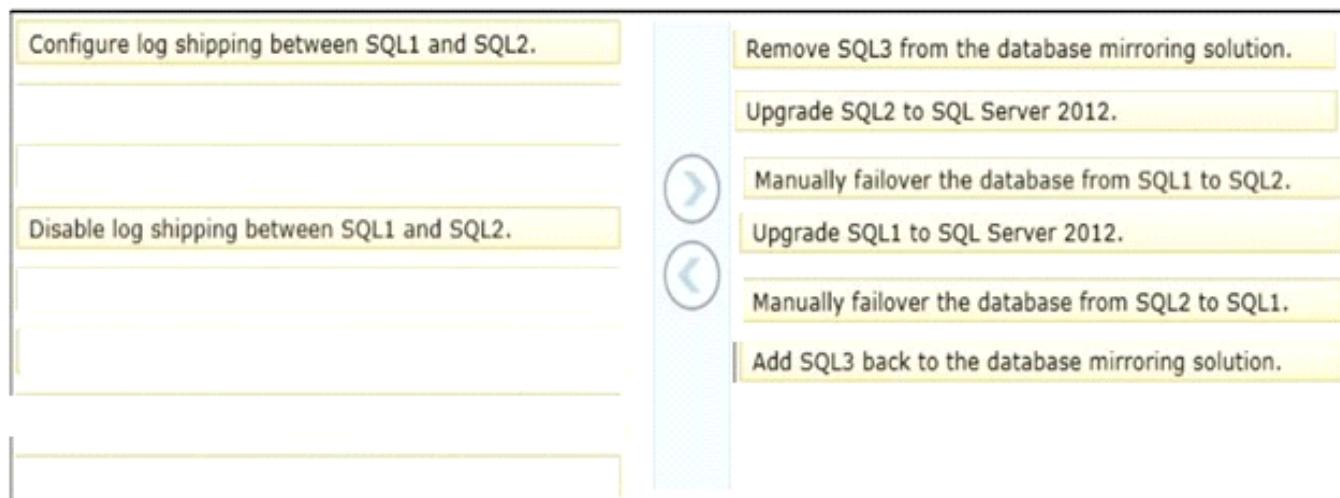
You need to upgrade SQL1 and SQL2 to SQL Server 2012. You need to ensure that downtime is minimized during the upgrade.

Which six 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.)

- Configure log shipping between SQL1 and SQL2.
- Upgrade SQL1 to SQL Server 2012.
- Upgrade SQL2 to SQL Server 2012.
- Disable log shipping between SQL1 and SQL2.
- Manually failover the database from SQL1 to SQL2.
- Manually failover the database from SQL2 to SQL1.
- Add SQL3 back to the database mirroring solution.
- Remove SQL3 from the database mirroring solution.



Answer:



Question: 18

You administer a Microsoft SQL Server 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.

Answer: B

Question: 19

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

Answer: C

Question: 20

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. Use the Master Data Services Configuration Manager to configure the application.
- D. Start the SQL Server Integration Services Service.

Answer: B

Question: 21

DRAG DROP

You administer a Microsoft SQL Server 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.)

```

WHERE
FILTER ON
SpecialOfferID IS NOT NULL;
ON dbo.OrderDetail (SalesOrderID)
ON dbo.OrderDetail (SalesOrderID) AS
FILTERED_INDEX
CREATE NONCLUSTERED INDEX FIndx_SpecialOfferID
CREATE NONCLUSTERED FILTERED INDEX
FIndx_SpecialOfferID

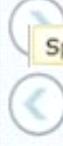
```

**Answer:**

```

FILTER ON
CREATE NONCLUSTERED INDEX FIndx_SpecialOfferID
ON dbo.OrderDetail (SalesOrderID)
WHERE
SpecialOfferID IS NOT NULL;
ON dbo.OrderDetail (SalesOrderID) AS
FILTERED_INDEX
CREATE NONCLUSTERED FILTERED INDEX
FIndx_SpecialOfferID

```



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: 22

HOTSPOT

You administer a Microsoft SQL Server 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:

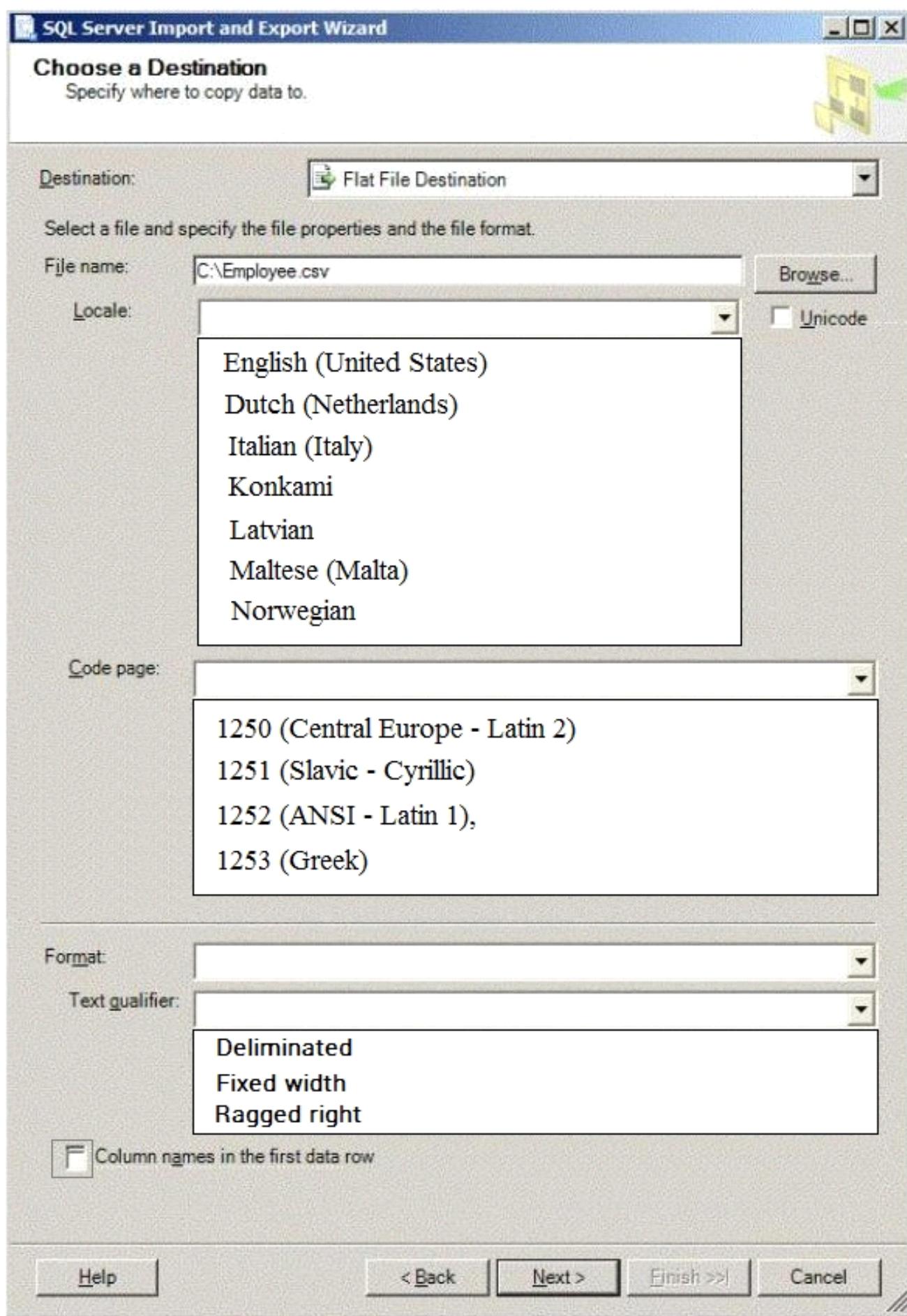
The first row of the file contains the first row of data.

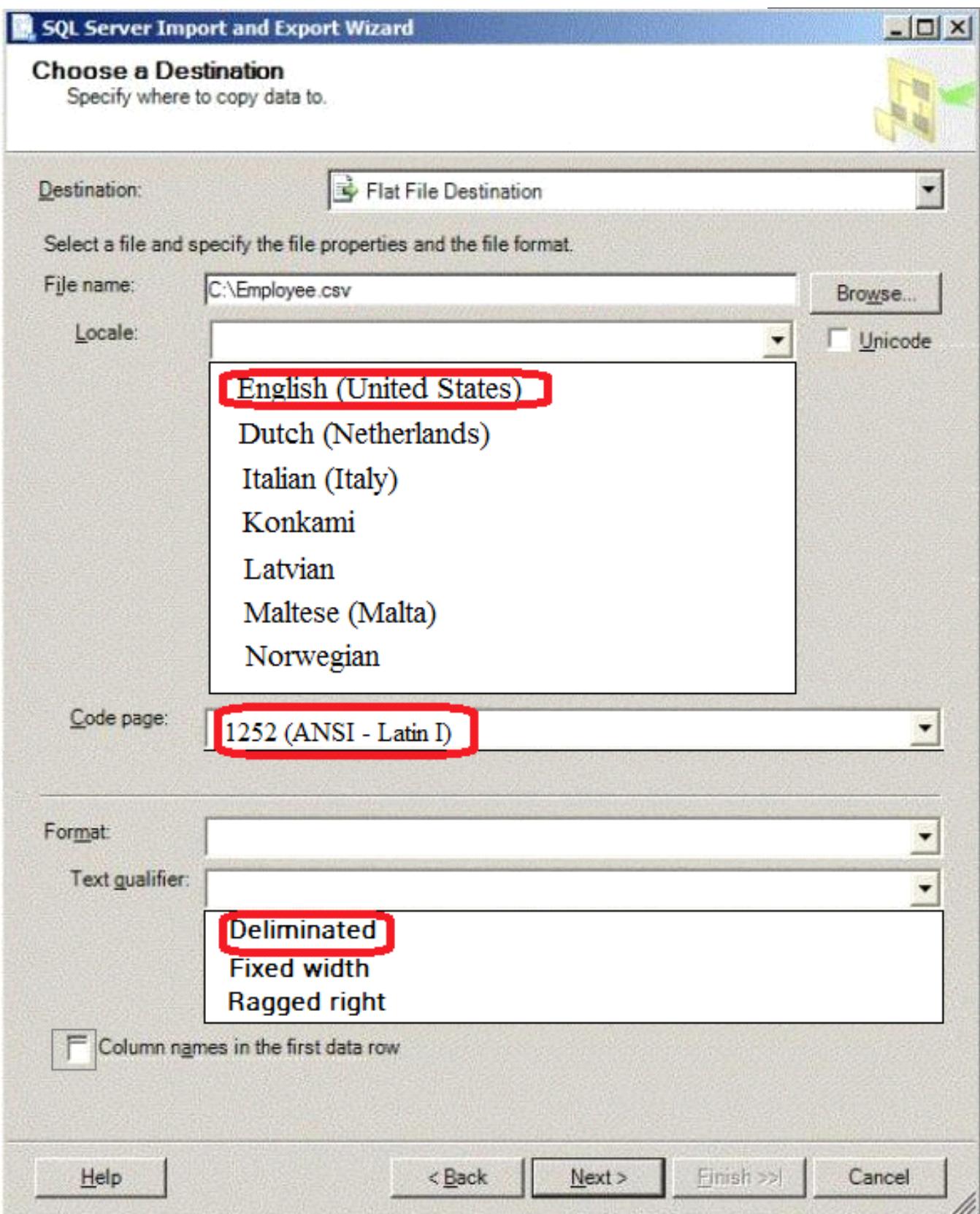
Each record is of the same length.

The date follows the U.S. date format.

The file supports international characters.

What should you do? (To answer, configure the appropriate option or options in the dialog box in the answer area.)



Answer:

References:

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

Question: 23

You administer a Microsoft SQL Server 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? Each correct answer presents part of the solution.

- 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

Answer: B

Explanation:

Execute permission on the Stored procedure is the minimal permission that is required. Select permission is not necessary.

References:

<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: 24

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' ASDELETE 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 ASDELETE FROM Purchases. Suppliers WHERE IsActive = 0 GO GRANT EXECUTE ON Purchases. PurgeInactiveSuppliers TO ContosoUser

Answer: D

Explanation:

References:

<http://msdn.microsoft.com/en-us/library/ms188354.aspx>

<http://msdn.microsoft.com/en-us/library/ms187926.aspx>

Question: 25

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

Answer: C

Question: 26

You administer a Microsoft SQL Server 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

- a. 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.

Answer: A

Question: 27

You are the lead database administrator (DBA) of a Microsoft SQL Server 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 three SQL statements should you use? Each correct answer presents part of the solution.

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

Answer: B,D,E

Question: 28

DRAG DROP

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."

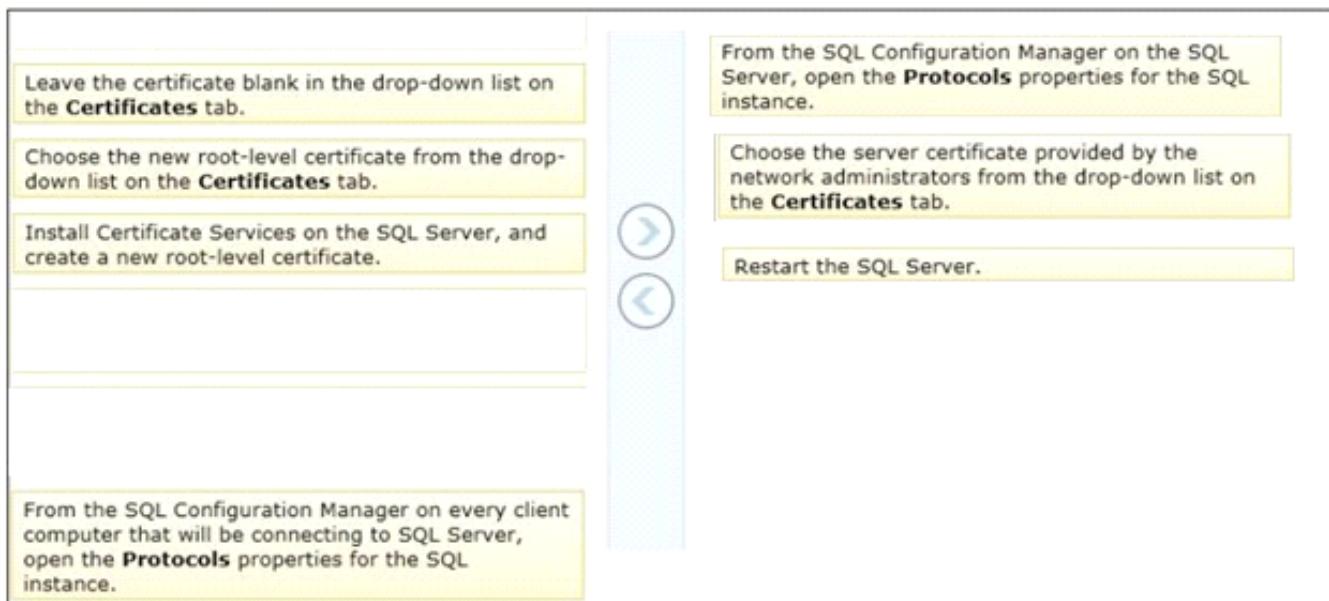
You need to configure SQL Server to encrypt all client traffic across the network.

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.)

Restart the SQL Server.	
Leave the certificate blank in the drop-down list on the Certificates tab.	
Choose the new root-level certificate from the drop-down list on the Certificates tab.	
Install Certificate Services on the SQL Server, and create a new root-level certificate.	
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.	
From the SQL Configuration Manager on every client computer that will be connecting to SQL Server, open the Protocols properties for the SQL instance.	

Answer:



Question: 29

You administer a Microsoft SQL Server 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.

Which two actions should you perform? Each correct answer presents part of the solution.

- A. Grant the VIEW SERVER STATE permission to User1.
- B. Move the stored procedure to the User1 schema.
- C. Modify the stored procedure to include the EXECUTE AS OWNER statement. Grant VIEW SERVER STATE permissions to the owner of the stored procedure.
- D. Grant the db_datareader role on the database to User1.
- E. Create a SQL Server login that has VIEW SERVER STATE permissions. Modify the stored procedure to include the EXECUTE AS (newlogin) statement.

Answer: C,E

Explanation:

References:

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

Question: 30

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 RCL\$ Isysadmin] ADD MEMBER [CorpNet\User1];
- C. ALTER USER [CorpNet\User1] WITH LOGIN [CorpNet\User1];
- D. ALTER ROLE [db owner] ADD MEMBER [CorpNet\User1];

Answer: C

Question: 31

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;
GO
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;

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: C

Question: 32

DRAG DROP

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.)

Enable StoredProcNamingPolicy.	
Evaluate StoredProcNamingPolicy.	
Create a Database Audit named StoredProcNamingConvention. Set the Filter to '@Name LIKE 'sp[_]%'.	
Create a Policy named StoredProcNamingPolicy. Set the Check condition to StoredProcNamingConvention and Evaluation Mode to On demand.	
Create a Policy named StoredProcNamingPolicy. Set the Check condition to StoredProcNamingConvention and Evaluation Mode to On change: prevent.	
Create a Condition named StoredProcNamingConvention by using the Stored Procedure facet that has a single expression. Set the Field to @Name, Operator to NOT LIKE, and Value to 'sp[_]%'.	
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[_]%'.	

Answer:

Create a Condition named StoredProcNamingConvention by using the Stored Procedure facet that has a single expression. Set the Field to @Name, Operator to NOT 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.

Step 1: Create a Condition named StoredProcNamingConvention by using the Stored Procedure facet that has a single expression. Set the Field to @Name, Operator to NOT LIKE, and Value to 'sp[_]%'.

Step 2: Create a Policy named StoredProcNamingPolicy Set the Check condition to StoredProcNamingConvention and Evaluation Mode to On Change: Prevent

Step 3: Enable StoredProcNamingPolicy

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

Select a Policy-Based Management facet that contains the properties to be configured.

Define a condition that specifies the state of a management facet.

Define a policy that contains the condition, additional conditions that filter the target sets, and the evaluation mode.

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: 33

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

Answer: D

Explanation:

The SERVER_ROLE_MEMBER_CHANGE_GROUP 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: 34

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'

Answer: C

Question: 35

DRAG DROP

You administer a Microsoft SQL Server database 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 are

a. 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.)

Tool	Issue	
DBCC CHECKDB	You want to verify network utilization.	
Performance Monitor	You suspect that a process is being blocked.	
sys.dm_exec_requests 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 need the details of that step.	
Job History	SQL Server will not start.	

Answer:

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

Question: 36

You administer a Microsoft SQL Server 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. Flag all stored procedures for recompilation by using sp_recompile.
- B. Create an Extended Events session by using the sqlserver.error_reported event.
- C. Create a Performance Monitor session to capture the SQLServer:SQL Errors object.
- D. Create a SQL Profiler session to capture all ErrorLog and EventLog events.

Answer: B

Explanation:

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

Question: 37

You administer a Microsoft SQL Server database 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. 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.
- D. Run the sp_who command from a query window.
- E. Run the DBCC TRACEON 1222 command from a query window and review the SQL Server event log.

Answer: A

Explanation:

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.

Incorrect:

Not B: The SQL Server lock monitor is responsible for implementing the logic to detect a blocking scenario if the 'blocked process threshold' value is greater than 0. However, the lock monitor only wakes up every 5 seconds to detect this condition (it is also looking for other conditions such as deadlocks). Therefore, if you set a 'blocked process threshold' value to 1, it will not detect a process that has been blocking for 1 second. The minimum time it can detect a blocked process is 5 seconds.

Not E: The Traceflag 1222 Shows Deadlocks, not the Duration of an query.

References: <https://docs.microsoft.com/en-us/sql/tools/sql-server-profiler/sql-server-profiler>

Question: 38

DRAG 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)

- a. 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.)

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

Answer:

Generating alerts

System Monitor

Capturing and replaying trace activity

SQL Profiler

Identifying cause of high page splits

XEvents

Troubleshooting cause of high page_io latch

XEvents

References:

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

Question: 39

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.

Answer: D**Question: 40**

You administer a Microsoft SQL Server 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.

Answer: C,D

Explanation:

How To Enable Instant File Initialization

References:

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

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

Question: 41

DRAG DROP

You administer a Microsoft SQL Server instance. You use a two-node SQL Server failover cluster. Node B is primary, and Node A is secondary.

You need to install a security patch on both nodes.

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.)

Actions

Pause Node B.

Pause Node A.

Failover from Node B to Node A.

Failover from Node A to Node B.

Install the security patch on Node B.

Install the security patch on Node A.

Stop the SQL Server services on both nodes.

Answer Area



Answer:

Answer Area

Install the security patch on Node B.

Failover from Node A to Node B.

Install the security patch on Node A.

Starting with the update to Microsoft SQL Server 2012 Service Pack 1, customers with SQL Server 2012 failover cluster instances can greatly benefit from the fully automated update process provided by Cluster-Aware Updating (CAU). CAU causes minimal down time for SQL Server 2012 client connectivity. While the primary node is being updated, the SQL Server clustered role (also called the resource group) goes through two failovers. The first failover happens before updating the primary node when CAU brings the original primary node into maintenance mode. During the update process on the original primary node, the SQL clustered role is temporarily brought online on a new primary node. The second failover happens once the update process is complete on the original primary node, and CAU fails back the SQL Server clustered role to the original primary node and brings it online.

Question: 42

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.

Answer: D

Explanation:

References:

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

Question: 43

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.

Answer: B

Explanation:

References:

<http://msdn.microsoft.com/en-us/library/ms186400.aspx>

<http://msdn.microsoft.com/en-us/library/ms345408.aspx>

Question: 44

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.

Answer: B

Question: 45

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

Answer: D

Question: 46

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

Answer: F

Explanation:

References:

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

<http://msdn.microsoft.com/en-us/library/microsoft.sqlserver.management.smo.backuprestorebase.continueaftererror.aspx>

Question: 47

You administer a Microsoft SQL Server 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. BULK_LOGGED
- G. STANDBY
- H. RESTART
- I. SKIP
- J. Transaction log
- K. DBO ONLY
- L. COPY_ONLY
- M. SIMPLE
- N. CONTINUE AFTER ERROR

Answer: L

Question: 48

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

Answer: L

Question: 49

You administer a Microsoft SQL Server 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. SKIP
- K. Transaction log
- L. COPY_ONLY
- M. Differential
- N. CONTINUE_AFTER_ERROR

Answer: K

Explanation:

References:

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

Question: 50

You administer a Microsoft SQL Server 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:

Type	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.

Answer: C

Question: 51

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 three.

- 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.

Answer: C,D,E

Question: 52

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

Answer: B

Question: 53

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	<ul style="list-style-type: none">• Sales.mdf
XACTIONS	<ul style="list-style-type: none">• Sales_1.ndf• Sales_2.ndf• Sales_3.ndf
ARCHIVES	<ul style="list-style-type: none">• 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 file restore.
- B. Perform a transaction log restore.
- C. Perform a restore from a full backup.
- D. Perform a filegroup restore.

Answer: A

Explanation:

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.

References:

<http://technet.microsoft.com/en-us/library/ms187048.aspx>

<http://msdn.microsoft.com/en-us/library/aa337540.aspx>

Question: 54**DRAG DROP**

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.

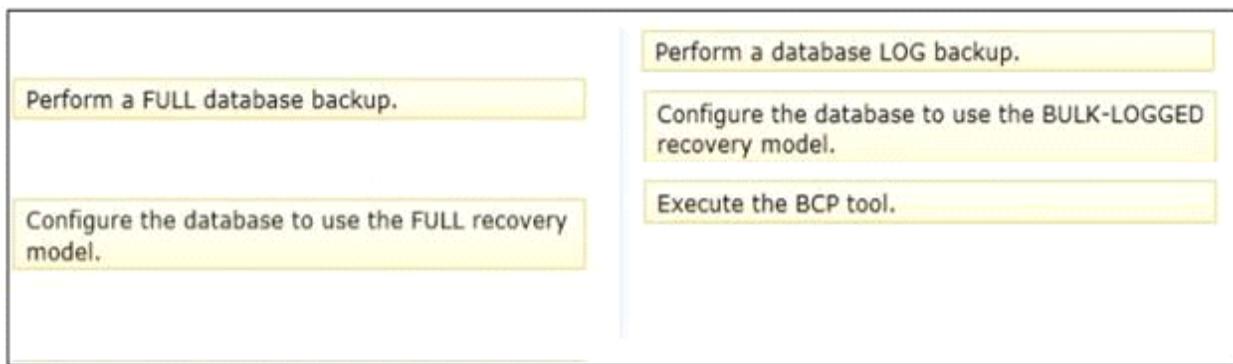
All transactions are fully recoverable prior to the import.

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.)

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

**Answer:<map><m
x1="4" x2="294"
y1="4" y2="29"
ss="0" a="0" /><m
x1="2" x2="294"
y1="37"**

y2="58" ss="0" a="0" /><m x1="1" x2="294" y1="66" y2="88" ss="0" a="0" /><m x1="4" x2="294" y1="97" y2="134" ss="0" a="0" /><m x1="3" x2="298" y1="144" y2="181" ss="0" a="0" /><m x1="310" x2="620" y1="10" y2="50" ss="1" a="0" /><m x1="312" x2="621" y1="60" y2="104" ss="1" a="0" /><m x1="312" x2="622" y1="112" y2="163" ss="1" a="0" /><c start="2" stop="0" /><c start="4" stop="1" /><c start="0" stop="2" /></map>

**Question: 55**

DRAG DROP

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)

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

Answer:

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

Question: 56

DRAG DROP

You administer a Microsoft SQL Server 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.)

- Restore the most recent full backup.
- Restore the full backup taken the previous night.
- Restore the differential backup taken at 22:00 hours.
- Restore the transaction log backup taken at 22:40 hours.
- Restore each transaction log backup taken from 22:00 hours till 22:40 hours.
- Restore each transaction log backup taken from the most recent full backup.
- Restore each differential database backup taken from the previous night's full backup.
- Restore each transaction log backup taken from the previous night's full backup till 22:40 hours.

**Answer:**

Restore the most recent full backup.	Restore the full backup taken the previous night.
Restore the transaction log backup taken at 22:40 hours.	Restore the differential backup taken at 22:00 hours.
	Restore each transaction log backup taken from 22:00 hours till 22:40 hours.
Restore each transaction log backup taken from the most recent full backup.	
Restore each differential database backup taken from the previous night's full backup.	
Restore each transaction log backup taken from the previous night's full backup till 22:40 hours.	

Question: 57

DRAG DROP

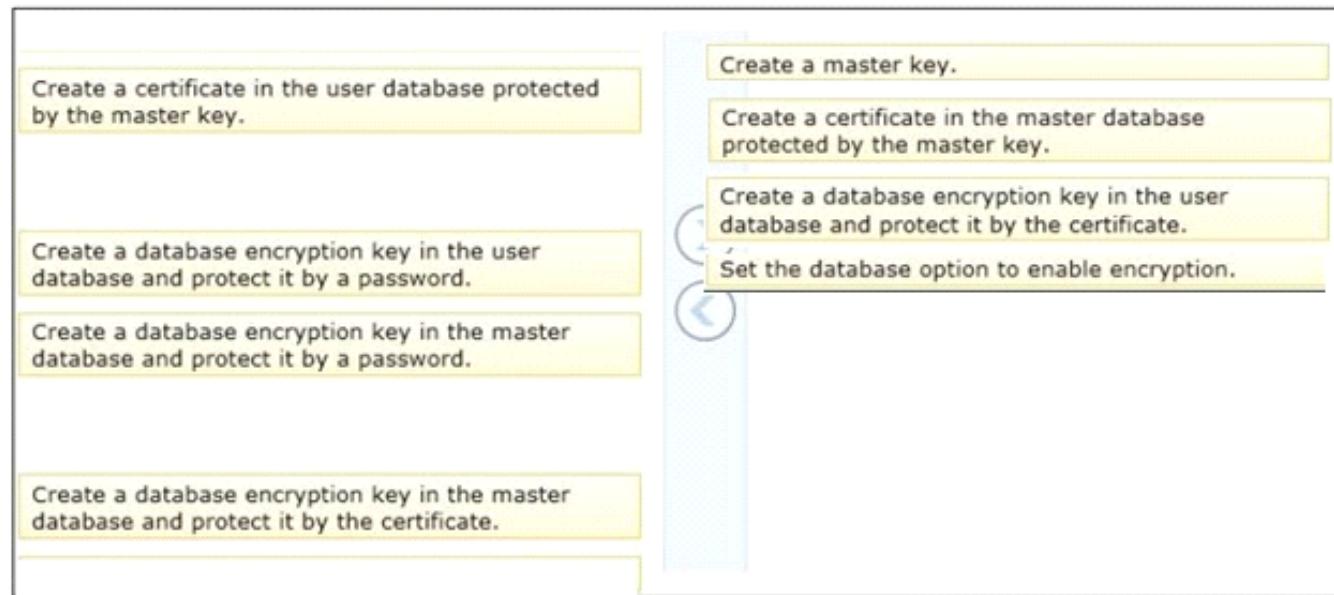
You administer a Microsoft SQL Server instance that contains a database of confidential data.

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 user database protected by the 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 a password.
Create a database encryption key in the master database and protect it by a password.
Create a database encryption key in the user database and protect it by the certificate.
Create a database encryption key in the master database and protect it by the certificate.
Set the database option to enable encryption.

**Answer:**



References:

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

Question: 58

You administer a Microsoft SQL Server 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.

Answer: C

Question: 59

You administer a Microsoft SQL Server 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

Answer: G

Question: 60

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

Answer: A

Question: 61

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

Answer: F

Question: 62

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 Policy
- E. A Database Audit Specification
- F. A SQL Profiler Trace
- G. A Server Audit Specification

Answer: D

Question: 63**DRAG DROP**

You administer a Microsoft SQL Server database server that has a database named Contoso. The Contoso database has a table named EmployeeSalary in a schema named HumanResources.

You need to create a script that writes audit events into the application log whenever data in the EmployeeSalary table is modified by the public principal.

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.)

Statements**Use Contoso**

```
CREATE SERVER AUDIT C_Audit to
APPLICATION_LOG
AFTER SERVER AUDIT C_Audit WITH (STATE=ON)
```

```
CREATE DATABASE AUDIT SPECIFICATION C_AuditSpec
FOR SERVER AUDIT C_Audit
ADD (INSERT ON
HumanResources.EmployeeSalary BY public),
ADD (UPDATE ON
HumanResources.EmployeeSalary BY public),
ADD (DELETE ON
HumanResources.EmployeeSalary BY public)
ALTER DATABASE AUDIT SPECIFICATION C_AuditSpec
WITH (STATE=ON)
```

```
CREATE SERVER AUDIT SPECIFICATION C_AuditSpec
FOR SERVER AUDIT C_Audit
ADD (SCHEMA_OBJECT_ACCESS_GROUP)
ALTER SERVER AUDIT SPECIFICATION C_AuditSpec
WITH (STATE=ON)
```

```
CREATE SERVER AUDIT C_Audit TO FILE (FILEPATH=
'ApplicationLog')
ALTER SERVER AUDIT C_Audit WITH (STATE=ON)
```

Use Master

```
CREATE DATABASE AUDIT SPECIFICATION C_AuditSpec
FOR SERVER AUDIT C_Audit
ADD (INSERT ON
HumanResources.EmployeeSalary BY dbo),
ADD (UPDATE ON
HumanResources.EmployeeSalary BY dbo),
ADD (DELETE ON
HumanResources.EmployeeSalary BY dbo)
ALTER DATABASE AUDIT SPECIFICATION C_AuditSpec
WITH (STATE=ON)
```

Answer:

Answer Area**Use Master**

```
CREATE SERVER AUDIT C_Audit TO FILE (FILEPATH=
'ApplicationLog')
```

```
ALTER SERVER AUDIT C_Audit WITH (STATE=ON)
```

Use Contoso

```
CREATE DATABASE AUDIT SPECIFICATION C_AuditSpec
FOR SERVER AUDIT C_Audit
ADD (INSERT ON
HumanResources.EmployeeSalary BY public),
ADD (UPDATE ON
HumanResources.EmployeeSalary BY public),
ADD (DELETE ON
HumanResources.EmployeeSalary BY public)
```

```
ALTER DATABASE AUDIT SPECIFICATION C_AuditSpec
WITH (STATE=ON)
```

References:

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

<http://msdn.microsoft.com/en-us/library/cc280448.aspx>

<http://msdn.microsoft.com/en-us/library/cc280404.aspx>

Question: 64**DRAG DROP**

You administer a Microsoft SQL Server 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.

Start Microsoft SQL Server Management Studio.

Start SQL Server Configuration Manager and locate the SQL Server service.

Restart the SQL Server service for that particular instance.

Run the **DBCC TRACEON (1221, -1)** Transact-SQL query.

From the SQL Server Properties page, click the **Startup parameters** tab and add **Trace Flag - T1222** to the start-up parameters list.

**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.

Question: 65

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. SELECT * FROM sys.dm_exec_requests WHERE session_id = 60
- B. SELECT * FROM sys.dm_exec_sessions WHERE session_id = 60
- C. DBCC INPUTBUFFER (60)
- D. DBCC OPENTRAN

Answer: A

Question: 66

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 centerSQL 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 centerA primary server configured to perform log-shipping every 10 minutesA backup server configured as a warm standby
- D. Two servers configured in different data centersSQL Server Availability Group configured in Synchronous-Commit Availability ModeOne server configured as an Active Secondary
- E. Two servers configured in the same data centerSQL Server Availability Group configured in Asynchronous-Commit Availability ModeOne server configured as an Active Secondary
- F. Two servers configured in different data centersSQL 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 subnetSQL Server Availability Group configured in Synchronous-Commit

Availability Mode

Answer: H

Question: 67

DRAG DROP

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.)

Back up Contoso on SQLServer01 by using a full backup.	
Back up Contoso on SQLServer01 by using a full backup followed by a transaction log backup by using the NORECOVERY option.	
Back up Contoso on SQLServer01 by using a transaction log backup. Restore the transaction log backup by using the RECOVERY option on SQLServer02.	
Back up Contoso on SQLServer01 by using a transaction log backup. Restore the transaction log backup by using the NORECOVERY option on SQLServer02.	
Restore the full database backup of Contoso by using the NORECOVERY option on SQLServer02 as Contoso.	
Restore the full database backup of Contoso by using the RECOVERY option on SQLServer02 as Contoso_Mirror.	

Answer:

Back up Contoso on SQLServer01 by using a full backup followed by a transaction log backup by using the NORECOVERY option.	
Back up Contoso on SQLServer01 by using a transaction log backup. Restore the transaction log backup by using the RECOVERY option on SQLServer02.	
Back up Contoso on SQLServer01 by using a full backup.	
Restore the full database backup of Contoso by using the NORECOVERY option on SQLServer02 as Contoso.	
Back up Contoso on SQLServer01 by using a transaction log backup. Restore the transaction log backup by using the NORECOVERY option on SQLServer02.	
Restore the full database backup of Contoso by using the RECOVERY option on SQLServer02 as Contoso_Mirror.	

Question: 68

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.

Answer: B

Question: 69

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.

Answer: B

Question: 70

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.

Answer: B

Question: 71

DRAG DROP

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.)

Actions

- Create a certificate encrypted by using a password.
- Assign the proxy to the SSIS package execution subsystem.
- Create a credential that references the domain user.
- Create a login that references the credential.
- Add a proxy that references the login.
- Add a proxy that references the credential.
- Create a domain user account and grant permissions to the domain user account to access the network share.
- Assign the proxy to the Operating System subsystem.

Answer Area



Answer:

Answer Area

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.

SQL Server Agent allows creating a proxy account which defines the security context for the job step.

We need to do is to create a credential to be used by the proxy account.

The created proxy need to have access to the SSIS subsystem

References: <https://www.mssqltips.com/sqlservertip/2163/running-a-ssis-package-from-sql-server-agent-using-a-proxy-account/>

Question: 72

You administer a Microsoft SQL Server instance.

You need to configure a new database to support FILETABLES.

Which three actions should you perform? Each correct answer presents part of the solution.

- 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.

Answer: B,D,F

Question: 73

You administer two instances of Microsoft SQL Server. 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.

Answer: D

Question: 74

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. SQL user without login
- B. User mapped to an asymmetric key
- C. Domain user
- D. login mapped to a virtual account

Answer: C

Question: 75

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 MasterSET ENCRYPTION OFF;
- B. CREATE CERTIFICATE TDE_CertificateFROM FILE = 'd:\TDE_Certificate.cer'WITH PRIVATE KEY (FILE =
'D:\TDE_Certificate.key',DECRYPTION BY PASSWORD = 'MyPassword1!');
- C. CREATE CERTIFICATE TDE_CertificateWITH SUBJECT = 'TDE Certificate';USE Orders;CREATE DATABASE ENCRYPTION KEYWITH ALGORITHM = AES_256ENCRYPTION BY SERVER CERTIFICATE TDE_Certificate;
- D. CREATE CERTIFICATE TDE_CertificateFROM FILE = 'd:\TDE_Certificate.cer';

Answer: B

Question: 76

Note: This question is part of a series of questions that use the same set of answer choices. An answer choice may be correct for more than one question in the series.

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

Answer: F

Explanation:

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>
- <http://msdn.microsoft.com/en-us/library/ms187728.aspx>

Question: 77

Note: This question is part of a series of questions that use the same set of answer choices. An answer choice may be correct for more than one question in the series.

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_droprolemember 'Sales', 'UserA'

- G. REVOKE SELECT ON Schema::Customers FROM UserA
- H. DENY SELECT ON Object::Regions FROM Sales
- I. DENY SELECT ON Schema::Customers FROM Sales
- J. REVOKE SELECT ON Schema::Customers FROM Sales

Answer: D

Explanation:

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: 78

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.

Answer: C

Question: 79

You administer a Microsoft SQL Server 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. Create a ConfigurationFile.ini file from Node B, and then run the AddNode command-line tool on Node A.
- B. Use Node A to install SQL Server on Node C.
- C. Run the Add Node to SQL Server Failover Cluster Wizard on Node C.
- D. Use Cluster Administrator to add a new Resource Group to Node B.

Answer: C

Explanation:

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: 80

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.

Answer: B

Question: 81

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.

Answer: A

Question: 82

DRAG DROP

You administer a Microsoft SQL Server 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 the **ALTER DATABASE** statement along with **CONTAINMENT=PARTIAL**.

Execute the **ALTER DATABASE** statement along with **CONTAINMENT=TRUE**.

Execute **sp_configure 'cross db ownership chaining', 1; RECONFIGURE**.

Execute **sp_configure 'contained database authentication', 1; RECONFIGURE**.

Execute **sp_migrate_user_to_contained** for the database.

Execute **sp_migrate_user_to_contained** for each user.



Answer:

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.

Question: 83

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.

Which three actions should you perform? Each correct answer presents part of the solution.

- 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',1**
- 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.

Answer: A,B,C

Question: 84

DRAG DROP

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.	
Run SQL Server Setup to add Node 1 to the failover cluster.	
Run Cluster Administrator Setup to add Node 1 to the failover cluster.	
Add Node 1 to the existing cluster by using SQL Server Configuration Manager.	
Add Node 1 to the existing cluster by using the Windows Failover Cluster Manager.	
Register the secondary instance with the Cluster Manager by using SQL Server Management Studio.	

Answer:

	Evict Node 1 from the Windows Failover Cluster.
	Install Windows on a new server to replace Node 1.
Run Cluster Administrator Setup to add Node 1 to the failover cluster.	Add Node 1 to the existing cluster by using the Windows Failover Cluster Manager.
Add Node 1 to the existing cluster by using SQL Server Configuration Manager.	Run SQL Server Setup to add Node 1 to the failover cluster.
Register the secondary instance with the Cluster Manager by using SQL Server Management Studio.	

Question: 85

You use Microsoft SQL Server 2012 to write code for a transaction that contains several statements. There is high contention between readers and writers on several tables used by your transaction. You need to minimize the use of the tempdb space. You also need to prevent reading queries from blocking writing queries. Which isolation level should you use?

- A. SERIALIZABLE
- B. SNAPSHOT
- C. READ COMMITTED SNAPSHOT
- D. REPEATABLE READ

Answer: C

Question: 86

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

Answer: K

Question: 87

DRAG DROP

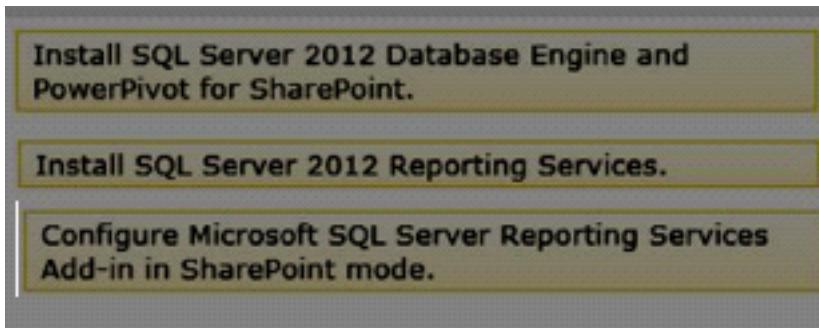
You administer a Microsoft SQL Server 2012 server.

You need to install the Power View components on a stand-alone server.

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.)



Answer:



Question: 88

You administer a Microsoft SQL Server 2012 database.

You have a SQL Server Agent job instance that runs using the service account. You have a job step within the job that requires elevated permissions.

You need to ensure that the job step can run using a different user account.

What should you use?

- A. A notification
- B. A schedule
- C. A job category
- D. A proxy

Answer: D

Question: 89

You maintain several databases on a 32-bit Microsoft SQL Server 2005 instance on a Windows Server 2008 R2 64-bit server.

You need to migrate the databases to a 64-bit SQL Server 2012 instance on the same server. You also need to ensure that the new Transact-SQL functionality in SQL Server 2012 can be used in the database after the migration.

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

- A. Perform a side-by-side installation of a 32-bit SQL Server 2012 instance.
- B. Perform a side-by-side installation of a 64-bit SQL Server 2012 instance.
- C. Perform an in-place upgrade to 64-bit SQL Server 2012.
- D. Detach the database from the old instance and attach it to the new instance.
- E. Change the compatibility level of the database.

Answer: B,D,E

Explanation:

Use detach and attach operations to upgrade a SQL Server 2005, SQL Server 2008 or SQL Server 2008 R2 database in SQL Server 2012. After being attached to SQL Server 2012, the database is available immediately and is automatically upgraded.

Question: 90

You administer a Microsoft SQL Server instance.

You discover that the SQL Agent Error Log file is rapidly growing in size.

You need to ensure that the SQL Agent Error Log file does not grow rapidly when SQL Server agent jobs execute.

What should you do?

- A. Execute the sp_cycle_agent_errorlog stored procedure.
- B. Configure event forwarding.
- C. Enable the Auto Shrink option on the master database.
- D. Enable the Auto Shrink option on the msdb database.
- E. Disable the Include execution trace messages feature.

Answer: E

Question: 91

You are a database administrator for a Microsoft SQL Server instance.

You need to ensure that data can be migrated from a production server to two reporting servers with minimal data latency. You also need to ensure that data on the reporting server is always accessible.

- A. Database Snapshot
- B. Log Shipping
- C. Availability Groups
- D. Change Data Capture

Answer: C

Question: 92

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

You discover that query performance on the table is poor due to fragmentation on the IDX_AccountTransaction_AccountCode non-clustered index.

You need to defragment the index. You also need to ensure that user queries are able to use the index during the defragmenting process.

Which Transact-SQL batch should you use?

- A. ALTER INDEX IDX_AccountTransaction_AccountCodeON AccountTransaction.AccountCode REORGANIZE
- B. ALTER INDEX ALL ON AccountTransaction REBUILD
- C. ALTER INDEX IDX_AccountTransaction_AccountCodeON AccountTransaction.AccountCode REBUILD
- D. CREATE INDEX IDXAccountTransactionAccountCodeON AccountTransaction.AccountCode WITH DROP EXISTING

Answer: A

Question: 93

You administer a Windows 2008 server hosting an instance of Microsoft SQL Server 2012 Standard Edition. The server hosts a database named Orders.

Users report that a query that filters on OrderDate is taking an exceptionally long time. You discover that an index named IX_OrderDate on the CustomerOrder table is heavily fragmented.

You need to improve the performance of the IX_OrderDate index. The index should remain online during the operation.

Which Transact-SQL command should you use?

- A. ALTER INDEX IX_OrderDateON CustomerOrderDISABLE
- B. ALTER INDEX IX_OrderDateON CustomerOrderENABLE
- C. ALTER INDEX IX_OrderDateON CustomerOrderREORGANIZE
- D. ALTER INDEX IX_OrderDateON CustomerOrderREBUILD

Answer: C

Question: 94

You administer a Microsoft Azure SQL Database database named Orders.

You need to create a copy of Orders named Orders_Reporting.

Which Transact-SQL command should you use?

- A. BACKUP DATABASE Orders TO DISK = 'D:\Orders.bak' RESTORE DATABASE Orders_Reporting FROM DISK = 'D:\Orders.bak'
- B. BACKUP DATABASE Orders TO DISK = 'D:\Orders.bak' CREATE DATABASE Orders_Reporting FROM DISK = 'D:\Orders.bak'
- C. CREATE DATABASE Orders_Reporting AS COPY OF Orders
- D. BACKUP DATABASE Orders TO DISK = 'D:\Orders.bak' MIRROR TO DISK = 'Orders_Reporting'

Answer: C

Question: 95

You administer a Microsoft SQL Server failover cluster.

You need to ensure that a failover occurs when the server diagnostics returns query_processing error.

Which server configuration property should you set?

- A. SqlDumperDumpFlags
- B. FailureConditionLevel
- C. HealthCheckTimeout
- D. SqlDumperDumpPath

Answer: B

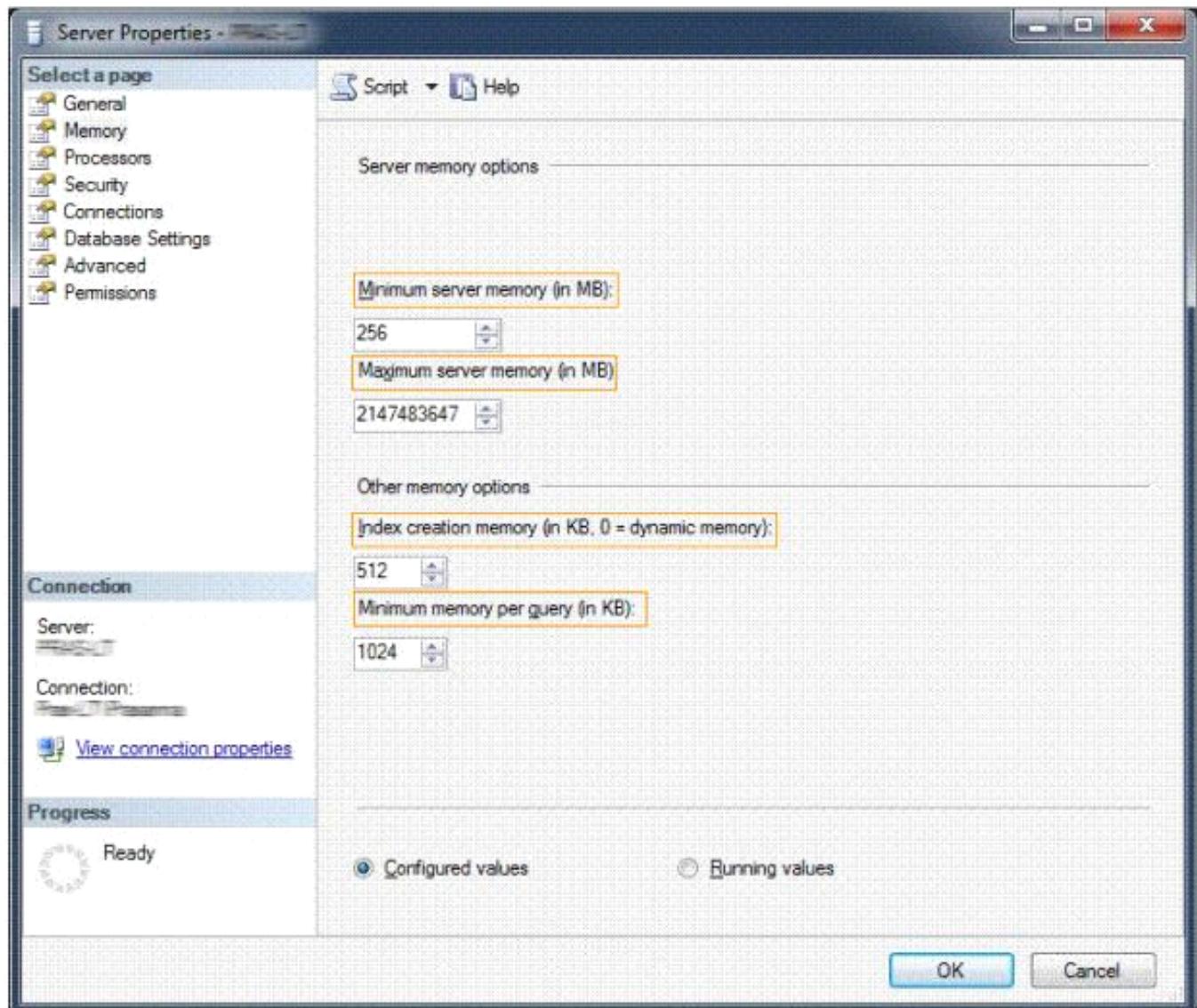
Question: 96

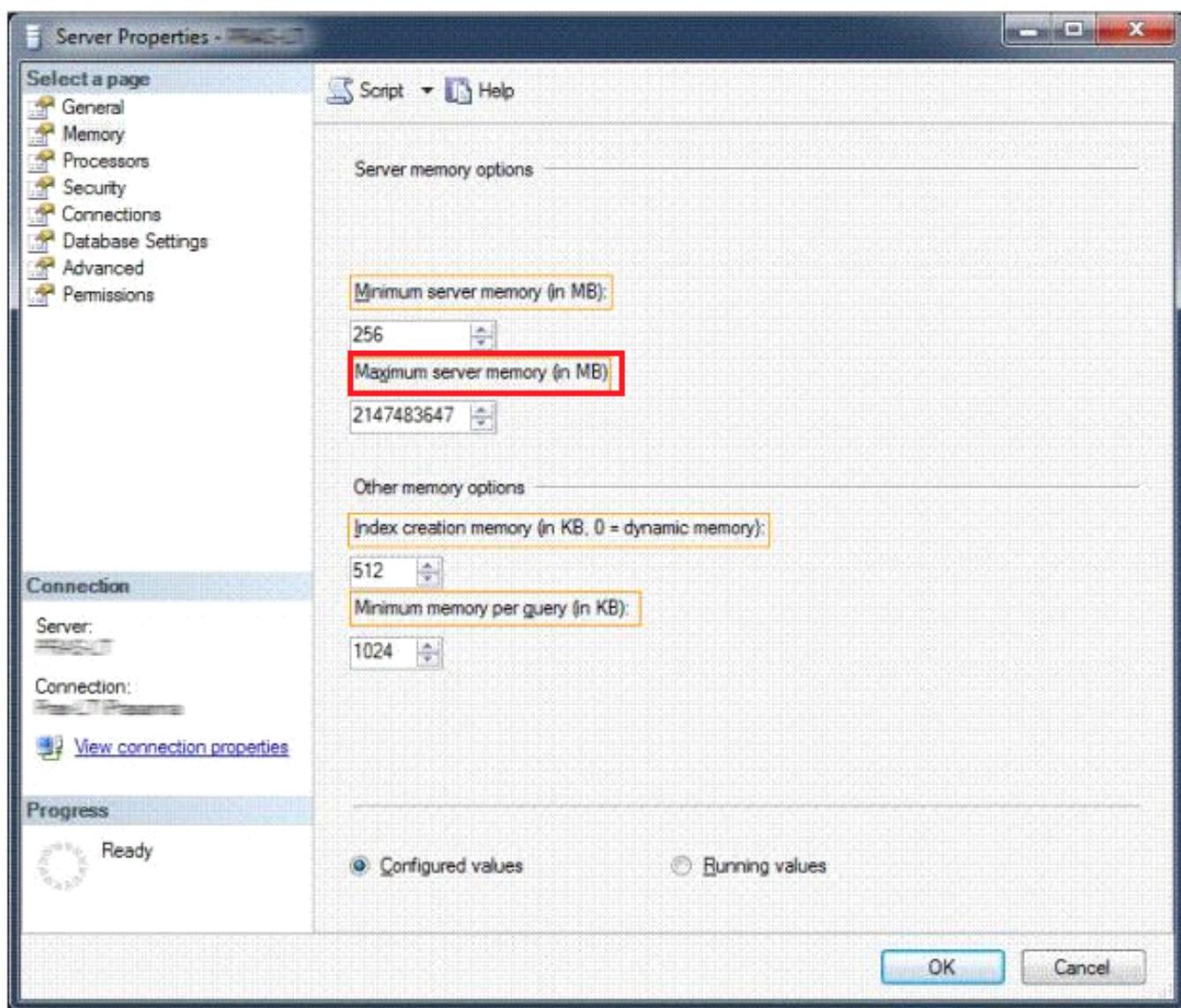
HOTSPOT

You administer a Microsoft SQL Server 2012 database instance. Other applications run on the server. Some of the applications are throwing errors because of insufficient memory.

You need to ensure that the other applications have sufficient memory.

Which setting should you configure?

**Answer:**



Question: 97

You are the administrator of a Microsoft SQL Server database server.

Some applications consume significant resources. You need to manage the server workload by restricting resource-intensive applications.

You need to dynamically limit resource consumption.

What should you do?

- Create a new Plan Guide with a Scope Type of sql and define the resource limits for each application.
- Enable the Resource Governor, and then configure Resource Pools, Workload Groups, and Classifier Function.
- Configure SQL Activity Monitor to define resource limits for each application type.
- Configure Extended Events to monitor and restrict resource limits allowed by each application type.

Answer: B

Explanation:

SQL Server Resource Governor is a feature than you can use to manage SQL Server workload and system resource consumption. Resource Governor enables you to specify limits on the amount of CPU, physical IO, and memory that incoming application requests can use.

The following three concepts are fundamental to understanding and using Resource Governor:

References: <https://docs.microsoft.com/en-us/sql/relational-databases/resource-governor/resource-governor>

Question: 98

You administer a Microsoft SQL Server database that includes a table named dbo.Log. This table contains millions of records about user activity in an application.

Records in dbo.Log that are more than 90 days old are purged nightly. When records are purged, table locks are causing contention with inserts.

You need to be able to modify dbo.Log without requiring any changes to the applications that utilize dbo.Log.

Which type of solution should you use?

- A. Extended events
- B. Columnstore index
- C. Partitioned tables
- D. Read committed snapshot

Answer: C

Question: 99

You administer a Microsoft SQL Server database named Orders.

Users report that during peak usage periods, certain operations are taking more time than expected. Your initial analysis suggests that blocking is the cause.

You need to gather more data to be able to determine which processes are being blocked and to identify the root cause.

What should you do?

- A. Schedule a SQL Agent job to run every 60 seconds and insert the results of executing the sp_who2 stored procedure into a table.
- B. Use System Monitor to catch the Lock Wait Time event.
- C. Start a trace using SQL Server Profiler to catch the Lock: Timeout event.
- D. Use sp_configure to set the blocked process threshold. Start a trace using SQL Server Profiler to catch the Blocked Process Report event.

Answer: D

Question: 100

You administer a Microsoft SQL Server database.

Users report that a billing application becomes unresponsive during busy times of the day.

While investigating, you notice large number of processes taking or waiting for table locks.

You suspect that SQL Server is assigning stronger locks to queries.

You start a SQL Profiler trace.

Which event should you select?

- A. Deadlock graph
- B. Lock: Escalation
- C. Lock: Timeout
- D. Lock: Deadlock

Answer: B

Explanation:

Question: 101

DRAG DROP

You administer a Microsoft SQL Server database called Human_Resources. The database contains a table named dbo.Salary.

You need to ensure that all read activity against dbo.Salary is audited and written to the Windows Security Log.

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

Enable the Audit and the Audit Specification.

Create a new Audit. For destination, choose **File**.

Create a new Audit. For destination, choose **Security Log**.

Create a new Server Audit Specification. For Audit Action Type, choose **DATABASE_OBJECT_ACCESS_GROUP**.

Create a new Database Audit Specification on Human_Resources. For Audit Action Type, choose **Select**, and for Object Class, choose **Database**.

Create a new Database Audit Specification on Human_Resources. For Audit Action Type, choose **References**, and for Object Class, choose **Database**.

Create a new Database Audit Specification on Human_Resources. For Audit Action Type, choose **Select**; for Object Class, choose **Object**; and for Object Name, choose **Salary**.

Answer:

Box 1:

Create a new Audit. For destination, choose **Security Log**.

Box 2:

Create a new Database Audit Specification on Human_Resources. For Audit Action Type, choose **Select**; for Object Class, choose **Object**; and for Object Name, choose **Salary**.

Box 3:

Enable the Audit and the Audit Specification.

Note:

Example (step 2) (we should audit SELECT on the Salary table):

USE AdventureWorks2012 ;

```
GO
-- Create the database audit specification.
CREATE DATABASE AUDIT SPECIFICATION Audit_Pay_Tables
FOR SERVER AUDIT Payrole_Security_Audit
ADD (SELECT, INSERT
    ON HumanResources.EmployeePayHistory BY dbo )
WITH (STATE = ON);
GO
References:
http://msdn.microsoft.com/en-us/library/cc280386.aspx
http://msdn.microsoft.com/en-us/library/cc280448.aspx
http://msdn.microsoft.com/en-us/library/cc280404.aspx
```

Question: 102

You install Microsoft SQL Server 2012 on a new server.

After setup is complete, you attempt to start the SQL Server service. After being in a starting state for a few moments, the service goes back to a stopped state.

You need to determine the cause of the failure.

Which file should you use?

- A. %programfiles%\Microsoft SQL Server\MSSQL11.MSSQLSERVER\MSSQL\Log\Errorlog
- B. %programfiles%\Microsoft SQL Server\110\Setup Bootstrap\Log\Summary.txt
- C. %programfiles%\Microsoft SQL Server\110\Shared\ErrorDumps\SQLDmpr[XXXX].mdmp
- D. %programfiles%\Microsoft SQL Server\MSSQL11.MSSQLSERVER\MSSQL\DATA\mastlog.ldf

Answer: A

Question: 103

DRAG DROP

You administer a Microsoft SQL Server 2012 database.

The database contains a schema named CUSTOMER. CUSTOMER contains several tables and views with sensitive data, as well as various stored procedures and functions.

In order to configure security for CUSTOMER, you need to determine how to meet the security requirements listed in the answer area.

Which command or commands should you use? (To answer, drag the appropriate command or commands to their corresponding security requirement or requirements in the answer area)

a. Answer choices may be used once, more than once, or not at all. Answer targets may be used once or not at all. Additionally, you may need to drag the split bar between panes or scroll to view content.)

Command	Security Requirement
DENY INSERT,UPDATE,DELETE ON customer.credit_card TO <user>	Allow users to run a stored procedure.
GRANT EXECUTE ON customer.getAddress TO <user>	Do not allow users the ability to change any data in a given table.
GRANT SELECT ON SCHEMA::CUSTOMER TO <user>	Grant users the ability to retrieve data from all tables and views in the schema.
GRANT SELECT ON customer.customer TO <user> WITH GRANT OPTION;	

Answer:

Allow users to run a stored procedure.

GRANT EXECUTE ON
customer.getAddress TO <user>

Do not allow users the ability to change any data in a given table.

DENY INSERT,UPDATE,DELETE ON
customer.credit_card TO <user>

Grant users the ability to retrieve data from all tables and views in the schema.

GRANT SELECT ON SCHEMA::CUSTOMER
TO <user>

Question: 104**DRAG DROP**

You administer a Microsoft SQL Server 2012 server along with a Microsoft Azure SQL Database database.

For both servers, you need to grant users the ability to create logins and create databases.

You need to determine which permission to grant users in each instance.

Which permission or permissions should you choose? (To answer, drag the appropriate permission or permissions to their corresponding instance type or types in the answer area.)

Answer choices may be used once, more than once, or not at all. Answer targets may be used once or not at all. Additionally, you may need to drag the split bar between panes or scroll to view content.)

Instance Type	Permissions
local instance	dbmanager
Azure instance	dbcreator
	db_accessadmin
	loginmanager
	securityadmin

Answer:

dbmanager	Azure instance
dbcreator	local instance
db_accessadmin	local instance
loginmanager	Azure instance
securityadmin	local instance

Question: 105

You administer a Microsoft Azure SQL Database database named Inventory that contains a stored procedure named p_AddInventory.

Users need to be able to SELECT from all tables in the database and execute the stored procedure.

You need to grant only the necessary permissions.

What should you do?

- Create a new database role. Grant EXECUTE permission on p_AddInventory to the new role. Grant VIEW DEFINITION to the role. Add all users to the role.
- Add all users to the db_datawriter role. Add all users to the db_datareader role.
- Grant EXECUTE permission on p_AddInventory to all users. Grant VIEW DEFINITION to all users.
- Create a new database role. Grant EXECUTE permission on p_AddInventory to the new role. Add all users to the role. Add all users to the db_datareader role.

Answer: D**Question: 106**

You administer a SQL Server 2012 database instance.

You need to configure the SQL Server Database Engine service on a failover cluster.
Which user account should you use?

- A. A domain user
- B. The BUILTIN\SYSTEM account
- C. A local user with Run as Service permissions
- D. The SQLBrowser account

Answer: A

Question: 107

You administer a Microsoft Azure SQL Database database named Human_Resources. The database contains 2 tables named Employees and SalaryDetails.

You add two Windows groups as logins for the server:

CORP\Employees - All company employees

CORP\HRAdmins - HR administrators only

HR Administrators are also company employees.

You need to grant users access according to the following requirements:

CORP\Employees should have SELECT access to the Employees table.

Only users in CORP\HRAdmins should have SELECT access to the SalaryDetails table.

Logins are based only on Windows security groups.

What should you do?

- A. Create a database role called Employees.Add CORP\Employees to the db_datareader role.Add all company employees except HR administrators to the Employees role.Deny SELECT access to the SalaryDetails table to the Employees role.
- B. Create a database role called HRAdmins.Add all company employees except HR administrators to the db_datareader role,Add all HR administrators to the HRAdmins role.Grant SELECT access to the SalaryDetails table to the HRAdmins role.Deny SELECT access to the SalaryDetails table to the db_datareader role.
- C. Create two database roles: Employees and HRAdmins.Add all company employees to the Employees role.Add HR administrators to the HRAdmins role.Grant SELECT access to all tables except SalaryDetails to the Employees role.Grant SELECT access to the SalaryDetails table to the HRAdmins role.Deny SELECT access to the SalaryDetails table to the Employees role.
- D. Create a database role called Employees.Add all HR administrators to the db_datareader role.Add all company employees to the Employees role.Grant SELECT access to all tables except the SalaryDetails table to the Employees role.Deny SELECT access to the SalaryDetails table to the Employees role.

Answer: D

Question: 108

You administer a Microsoft SQL Server database instance.

You plan to migrate the database to Microsoft Azure SQL Database. You verify that all objects contained in the database are compatible with Microsoft Azure SQL Database.

You need to ensure that database users and required server logins are migrated to Microsoft Azure SQL Database.

What should you do?

- A. Use the copy database wizard
- B. Use the Database Transfer wizard

- C. Use SQL Server Management Studio to deploy the database to Microsoft Azure SQL Database
- D. Backup the database from the local server and restore it to Microsoft Azure SQL Database

Answer: C

Question: 109

HOTSPOT

You administer a Microsoft SQL Server 2012 instance.

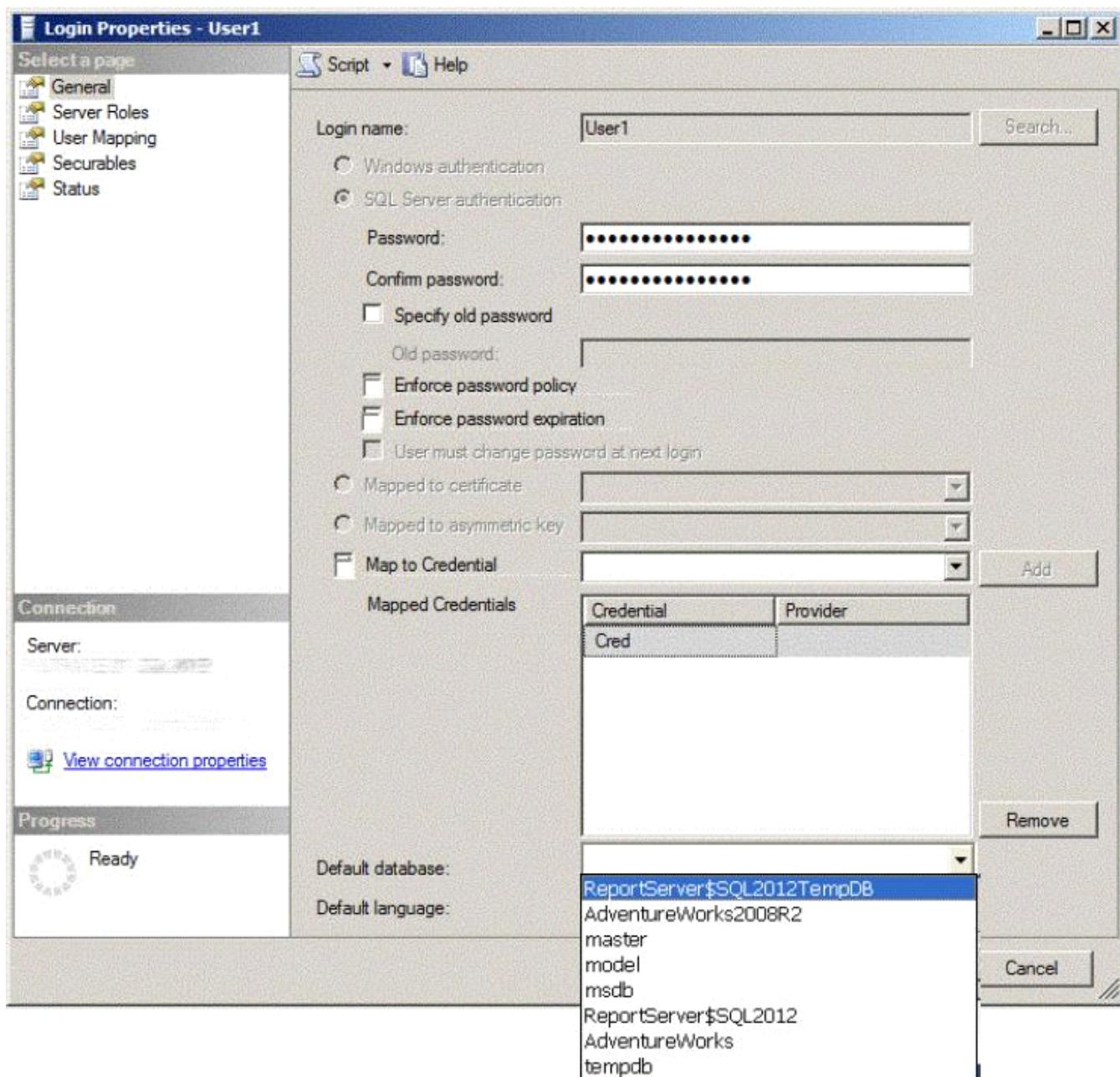
You need to configure an existing SQL Authenticated Login that meets the following requirements:

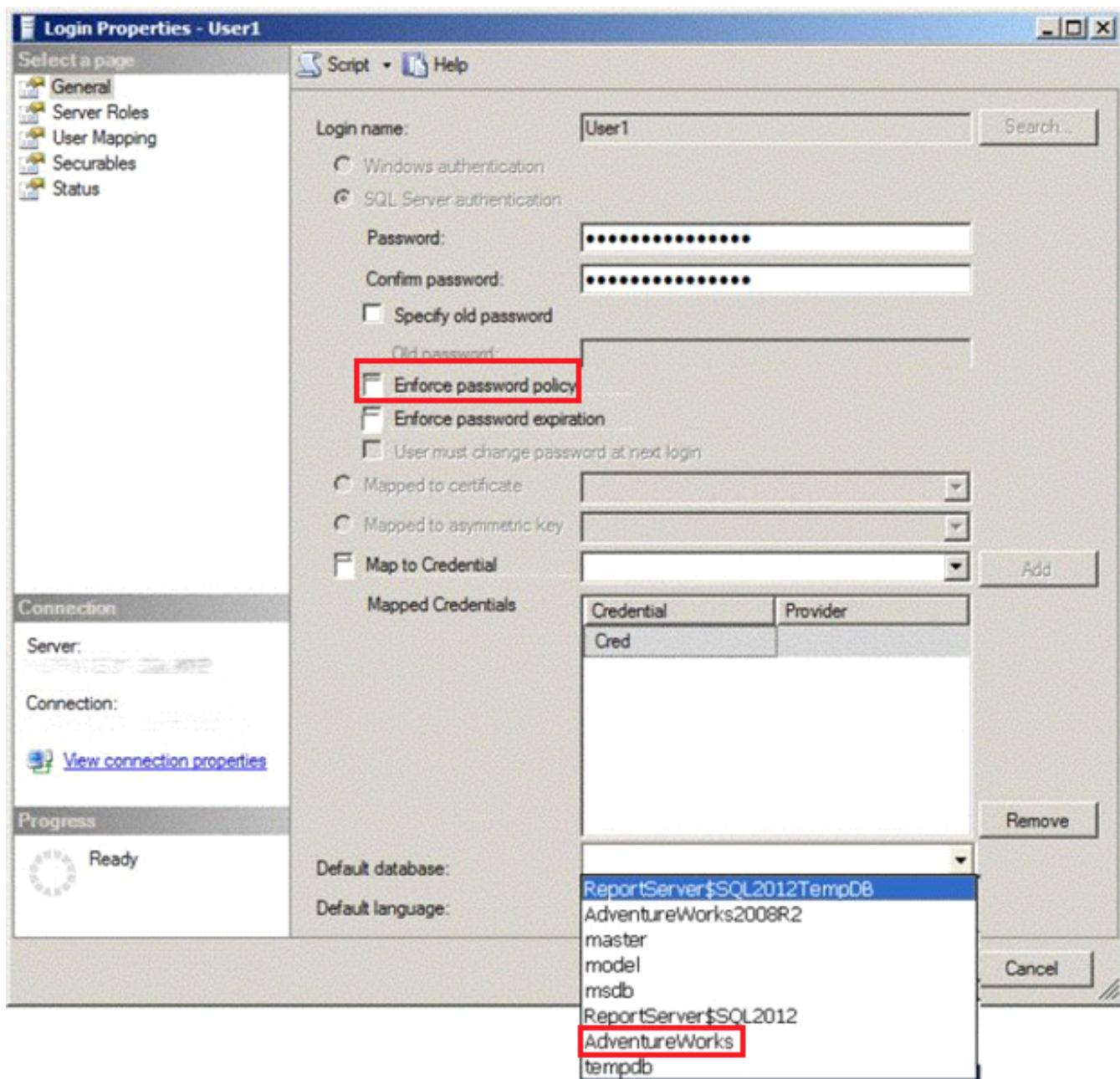
Enforces password policy

No password expiration enforcement

Resets the default database to AdventureWorks database

Which option or options should you choose in the Login Properties of the login for User1? To answer, configure the appropriate option or options in the dialog box in the answer area.





Question: 110

You administer a Microsoft SQL Server 2012 database named Orders.

Orders contain a table named OrderShip that is defined as follows:

```
CREATE TABLE OrderShip
(OrderID bigint NOT NULL PRIMARY KEY,
 CustomerID int NOT NULL,
 ShipAddress nvarchar(500) NOT NULL,
 CountryCode tinyint NULL)
```

A NULL value represents a domestic order. Ninety percent of the values in CountryCode are NULL.

Customers require a procedure that will return orders for all customers from a specified country. You create a new procedure:

```
CREATE PROCEDURE p_GetIntlOrders
    (@countrycode tinyint)
AS
SELECT DISTINCT CustomerID, ShipAddress
FROM OrderShip
WHERE CountryCode = @countrycode
GO
```

Performance on this procedure is slow.

You need to alter the schema to optimize this query. Objects created must use a minimum amount of resources. Which Transact-SQL statement should you use?

- A. CREATE NONCLUSTERED INDEX IX_CountryCode ON Ordership (CountryCode) WHERE CountryCode IS NOT NULL
- B. CREATE STATISTICS ST_CountryCode ON OrderShip (CountryCode) WHERE CountryCode IS NOT NULL
- C. CREATE CLUSTERED INDEX IX_CountryCode ON OrderShip (CountryCode)
- D. CREATE INDEX IX_CountryCode ON OrderShip (CustomerID) WHERE CountryCode IS NOT NULL

Answer: B

Explanation:

Filtered statistics can improve query performance for queries that select from well-defined subsets of data.

References: <https://msdn.microsoft.com/en-us/library/ms190397.aspx>

Question: 111

You administer a Microsoft SQL Server database. The database is currently configured to log ship to a secondary server.

You are preparing to cut over to the secondary server by stopping log-shipping and bringing the secondary database online. You want to perform a tail-log backup.

You need to leave the primary database in a restoring state.

Which option of the BACKUP LOG command should you use?

- A. NO_TRUNCATE
- B. NORECOVERY
- C. STANDBY
- D. FORMAT

Answer: B

Question: 112

HOTSPOT

You administer a Microsoft SQL Server database.

The database is in the Simple recovery mode.

You schedule the following backup plan:

Full backup every day at midnight

Differential backups every hour on the hour, except at midnight

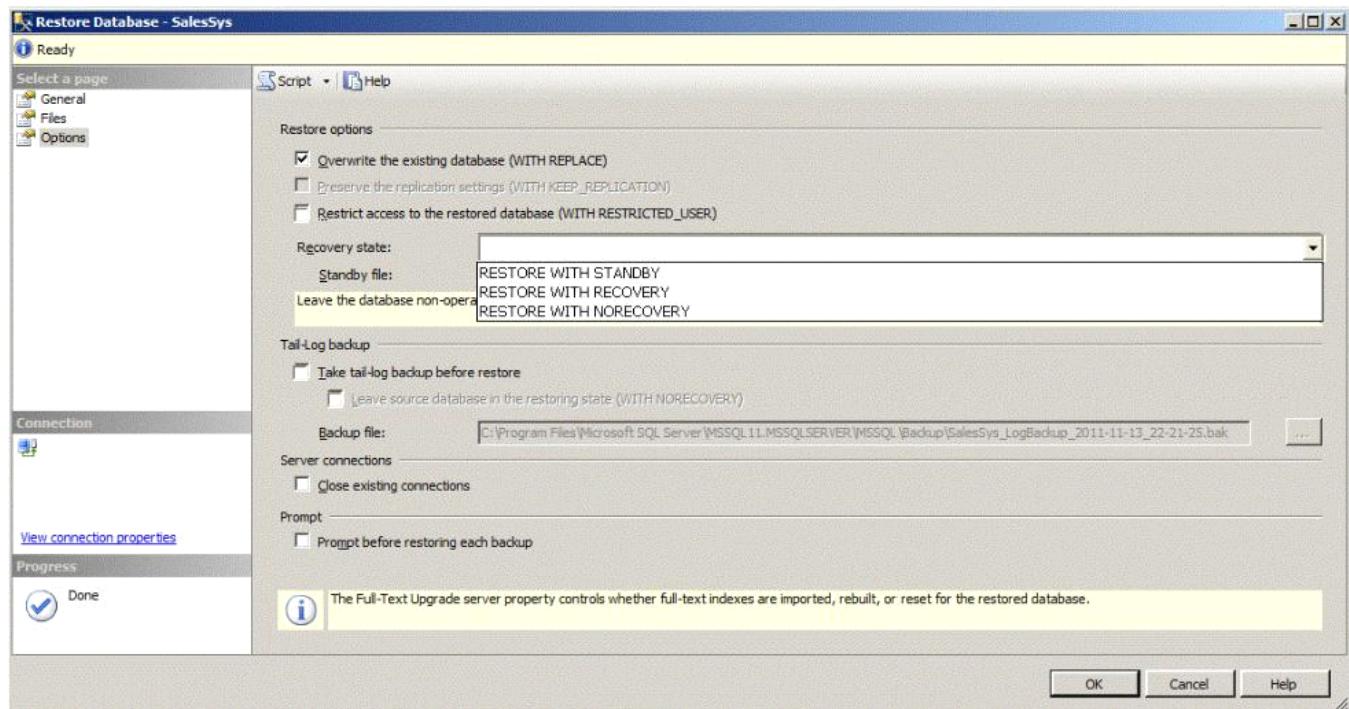
Transaction log backups every ten minutes, starting 10 minutes from the hour, except on the hour

The database fails at 20:45 hours.

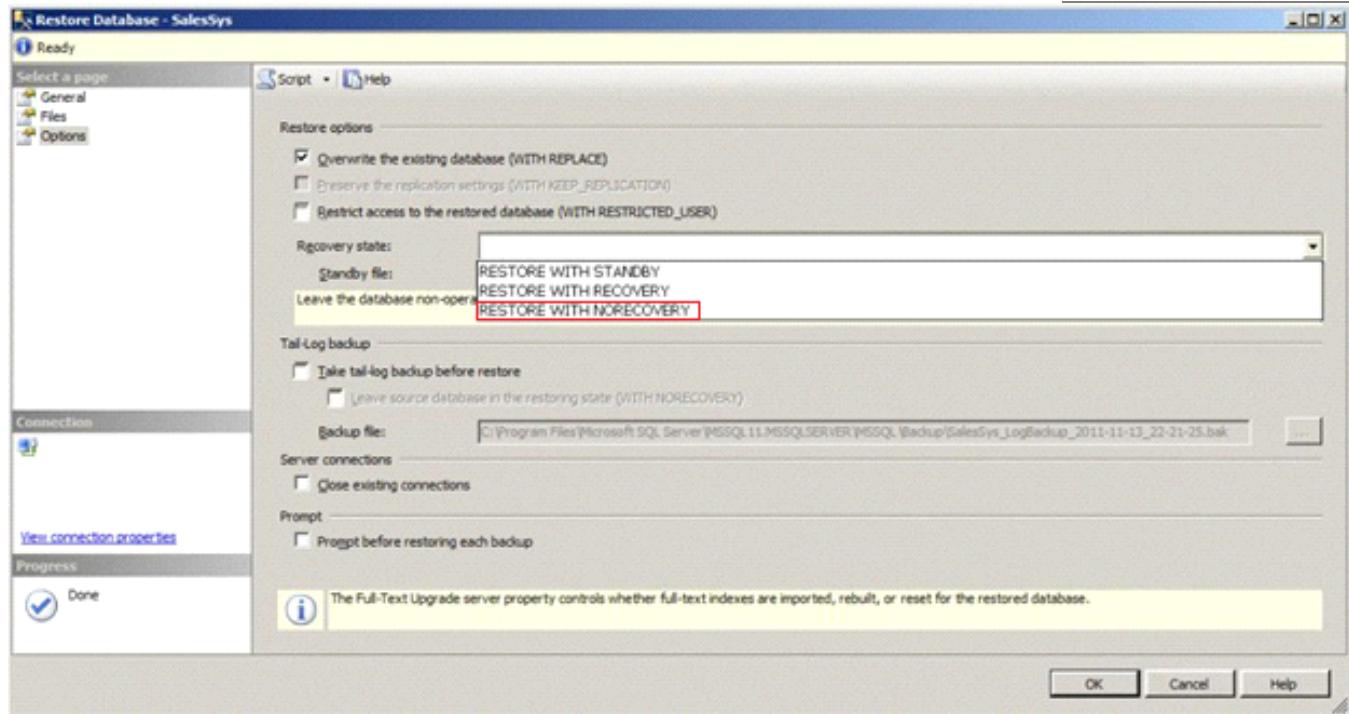
You need to use SQL Server Management Studio (SSMS) to begin restoring the database with a minimum amount of

data loss.

Which options should you select on the Options page of the Restore Database window? (To answer, configure the appropriate option or options in the dialog box in the answer area.)



Answer:



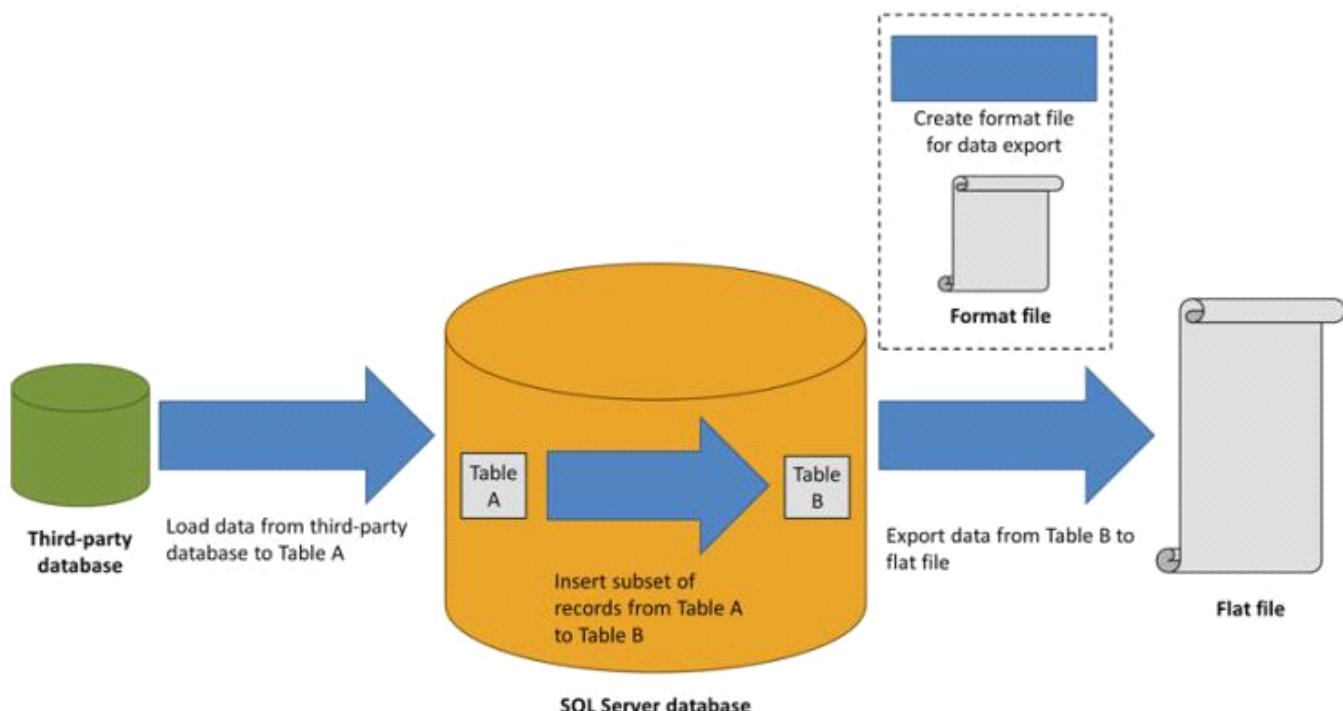
First, restore full database backup, differential database backup and all transaction log backups WITH NORECOVERY Option. After that, bring back database online using WITH RECOVERY option.

References: <https://blog.sqlauthority.com/2009/07/15/sql-server-restore-sequence-and-understanding-norecovery-and-recovery/>

Question: 113

DRAG DROP

You administer a Microsoft SQL Server 2012 database. The database contains two tables named Table A and Table B. You perform an import and export operation by using the following steps in sequence, as shown in the exhibit. (Click the Exhibit button.)



Load data from a third-party database to Table

A. Insert a subset of records from Table A to Table B. Export the data from Table B to a flat file.

You also create a format file for the data export.

You need to choose the correct command or tool for each task. You need to ensure that each task is performed efficiently.

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

Command/Tool	Task
INSERT...SELECT	Load data from third-party database to Table A
INSERT...SELECT... OPENROWSET	Insert subset of records from Table A to Table B
BCP	Export data from Table B to flat file
Extended Events	
SELECT...INTO	Create format file for data export

Answer:

Load data from third-party database to Table A

**INSERT...SELECT...
OPENROWSET**

Insert subset of records from Table A to Table B

INSERT...SELECT

Export data from Table B to flat file

BCP

Create format file for data export

BCP

Question: 114

You administer a Microsoft SQL Server 2012 database. You want to make a full backup of the database to a file on disk. In doing so, you need to output the progress of the backup.

Which backup option should you use?

- A. STATS
- B. COMPRESSION
- C. CHECKSUM
- D. IN IT

Answer: A

Question: 115

You are a database administrator for a Microsoft SQL Server 2012 database named AdventureWorks2012.

You create an Availability Group defined by the following schema

a. (Line numbers are included for reference only.)

```

01 CREATE AVAILABILITY GROUP Group1
02 FOR DATABASE AdventureWorks2012
03 REPLICA ON 'SecondaryServer'
04 WITH(
05     ENDPOINT_URL = 'TCP://SecondaryServer:5022',
06     ...
07 );

```

You need to implement an AlwaysOnAvailability Group that will meet the following conditions:

Production transactions should be minimally affected.

The secondary server should allow reporting queries to be performed.

If the primary server goes offline, the secondary server should not automatically take over.

Which Transact-SQL statement should you insert at line 06?

- A. AVAILABILITY_MODE = SYNCHRONOUS_COMMIT,FAILOVER_MODE = MANUALSECONDARY_ROLE (ALLOW_CONNECTIONS = READ_ONLY,READ_ONLY_ROUTING_URL = 'TCP://SecondaryServer:1433')PRIMARY_ROLE (ALLOW_CONNECTIONS = READ_WRITE,READ_ONLY_ROUTING_LIST = NONE)
- B. AVAILABILITY_MODE = SYNCHRONOUS_COMMIT,FAILOVER_MODE = MANUALSECONDARY_ROLE (ALLOW_CONNECTIONS = READ_ONLY,READ_ONLY_ROUTING_URL = 'TCP://SecondaryServer:1433')
- C. AVAILABILITY_MODE = ASYNCHRONOUS_COMMIT,FAILOVER_MODE = MANUALSECONDARY_ROLE (ALLOW_CONNECTIONS = READ_ONLY,READ_ONLY_ROUTING_URL = 'TCP://SecondaryServer:1433')
- D. AVAILABILITY_MODE = ASYNCHRONOUS_COMMIT,FAILOVER_MODE = MANUALSECONDARY_ROLE (ALLOW_CONNECTIONS = YES,READ_ONLY_ROUTING_URL = 'TCP://SecondaryServer:1433')

Answer: C

Explanation:

References: <https://msdn.microsoft.com/en-us/library/hh213002.aspx>

Question: 116

DRAG DROP

You are a database administrator for a Microsoft SQL Server 2012 environment that contains two SQL Server instances named Server01 and Server02. The Contoso database is located on Server01. Through database mirroring, a copy of the Contoso database is on Server02.

During the last manual failover of database mirroring, the recovery took longer than usual.

You need to determine where the synchronization bottleneck is for the database mirroring topology.

Which performance counter or counters should you use for each server? (To answer, drag the appropriate performance counter or counters to their corresponding server or servers in the answer area.)

- a. Answer choices may be used once, more than once, or not at all. Answer targets may be used once or not at all. Additionally, you may need to drag the split bar between panes or scroll to view content.)

Performance Counter	Server
Log Send Queue KB	Server01
Redo Queue KB	Server02
Output Queue Length	
Processor Queue Length	

Answer:

Server01 Log Send Queue KB

Server02 Redo Queue KB

Question: 117

You administer two Microsoft SQL Server servers named ProdSrv1 and ProdSrv2. ProdSrv1 is configured as a Distributor. Both servers are configured to use the Windows NT Service virtual accounts for all SQL Services. You are configuring snapshot replication from ProdSrv1 to ProdSrv2 by using ProdSrv2 as a pull subscriber. The distribution agent on ProdSrv2 regularly fails, displaying the following error message: "Cannot access the file. Operating system error code 5 (Access is denied.)." You need to configure the distribution agent by granting only the minimum required access to all accounts. What should you do?

- A. Configure the SQL Server service on ProdSrv2 to use the Local System account.
- B. Configure the SQL Server Agent service to run under a Windows domain account. Configure the Subscriber to use the SQL Server Agent service account. Grant EXECUTE permissions on xp_cmdshell to the Windows domain account.
- C. Configure the Subscriber to use a Windows domain account. Grant READ access for the domain account to the ReplData share on ProdSrv1.
- D. Grant EXECUTE permission on xp_cmdshell to the [NT SERVICE\SQLSERVERAGENT] account.

Answer: C

Question: 118

You are a database administrator for a Microsoft SQL Server environment. You want to deploy a new application that will scale out the workload to at least five different SQL Server instances. You need to ensure that for each copy of the database, users are able to read and write data that will then be synchronized between all of the database instances. Which feature should you use?

- A. snapshot replication
- B. peer-to-peer replication
- C. database audits
- D. failover clustering

Answer: B

Explanation:

Peer-to-peer replication provides a scale-out and high-availability solution by maintaining copies of data across multiple server instances, also referred to as nodes. Built on the foundation of transactional replication, peer-to-peer replication propagates transactionally consistent changes in near real-time. This enables applications that require scale-out of read operations to distribute the reads from clients across multiple nodes. Because data is maintained across the nodes in near real-time, peer-to-peer replication provides data redundancy, which increases the availability of data.

Although peer-to-peer replication enables scaling out of read operations, write performance for the topology is like that for a single node.

References: <https://docs.microsoft.com/en-us/sql/relational-databases/replication/transactional/peer-to-peer-transactional-replication>

Question: 119

You administer a Microsoft SQL Server instance that has multiple databases. You have a two-node SQL Server failover cluster. The cluster uses a storage area network (SAN).

You discover I/O issues. The SAN is at capacity and additional disks cannot be added.
You need to reduce the I/O workload on the SAN at a minimal cost.
What should you do?

- A. Move user databases to a local disk.
- B. Expand the tempdb data and log files
- C. Modify application code to use table variables
- D. Move the tempdb files to a local disk

Answer: D

Question: 120

You administer a Microsoft SQL Server database that includes a table named Application.Events. Application.Events contains millions of records about user activity in an application.
Records in Application.Events that are more than 90 days old are purged nightly. When records are purged, table locks are causing contention with inserts.
You need to be able to modify Application.Events without requiring any changes to the applications that utilize Application.Events.
Which type of solution should you use?

- A. Partitioned tables
- B. Online index rebuild
- C. Change data capture
- D. Change tracking

Answer: A

Question: 121

DRAG DROP
You administer a Microsoft SQL Server instance.
An application executes a large volume of dynamic queries.
You need to reduce the amount of memory used for cached query plans.
Which three 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.)

Actions

```
EXEC sp_configure 'ad hoc distributed queries' , 1
```

```
EXEC sp_configure
'optimize
for ad hoc workloads' , 1
```

```
EXEC sp_configure 'show advanced options' , 1;
RECONFIGURE
```

```
EXEC sp_updatestats
```

```
EXEC sp_configure
'recovery
interval' , 75
```

```
RECONFIGURE
```

```
DBCC DROPCLEANBUFFERS
```

Answer Area**Answer:****Answer Area**

```
EXEC sp_configure 'show advanced options' , 1;
RECONFIGURE
```

```
EXEC sp_configure 'optimize
for ad hoc workloads' , 1
```

```
RECONFIGURE
```

Box 1: EXEC sp_configure 'show advanced options', 1; RECONFIGURE

Box 2: sp_CONFIGURE 'optimize for ad hoc workloads',1

Box 3: RECONFIGURE

SQL SERVER – 2008 – Optimize for Ad hoc Workloads – Advance Performance Optimization

Every batch (T-SQL, SP etc) when ran creates execution plan which is stored in system for re-use. Due to this reason a large number of query plans are stored in system. However, there are plenty of plans which are only used once and have never re-used again. One time ran batch plans wastes memory and resources.

Let us now enable the option of optimizing ad hoc workload. This feature is available in all the versions of SQL Server 2008.

sp_CONFIGURE 'show advanced options',1

```
RECONFIGURE  
GO  
sp_CONFIGURE 'optimize for ad hoc workloads',1  
RECONFIGURE  
GO
```

SQL Server 2008 has feature of optimizing ad hoc workloads.

References: <https://blog.sqlauthority.com/2009/03/21/sql-server-2008-optimize-for-ad-hoc-workloads-advanced-performance-optimization/>

Question: 122

HOTSPOT

You administer a Microsoft SQL Server 2012 database instance.

The instance is running on a server with the following configuration:

1 TB RAM

SAN storage for database and log files

4 quad-core processors

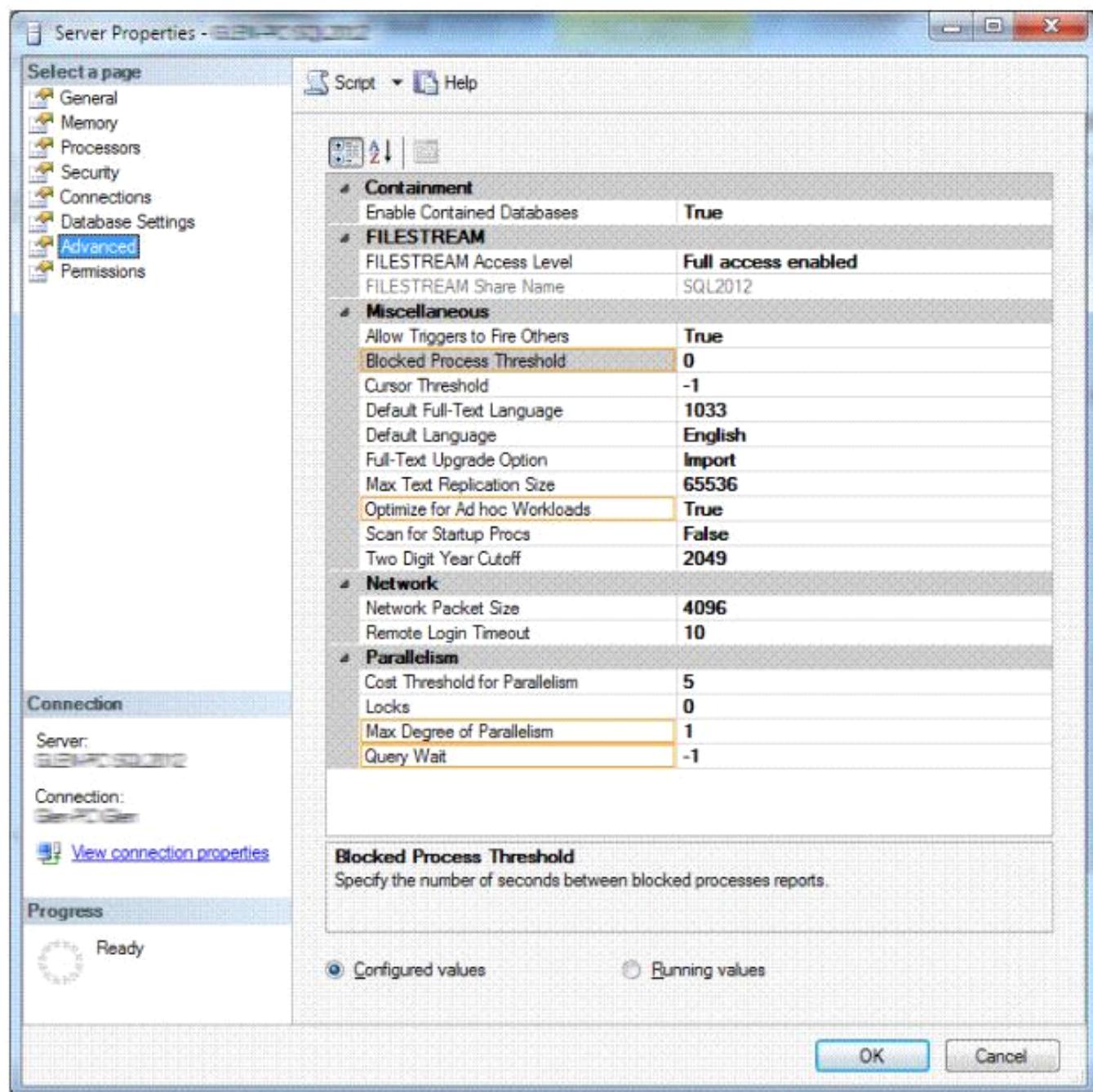
64-Bit Windows 2008 R2 operating system

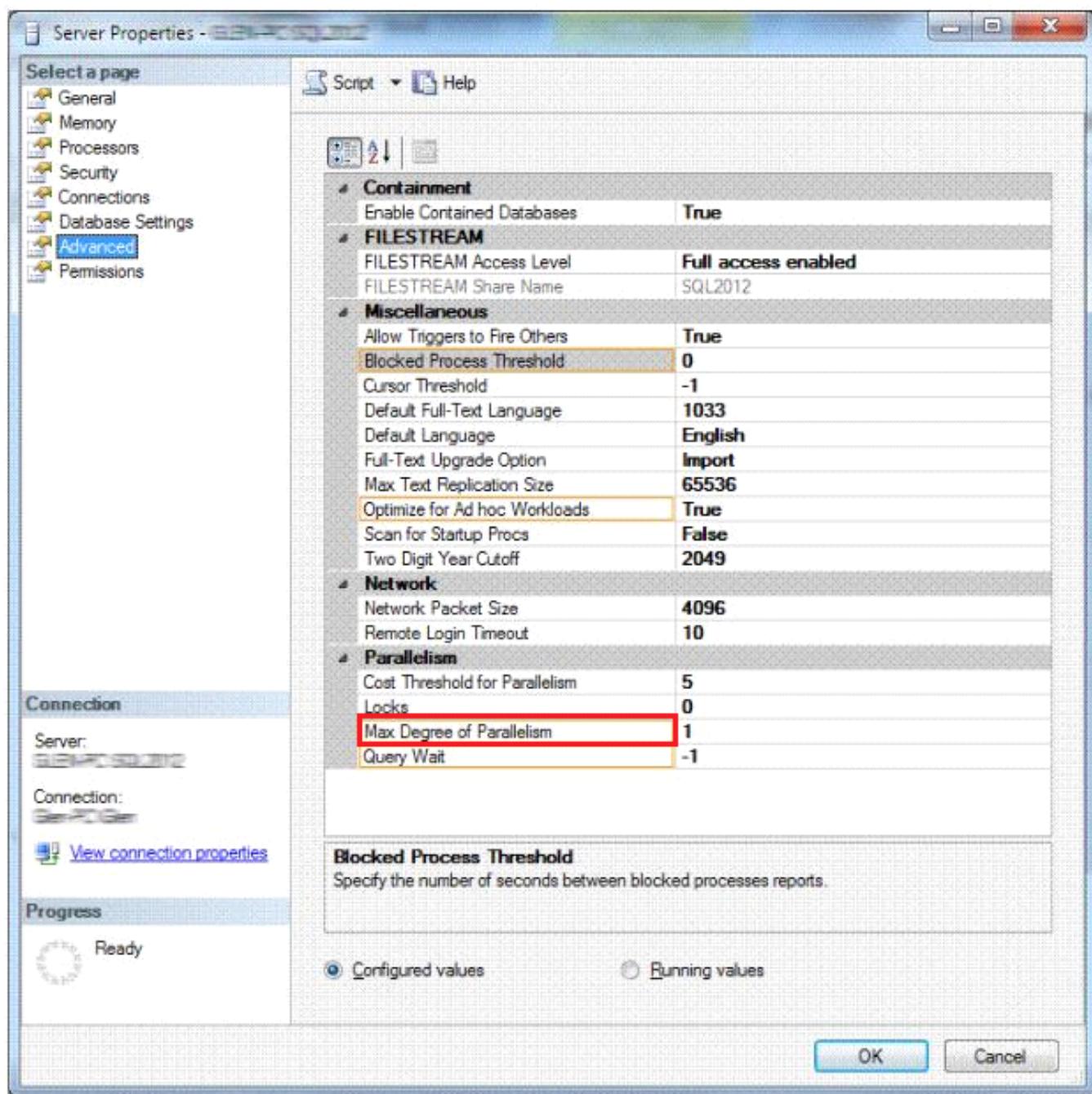
This instance hosts a database with large partitioned tables. Users report that complex queries are taking a long time to complete.

While troubleshooting, you discover that CPU utilization is low (less than 20 percent), disk activity is low (little or no waiting processes), and no significant blocking is occurring.

You need to ensure that the instance can process queries as quickly and efficiently as possible.

Which setting should you configure?

**Answer:**



Question: 123

You administer a Microsoft SQL Server 2012 environment. One of the SQL Server 2012 instances contains a database named Sales.

You plan to migrate Sales to Microsoft Azure SQL Database.

To do so, you need to implement a contained database.

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

- A. Set database containment to AZURE.
- B. Enable server property contained database authentication.
- C. Disable server property cross db ownership chaining.
- D. Set database containment to PARTIAL.
- E. Disable server property contained database authentication.

F. Set database containment to FULL.

Answer: B,D

Question: 124

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

You need to track all SELECT statements issued in the Contoso database only by users in a role named Sales.

What should you create?

- A. An Alert
- B. A Resource Pool
- C. An Extended Event session
- D. A Server Audit Specification
- E. A SQL Profiler Trace
- F. A Database Audit Specification
- G. A Policy
- H. A Data Collector Set

Answer: F

Question: 125

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

You need to collect data for a long period of time to troubleshoot wait statistics when querying Contoso. You also need to ensure minimum impact to the server.

What should you create?

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

Answer: C

Question: 126

You plan to install Microsoft SQL Server 2012 for a web hosting company.

The company plans to host multiple web sites, each supported by a SQL Server database.

You need to select an edition of SQL Server that features backup compression of databases, basic data integration features, and low total cost of ownership.

Which edition should you choose?

- A. Express Edition with Tools
- B. Standard Edition
- C. Web Edition

D. Express Edition with Advanced Services

Answer: B

Question: 127

You plan to install a Microsoft SQL Server 2012 instance.

The instance will support a database that has the following requirements:

Store Excel workbooks on the file system.

Access the workbooks through Transact-SQL.

Include the workbooks in database backups.

During installation, you need to ensure that the requirements will be met.

Which feature should you use?

- A. Excel Services
- B. FILESTREAM
- C. SQL Server Integration Services (SSIS)
- D. OpenXML

Answer: B

Question: 128

You administer a Microsoft SQL Server 2012 instance named SQL2012. You are in the process of migrating a database from a SQL Server 2008 instance named SQL2008 to the SQL2012 instance.

You have upgraded a database from the SQL2008 instance by using the side-by-side migration technique.

You need to migrate the SQL Server logins from the SQL2008 instance to the SQL2012 instance.

What should you do?

- A. Back up the master database on the SQL2008 instance. Restore the master database on the SQL2012 instance
- B. Use the Transfer Logins task in a Microsoft SQL Server Integrated Services package
- C. Use sp_grantlogin
- D. Use xp_logininfo.

Answer: B

Question: 129

You administer a Microsoft SQL Server database instance. You create a new user named UserA.

You need to ensure that UserA is able to create SQL Server Agent jobs and execute SQL Server Agent jobs owned by UserA

To which role should you add UserA?

- A. RSEexecRole
- B. SQLAgentUserRole
- C. serveradmin
- D. DatabaseMailUserRole

Answer: B

Question: 130

You administer a Microsoft SQL Server database.

You have a SQL Server Agent job instance that runs using the service account. You have a job step within the job that requires elevated privileges.

You need to ensure that the job step can run using a different user account.

What should you use?

- A. a schedule
- B. an alert
- C. an operator
- D. a proxy

Answer: D

Question: 131

You install a Microsoft SQL Server instance.

The instance will store data extracted from two databases running on Microsoft Azure SQL Database.

You hire a data steward to perform interactive data cleansing and ad hoc querying and updating of the data.

You need to ensure that the data steward is given the correct client tools to perform these tasks.

Which set of tools should you install?

- A. SQL Server DATA Tools and Distributed Replay Client
- B. Data Quality Client and SQL Server DATA Tools
- C. Master Data Services and SQL Server Data Tools
- D. Data Quality Client and Distributed Replay Client

Answer: B

Explanation:

Data Quality Client is a standalone application that enables you to perform knowledge management, data quality projects, and administration in one user interface. The application is designed for both data stewards and DQS administrators. It is a stand-alone executable file that performs knowledge discovery, domain management, matching policy creation, data cleansing, matching, profiling, monitoring, and server administration.

SQL Server Data Tools is a modern development tool that you can download for free to build SQL Server relational databases, Azure SQL databases, Integration Services packages, Analysis Services data models, and Reporting Services reports. With SSDT, you can design and deploy any SQL Server content type with the same ease as you would develop an application in Visual Studio.

Incorrect Answers:

A, D: The SQL Server Distributed Replay feature helps you assess the impact of future SQL Server upgrades. You can also use it to help assess the impact of hardware and operating system upgrades, and SQL Server tuning.

C: Master Data Services enables you to manage a master set of your organization's data. You can organize the data into models, create rules for updating the data, and control who updates the data.

References:

- [https://technet.microsoft.com/en-us/library/ff877917\(v=sql.110\).aspx](https://technet.microsoft.com/en-us/library/ff877917(v=sql.110).aspx)
- <https://docs.microsoft.com/en-us/sql/ssdt/download-sql-server-data-tools-ssdt>

Question: 132

You administer a Microsoft SQL Server environment. You purchase a new server and plan to migrate your database from SQL Server 2008 to SQL Server 2012.

You want to evaluate to prepare for possible conflicts and issues that may arise during or after the migration.

Which SQL Server tool should you use?

- A. Distributed Replay
- B. Migration Assistant
- C. Data Tools
- D. Upgrade Advisor

Answer: D

Question: 133

DRAG DROP

You are migrating an OLTP database from Microsoft Azure SQL Database to on-premise. You are planning the installation of a Microsoft SQL Server server failover cluster.

The server has the following partitions:

Disk Subsystem	Storage Location	RAID Level	Capacity
C:	Local	1	100GB
D:	Local SSD	1	128GB
Partition(1)	SAN	10	500GB
Partition(2)	SAN	5	500GB

You install the operating system on the C: drive.

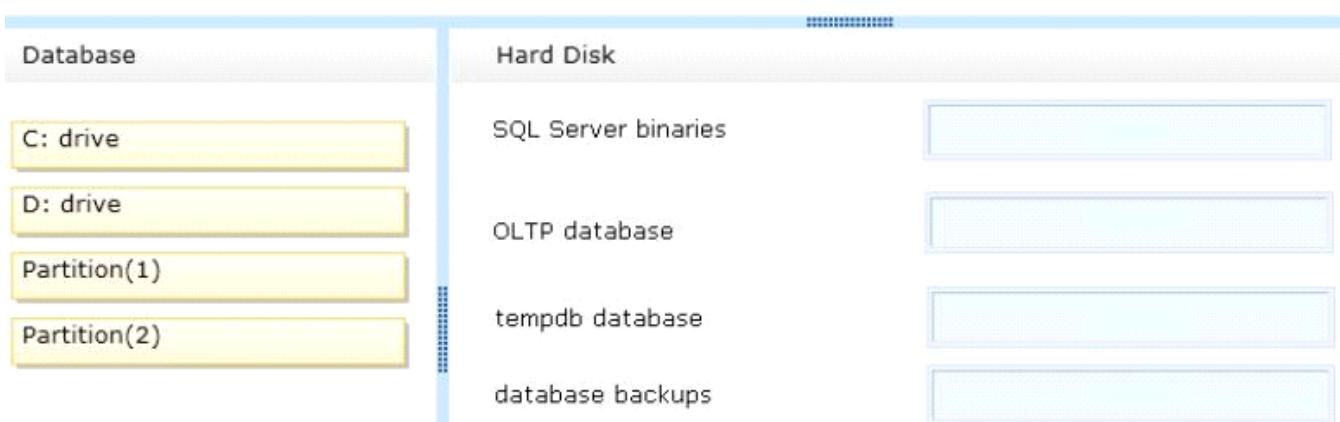
The database solution will use row versioning, triggers, and cursors. The tempdb database cannot be placed on the same disk subsystem as the OLTP database.

The OLTP database needs to be on the fastest disk subsystem possible. The database is currently 200GB in size. It will not substantially increase in size in the next 3 years.

You need to plan the usage of the disk subsystems.

To which hard disk should each database belong? (To answer, drag the appropriate database or databases to their corresponding hard disk or disks in the answer area.)

a. Answer choices may be used once, more than once, or not at all. Answer targets may be used once or not at all. Additionally, you may need to drag the split bar between panes or scroll to view content.)



Answer:

SQL Server binaries

C: drive

OLTP database

Partition(1)

tempdb database

D: drive

database backups

Partition(2)

Question: 134

DRAG DROP

You administer several Microsoft SQL Server 2012 servers.

You want to run scheduled checks to confirm that the databases on the servers are not configured to AutoShrink.

You need to create a policy to check the condition.

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

<p>Create a new condition to check that the Database facet SHRINKDB field is set to TRUE.</p> <p>Create a new condition to check that the Database facet @Autoshrink field is set to FALSE.</p> <p>Create a new policy to check the condition. Set the evaluation mode to On Demand.</p> <p>Create a new policy to check the condition. Set the evaluation mode to Schedule.</p> <p>Create a schedule and enable the policy.</p> <p>Export the schedule, the policy, and the condition to SQL files using the management studio SCRIPT AS... CREATE TO option.</p> <p>Right-click on the policy in Management Studio and select Evaluate.</p>		
--	--	--

Answer:

<p>Create a new condition to check that the Database facet SHRINKDB field is set to TRUE.</p> <p>Create a new condition to check that the Database facet @Autoshrink field is set to FALSE.</p> <p>Create a new policy to check the condition. Set the evaluation mode to Schedule.</p> <p>Create a schedule and enable the policy.</p>
--

The Evaluation Mode defines the combination of 1) when the policy will be evaluated and 2) what the system will do in case of policy violation. The following evaluation modes are supported:

Evaluation Mode	When to Check	Action upon Violation
On Demand	On demand only	Users can choose to configure the system to comply to the policy
On Schedule	Periodically according to the specified schedule	log
On Change – Log only	When there is a relevant (DDL) change to the DBMS	log
On Change – Prevent	When there is a relevant (DDL) change to the DBMS	Roll back the transaction

Question: 135

DRAG DROP

You administer a Microsoft Azure SQL Database database used for data warehouse operations.

The database contains a table named OrdersHistory, defined as follows:

```

CREATE TABLE OrdersHistory
(OrderID bigint NOT NULL,
CustomerID int NOT NULL,
ShippingAddressID int NOT NULL,
OrderDetails varchar (4000) NULL,
ShipDate date NULL)
CREATE NONCLUSTERED INDEX IX_OrdersHistory_OrderID
ON OrdersHistory(OrderID) INCLUDE (CustomerID, OrderDetails)
CREATE NONCLUSTERED INDEX IX_OrdersHistory_CustomerID_OrderID
ON OrdersHistory (CustomerID, OrderID) INCLUDE (OrderDetails)
CREATE NONCLUSTERED INDEX IX_OrdersHistory_Shipdate
ON OrdersHistory (ShipDate) INCLUDE (CustomerID, OrderID)

```

A weekly ETL (extract-transform-load) runs a large INSERT statement to add data into the OrdersHistory table. The process is taking a long time to complete. You discover that the bulk of the process is performing non-clustered index updates on the OrdersHistory table.

You need to improve the performance of the ETL process faster. You need to meet the following requirements:

Use minimal administrative effort.

Avoid losing existing permissions on existing objects.

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

Answer Area

Actions

Replace the INSERT statement with a SELECT INTO statement. Run the SELECT INTO statement.

Run a CREATE INDEX statement for each index.

Run a DROP INDEX statement for each index.

Run the INSERT statement.

Run the following statement:
DROP TABLE OrdersHistory.

Run the following statement:
ALTER INDEX ALL on OrdersHistory DISABLE.

Run the following statement:
ALTER INDEX ALL on OrdersHistory REBUILD.



Answer:

Answer Area

Run the following statement:
ALTER INDEX ALL on OrdersHistory DISABLE.

Run the INSERT statement.

Run the following statement:
ALTER INDEX ALL on OrdersHistory REBUILD.

Step 1: Run the following statement: ALTER INDEX ALL on OrdersHistory DISABLE.

Step 2: Run the INSERT statement.

Step 3: Run the following statement:

ALTER INDEX ALL on OrdersHistory REBUILD

The ALTER INDEX ALL REBUILD statement rebuilds and enables all disabled indexes on the table.

References: <https://docs.microsoft.com/en-us/sql/relational-databases/indexes/disable-indexes-and-constraints>

Question: 136

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

You discover performance issues when complex calculations are performed on large amounts of data under heavy system load.

You need to limit the number of cores that handle the processing.

What should you configure?

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

Answer: B

Question: 137

You are implementing a SQL Server five-node failover cluster.

You need to choose a quorum configuration.

Which configuration should you use?

- A. Distributed file system (DFS)
- B. Cluster Shared Volume (CSV)
- C. Node and Disk Majority
- D. Node Majority

Answer: C

Question: 138

HOTSPOT

You administer two Microsoft SQL Server 2012 databases named Contoso and ContosoWarehouse.

You plan to replicate tables from the Contoso database to the ContosoWarehouse database.

Indexes will be added to the tables in ContosoWarehouse to improve the performance of reports.

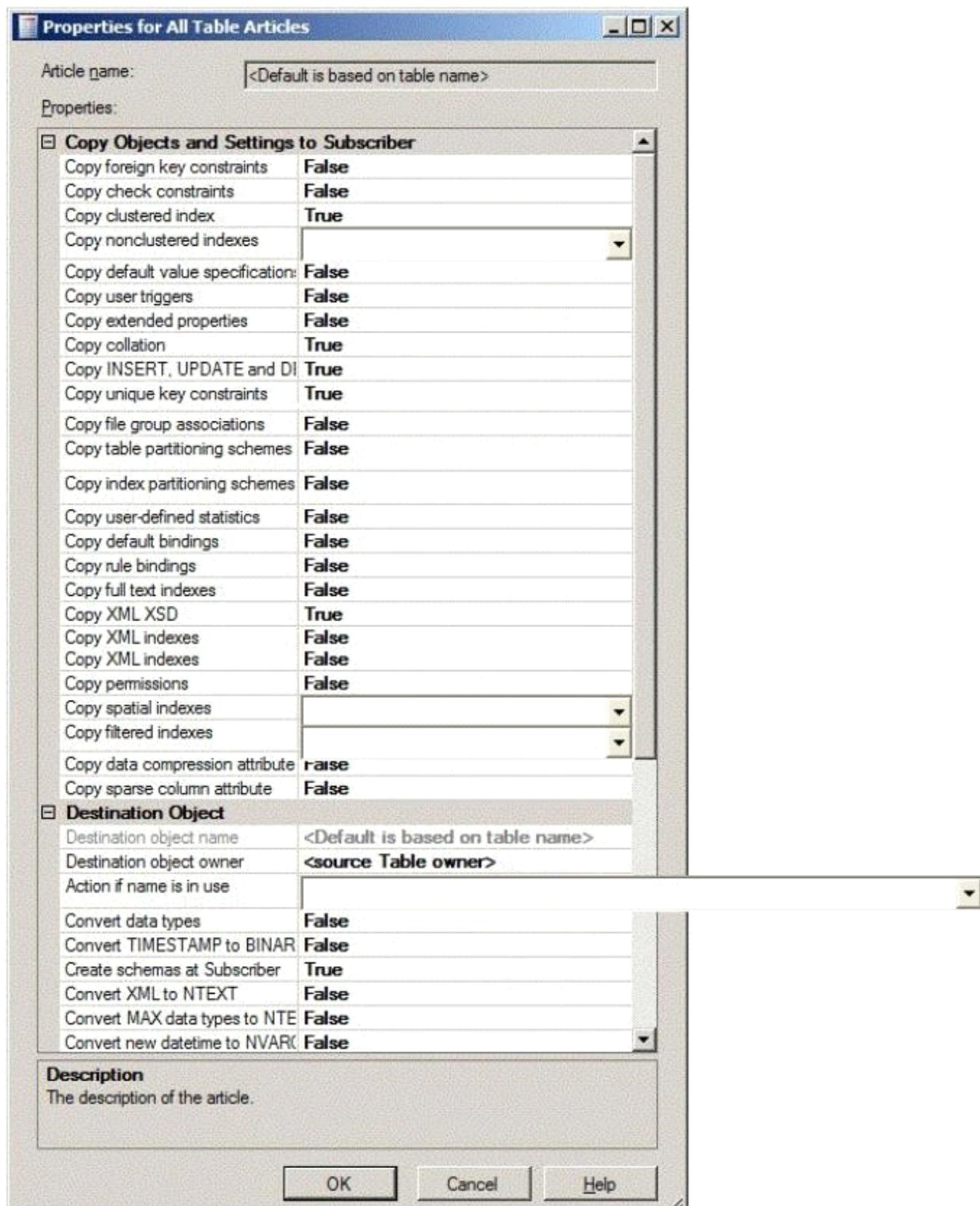
You need to ensure that the following requirements are met:

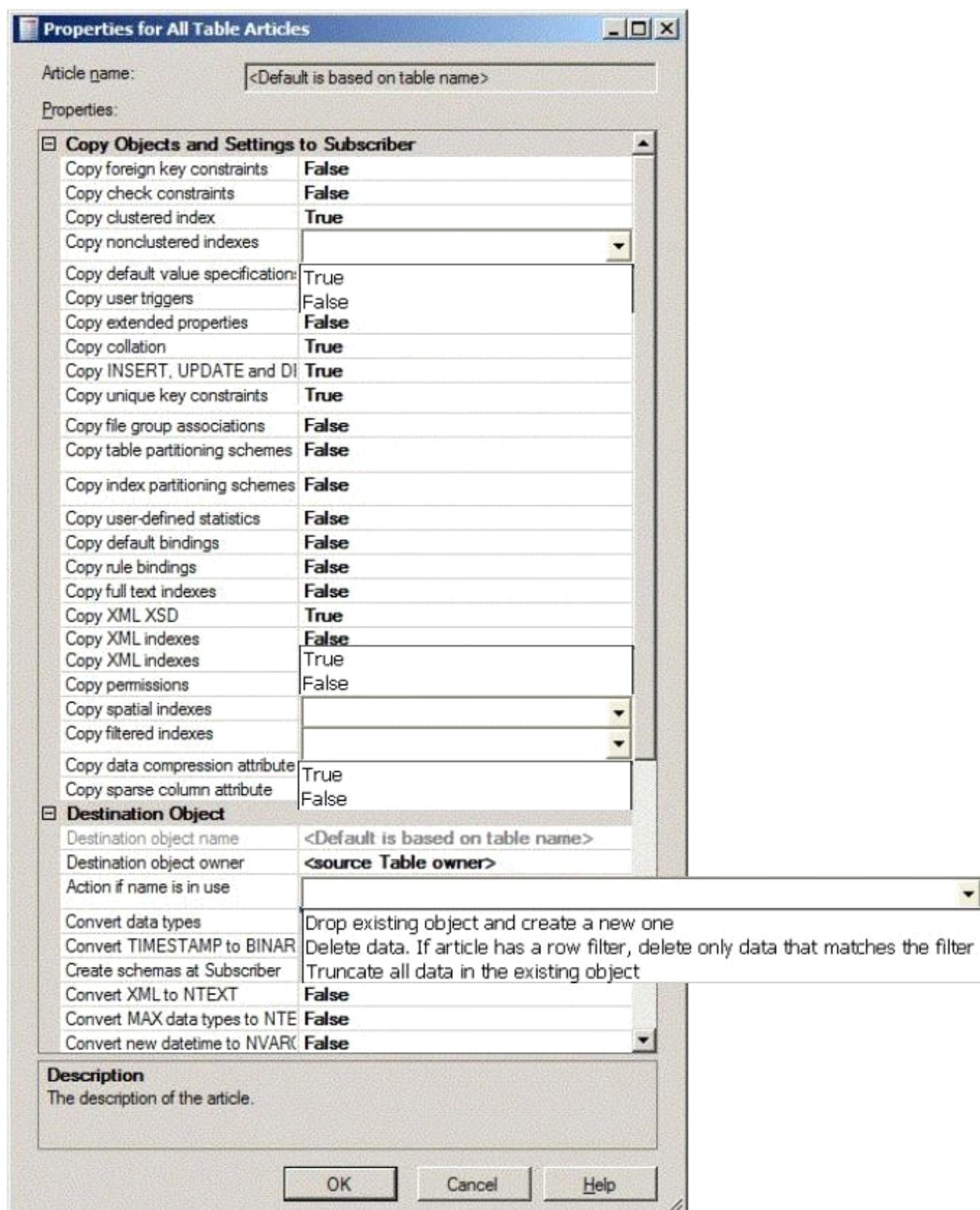
Indexes are not modified when the subscriptions are reinitialized.

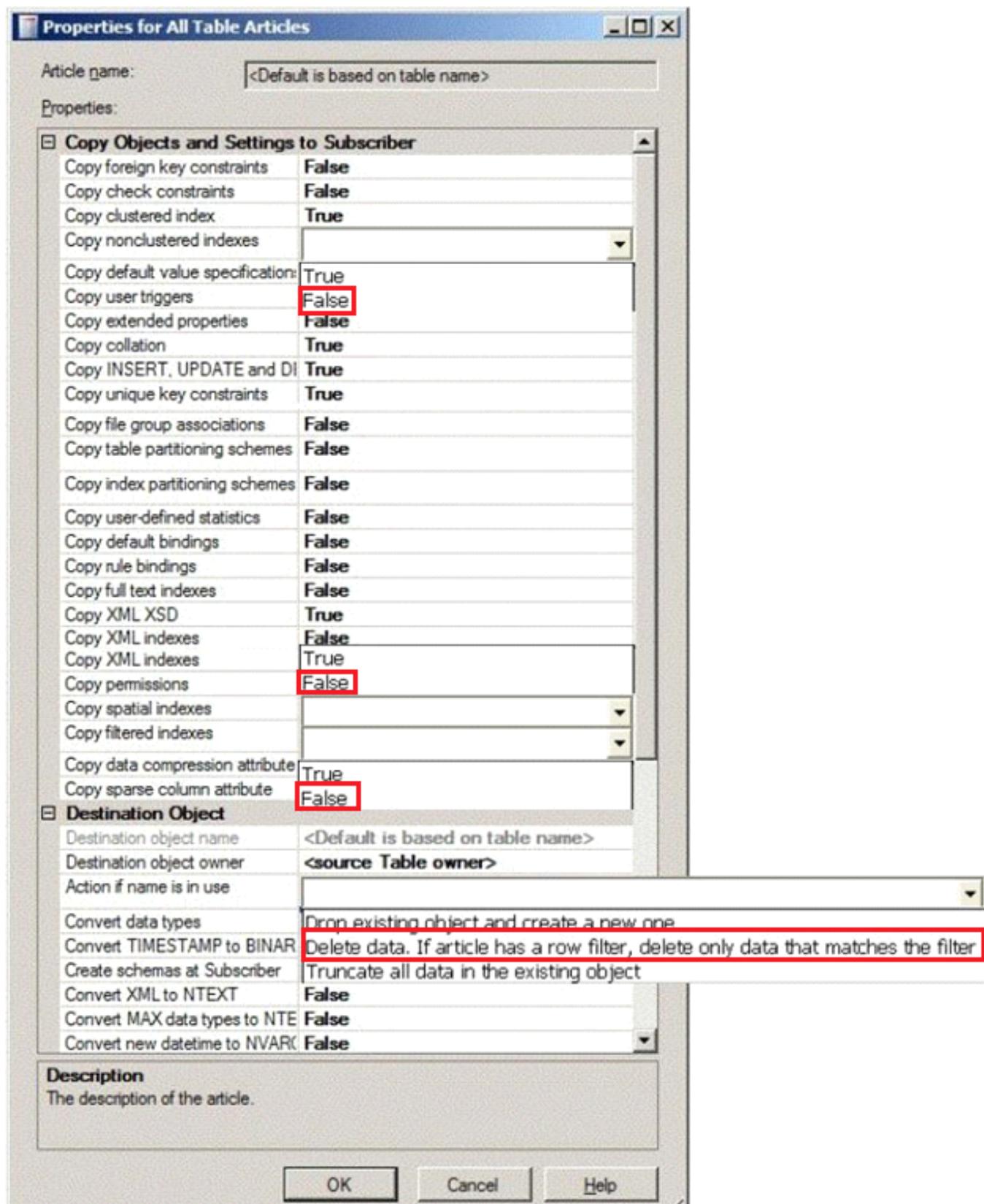
Only the clustered index from Contoso will be replicated.

Minimal transaction log activity during the reinitialization.

What should you do? Choose the correct option(s).



**Answer:**

**Question: 139**

You administer a SQL Server 2012 database instance.

You need to configure the SQL Server Database Engine service on a failover cluster.

Which user account should you use?

- A. The BUILTIN\LocalService account
- B. A domain user
- C. A local administrative user
- D. The BUILTIN\NetworkService account

Answer: B

Question: 140

You administer a Microsoft SQL Server database named Contoso that contains a single user-defined database role named BillingUsers.

All objects in Contoso are in the dbo schema.

You need to grant EXECUTE permissions for all stored procedures in Contoso to BillingUsers.

Which Transact-SQL statement should you use?

- A. GRANT EXECUTE ON Schema::dbo TO BillingUsers
- B. EXEC sp_addrolemember 'db_proceexecutor', 'BillingUsers'
- C. GRANT EXECUTE ON INFORMATION_SCHEMA.ROUTINES TO BillingUsers
- D. GRANT EXECUTE ON Schema::Contoso TO BillingUsers

Answer: A

Explanation:

If you want to do it on schema level:

GRANT EXECUTE ON SCHEMA ::dbo TO

Incorrect:

Not B: DB_Executor is none of the predefined SQL Server database role

Not C, Not D: Incorrect schema.

References: <http://www.sqlservercentral.com/articles/Permissions/107472/>

Question: 141

You have been hired as a Database Consultant by ABC.com to design a SQL Server 2012 database solution.

You are tasked with designing a scale-out and high-availability SQL Server 2012 Online

Transaction Processing (OLTP) database solution that will maintain copies of data across two server instances.

Your solution must provide scale-out of read operations by distributing the reads from clients across two SQL Server 2012 nodes. The data in both SQL Server nodes needs to be indexed.

What should you include in your solution?

- A. You should include a primary database with scheduled log shipping to the secondary database configured.
- B. You should include two servers configured in an Active-Passive SQL Server 2012 Cluster.
- C. You should include a primary SQL Server 2012 database that uses transactional replication to replicate data to the secondary database.
- D. You should include two servers in an Asynchronous-Commit Availability Mode Availability Group.
- E. You should include two servers in a Synchronous-Commit Availability Mode Availability Group.

Answer: E

Question: 142

You are a database developer of a Microsoft SQL Server 2012 database. You are designing a table that will store Customer data from different sources. The table will include a column that contains the CustomerID from the source system and a column that contains the SourceID. A sample of this data is as shown in the following table.

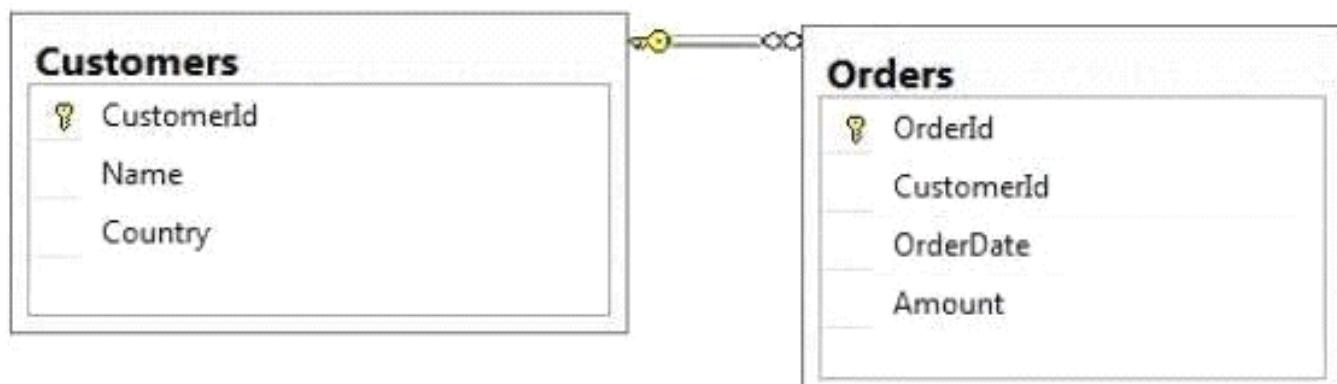
SourceID	CustomerID	Customer Name
1	234	John Smith
3	7345	Jason Warren
3	4402	Susan Burk
2	866	Michael Allen

You need to ensure that the table has no duplicate CustomerID within a SourceID. You also need to ensure that the data in the table is in the order of SourceID and then CustomerID. Which Transact- SQL statement should you use?

- A. CREATE TABLE Customer(SourceID int NOT NULL IDENTITY,CustomerID int NOT NULL IDENTITY,CustomerName varchar(255) NOT NULL);
- B. CREATE TABLE Customer(SourceID int NOT NULL,CustomerID int NOT NULL PRIMARY KEY CLUSTERED,CustomerName varchar(255) NOT NULL);
- C. CREATE TABLE Customer(SourceID int NOT NULL PRIMARY KEY CLUSTERED,CustomerID int NOT NULL UNIQUE,CustomerName varchar(255) NOT NULL);
- D. CREATE TABLE Customer(SourceID int NOT NULL,CustomerID int NOT NULL,CustomerName varchar(255) NOT NULL,CONSTRAINT PK_Customer PRIMARY KEY CLUSTERED(SourceID, CustomerID));

Answer: D**Question: 143**

You administer a Microsoft SQL Server 2012 database named ContosoDb. Tables are defined as shown in the exhibit. (Click the Exhibit button.)



You need to display rows from the Orders table for the Customers row having the CustomerId value set to 1 in the following XML format.

```

<Customers>
  <Name>Customer A</Name>
  <Country>Australia</Country>
  <Orders>
    <OrderId>1</OrderId>
    <OrderDate>2000-01-01T00:00:00</OrderDate>
    <Amount>3400.00</Amount>
  </Orders>
  <Orders>
    <OrderId>2</OrderId>
    <OrderDate>2001-01-01T00:00:00</OrderDate>
    <Amount>4300.00</Amount>
  </Orders>
</Customers>

```

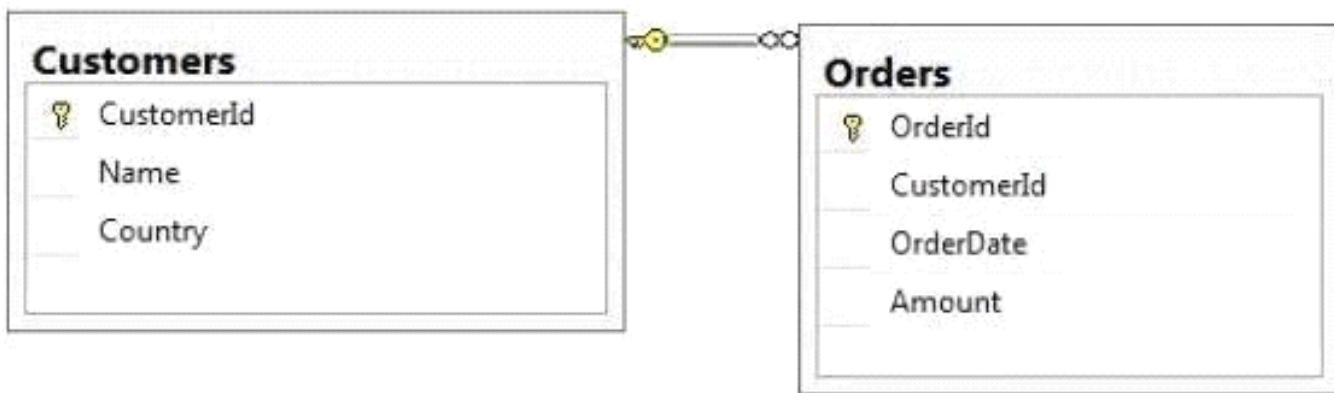
Which Transact-SQL query should you use?

- A. SELECT OrderId, OrderDate, Amount, Name, Country FROM Orders INNER JOIN Customers ON Orders.CustomerId = Customers.CustomerId WHERE Customers.CustomerId = 1 FOR XML RAW
- B. SELECT OrderId, OrderDate, Amount, Name, Country FROM Orders INNER JOIN Customers ON Orders.CustomerId = Customers.CustomerId WHERE Customers.CustomerId = 1 FOR XML RAW, ELEMENTS
- C. SELECT OrderId, OrderDate, Amount, Name, Country FROM Orders INNER JOIN Customers ON Orders.CustomerId = Customers.CustomerId WHERE Customers.CustomerId = 1 FOR XML AUTO
- D. SELECT OrderId, OrderDate, Amount, Name, Country FROM Orders INNER JOIN Customers ON Orders.CustomerId = Customers.CustomerId WHERE Customers.CustomerId = 1 FOR XML AUTO, ELEMENTS
- E. SELECT Name, Country, OrderId, OrderDate, Amount FROM Orders INNER JOIN Customers ON Orders.CustomerId = Customers.CustomerId WHERE Customers.CustomerId = 1 FOR XML AUTO, ELEMENTS
- F. SELECT Name, Country, CrderId, OrderDate, Amount FROM Orders INNER JOIN Customers ON Orders.CustomerId = Customers.CustomerId WHERE Customers.CustomerId = 1 FOR XML AUTO, ELEMENTS
- G. SELECT Name AS '@Name', Country AS '@Country', OrderId, OrderDate, Amount FROM Orders INNER JOIN Customers ON Orders.CustomerId = Customers.CustomerId WHERE Customers.CustomerId = 1 FOR XML PATH ('Customers')
- H. SELECT Name AS 'Customers/Name', Country AS 'Customers/Country', OrderId, OrderDate, Amount FROM Orders INNER JOIN Customers ON Orders.CustomerId = Customers.CustomerId WHERE Customers.CustomerId = 1 FOR XML PATH ('Customers')

Answer: E

Question: 144

You administer a Microsoft SQL Server 2012 database named ContosoDb. Tables are defined as shown in the exhibit. (Click the Exhibit button.)



You need to display rows from the Orders table for the Customers row having the CustomerId value set to 1 in the following XML format.

```

<Customers Name="Customer A" Country="Australia">
    <OrderId>1</OrderId>
    <OrderDate>2000-01-01T00:00:00</OrderDate>
    <Amount>3400.00</Amount>
</Customers>
<Customers Name="Customer A" Country="Australia">
    <OrderId>2</OrderId>
    <OrderDate>2001-01-01T00:00:00</OrderDate>
    <Amount>4300.00</Amount>
</Customers>
  
```

Which Transact-SQL query should you use?

- SELECT OrderId, OrderDate, Amount, Name, Country FROM Orders INNER JOIN Customers ON Orders.CustomerId = Customers.CustomerId WHERE Customers.CustomerId = 1 FOR XML RAW
- SELECT OrderId, OrderDate, Amount, Name, Country FROM Orders INNER JOIN Customers ON Orders.CustomerId = Customers.CustomerId WHERE Customers.CustomerId = 1 FOR XML RAW, ELEMENTS
- SELECT OrderId, OrderDate, Amount, Name, Country FROM Orders INNER JOIN Customers ON Orders.CustomerId = Customers.CustomerId WHERE Customers.CustomerId = 1 FOR XML AUTO
- SELECT OrderId, OrderDate, Amount, Name, Country FROM Orders INNER JOIN Customers ON Orders.CustomerId = Customers.CustomerId WHERE Customers.CustomerId = 1 FOR XML AUTO, ELEMENTS
- SELECT Name, Country, OrderId, OrderDate, Amount FROM Orders INNER JOIN Customers ON Orders.CustomerId = Customers.CustomerId WHERE Customers.CustomerId = 1 FOR XML AUTO
- SELECT Name, Country, OrderId, OrderDate, Amount FROM Orders INNER JOIN Customers ON Orders.CustomerId = Customers.CustomerId WHERE Customers.CustomerId = 1 FOR XML AUTO, ELEMENTS
- SELECT Name AS '@Name', Country AS '@Country', OrderId, OrderDate, Amount FROM Orders INNER JOIN Customers ON Orders.CustomerId = Customers.CustomerId WHERE Customers.CustomerId = 1 FOR XML PATH ('Customers')
- SELECT Name AS 'Customers/Name', Country AS 'Customers/Country', OrderId, OrderDate, Amount FROM Orders INNER JOIN Customers ON Orders.CustomerId = Customers.CustomerId WHERE Customers.CustomerId = 1 FOR XML PATH ('Customers')

Answer: G

Question: 145

You use Microsoft SQL Server 2012 to develop a database application. You need to implement a computed column that references a lookup table by using an INNER JOIN against another table.

What should you do?

- A. Reference a user-defined function within the computed column.
- B. Create a BEFORE trigger that maintains the state of the computed column.
- C. Add a default constraint to the computed column that implements hard-coded values.
- D. Add a default constraint to the computed column that implements hard-coded CASE statements.

Answer: A**Question: 146**

You use a Microsoft SQL Server 2012 database that contains two tables named SalesOrderHeader and SalesOrderDetail. The indexes on the tables are as shown in the exhibit. (Click the Exhibit button.)

The screenshot shows the Object Explorer tree for a database named 'AdventureWorks2012'. Under the 'Tables' node for the 'Sales.SalesOrderDetail' table, the 'Indexes' folder is selected and expanded. It contains two non-clustered indexes: 'AK_SalesOrderDetail_rowguid' (Unique, Non-Clustered) and 'IX_SalesOrderDetail_ProductID' (Non-Unique, Non-Clustered). Under the 'Statistics' folder, there is one entry: 'AK_SalesOrderDetail_rowguid'. The 'Sales.SalesOrderHeader' table also has an 'Indexes' folder, which is expanded to show four non-clustered indexes: 'AK_SalesOrderHeader_rowguid' (Unique, Non-Clustered), 'AK_SalesOrderHeader_SalesOrderNumber' (Unique, Non-Clustered), 'IX_SalesOrderHeader_CustomerID' (Non-Unique, Non-Clustered), and 'IX_SalesOrderHeader_SalesPersonID' (Non-Unique, Non-Clustered).

You write the following Transact-SQL query:

```
SELECT h.SalesOrderID, h.TotalDue, d.OrderQty
FROM Sales.SalesOrderHeader AS h
INNER JOIN Sales.SalesOrderDetail AS d
ON h.SalesOrderID = d.SalesOrderID
WHERE h.TotalDue > 100
AND (d.OrderQty > 5 OR d.LineTotal < 1000.00);
```

You discover that the performance of the query is slow. Analysis of the query plan shows table scans where the estimated rows do not match the actual rows for SalesOrderHeader by using an unexpected index on SalesOrderDetail.

You need to improve the performance of the query.

What should you do?

- A. Use a FORCESCAN hint in the query.
- B. Add a clustered index on SalesOrderId in SalesOrderHeader.
- C. Use a FORCESEEK hint in the query.
- D. Update statistics on SalesOrderId on both tables.

Answer: D

Question: 147

You are a database developer for an application hosted on a Microsoft SQL Server 2012 server. The database contains two tables that have the following definitions:

```
CREATE TABLE Customer
(CustomerID int NOT NULL PRIMARY KEY,
CustomerName varchar(50) NOT NULL)

CREATE TABLE Orders
(OrderID int NOT NULL PRIMARY KEY,
CustomerID int NOT NULL FOREIGN KEY REFERENCES Customer (CustomerID),
OrderAmount money NOT NULL,
ShippingCountry varchar(50) NOT NULL)
```

Global customers place orders from several countries. You need to view the country from which each customer has placed the most orders.

Which Transact-SQL query do you use?

- A. SELECT c.CustomerID, c.CustomerName, o.ShippingCountry FROM Customer c INNER JOIN (SELECT CustomerID, ShippingCountry, RANK() OVER (PARTITION BY CustomerID ORDER BY COUNT(OrderAmount) DESC) AS Rnk) FROM Orders GROUP BY CustomerID, ShippingCountry) AS o ON c.CustomerID = o.CustomerID WHERE o.Rnk = 1
- B. SELECT c.CustomerID, c.CustomerName, o.ShippingCountry FROM (SELECT c.CustomerID, c.CustomerName, o.ShippingCountry, RANK() OVER (PARTITION BY CustomerID ORDER BY COUNT(o.OrderAmount) ASC) AS Rnk) FROM Customer c INNER JOIN Orders o ON c.CustomerID = o.CustomerID GROUP BY c.CustomerID, c.CustomerName, o.ShippingCountry) cs WHERE Rnk = 1
- C. SELECT c.CustomerID, c.CustomerName, o.ShippingCountry FROM Customer c INNER JOIN (SELECT CustomerID, ShippingCountry, RANK() OVER (PARTITION BY CustomerID ORDER BY OrderAmount DESC) AS Rnk) FROM Orders GROUP BY CustomerID, ShippingCountry) AS o ON c.CustomerID = o.CustomerID WHERE o.Rnk = 1

D. SELECT c.CustomerID, c.CustomerName, o.ShippingCountryFROM Customer cINNER JOIN(SELECT CustomerID, ShippingCountry,COUNT(OrderAmount) DESC) AS OrderAmountFROM OrdersGROUP BY CustomerID, ShippingCountry) AS oON c.CustomerID = o.CustomerIDORDER BY OrderAmount DESC

Answer: A

Question: 148

DRAG DROP

You use a Microsoft SQL Server 2012 database. You need to create an indexed view within the database for a report that displays Customer Name and the total revenue for that customer.

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

Order List Title**Answer Choices Title**

```
CREATE VIEW  
Sales.vwCustomerRevenue  
AS  
WITH SCHEMABINDING
```

```
CREATE VIEW  
Sales.vwCustomerRevenue  
WITH SCHEMABINDING  
AS
```

```
SELECT  
O.CustomerID  
, C.CustomerName  
, SUM (O.SubTotal) AS  
Customer Total  
, COUNT_BIG ( * ) AS  
RecCount  
FROM  
Sales.SalesOrderHeader AS  
O  
JOIN Sales.Customer AS C  
ON C.CustomerID =  
O.CustomerID
```

```
GROUP BY  
O.CustomerID  
, C.CustomerName
```

```
GO  
CREATE UNIQUE  
CLUSTERED INDEX  
idx_vwCustomerRevenue  
ON  
Sales.vwCustomerRevenue  
(CustomerID);
```

```
GO  
CREATE UNIQUE INDEX
```

Answer:

Answer Choices Title

```
CREATE VIEW  
Sales.vwCustomerRevenue  
WITH SCHEMABINDING  
AS
```

```
SELECT  
O.CustomerID  
, C.CustomerName  
, SUM (O.SubTotal) AS  
Customer Total  
, COUNT_BIG (*) AS  
RecCount  
FROM  
Sales.SalesOrderHeader AS  
O  
JOIN Sales.Customer AS C  
ON C.CustomerID =  
O.CustomerID
```

```
GROUP BY  
O.CustomerID  
, C.CustomerName
```

```
GO  
CREATE UNIQUE  
CLUSTERED INDEX  
idx_vwCustomerRevenue  
ON
```

Question: 149

You use Microsoft SQL Server 2012 to develop a database application. You need to create an object that meets the following requirements:

Takes an input variable
Returns a table of values
Cannot be referenced within a view
Which object should you use?

- A. Scalar-valued function
- B. Inline function
- C. User-defined data type
- D. Stored procedure

Answer: D

Question: 150

Note: This question is part of a series of questions that use the same set of answer choices. An answer choice may be correct for more than one question in the series.

You administer a SQL Server 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 following requirements are met:

The Sales role does not have the Select permission on the Customers schema.
UserA has the Select permission on the Regions table.
Which Transact-SQL statement should you use?

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

Answer: D

Explanation:

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: 151

You develop a Microsoft SQL Server database that contains a heap named OrdersHistorical.

You write the following Transact-SQL query:

```
INSERT INTO OrdersHistorical  
SELECT * FROM CompletedOrders
```

You need to optimize transaction logging and locking for the statement.
Which table hint should you use?

- A. HOLDLOCK
- B. ROWLOCK
- C. XLOCK
- D. UPDLOCK
- E. TABLOCK

Answer: E

Question: 152

Your database contains a table named Purchases. The table includes a DATETIME column named PurchaseTime that stores the date and time each purchase is made. There is a non-clustered index on the PurchaseTime column. The business team wants a report that displays the total number of purchases made on the current day. You need to write a query that will return the correct results in the most efficient manner.

Which Transact-SQL query should you use?

- A. SELECT COUNT(*)FROM PurchasesWHERE PurchaseTime = CONVERT(DATE, GETDATE())
- B. SELECT COUNT(*)FROM PurchasesWHERE PurchaseTime = GETDATE()
- C. SELECT COUNT(*)FROM PurchasesWHERE CONVERT(VARCHAR, PurchaseTime, 112) = CONVERT(VARCHAR, GETDATE(), 112)
- D. SELECT COUNT(*)FROM PurchasesWHERE PurchaseTime >= CONVERT(DATE, GETDATE())AND PurchaseTime < DATEADD(DAY, 1, CONVERT(DATE, GETDATE()))

Answer: D

Question: 153

You develop a database for a travel application. You need to design tables and other database objects. You need to store media files in several tables. Each media file is less than 1 MB in size.

The media files will require fast access and will be retrieved frequently.

What should you do?

- A. Use the CAST function.
- B. Use the DATE data type.
- C. Use the FORMAT function.
- D. Use an appropriate collation.
- E. Use a user-defined table type.
- F. Use the VARBINARY data type.
- G. Use the DATETIME data type.
- H. Use the DATETIME2 data type.
- I. Use the DATETIMEOFFSET data type.
- J. Use the TODATETIMEOFFSET function.

Answer: F

Question: 154

You develop a database for a travel application. You need to design tables and other database objects. You create a view that displays the dates and times of the airline schedules on a report.

You need to display dates and times in several international formats.

What should you do?

- A. Use the CAST function.
- B. Use the DATE data type.
- C. Use the FORMAT function.
- D. Use an appropriate collation.
- E. Use a user-defined table type.
- F. Use the VARBINARY data type.
- G. Use the DATETIME data type.
- H. Use the DATETIME2 data type.
- I. Use the DATETIMEOFFSET data type.
- J. Use the TODATETIMEOFFSET function.

Answer: C

Question: 155

You have three tables that contain data for vendors, customers, and agents. You create a view that is used to look up telephone numbers for these companies.

The view has the following definition:

```

Create view apt.vwCompanyPhoneList
(Source, CompanyID, CompanyNumber,
 LastName, FirstName, BusinessName, Phone)
as

SELECT 'Customer' as Source
, CustomerID
, CustomerNumber
, CustomerLastName
, CustomerFirstName
, CustomerBusinessName
, Phone
FROM apt.Customer
UNION ALL
SELECT 'Agent' as Source
, AgentID
, AgentNumber
, AgentLastName
, AgentFirstName
, AgentBusinessName
, Phone
FROM apt.Agent
UNION ALL
SELECT 'Vendor' as Source
, VendorID
, VendorNumber
, VendorLastName
, VendorFirstName
, VendorBusinessName
, Phone
FROM apt.Vendor
GO

```

You need to ensure that users can update only the phone numbers by using this view. What should you do?

- Alter the view. Use the EXPAND VIEWS query hint along with each SELECT statement.
- Drop the view. Re-create the view by using the SCHEMABINDING clause, and then create an index on the view.
- Create an AFTER UPDATE trigger on the view.

D. Create an INSTEAD OF UPDATE trigger on the view.

Answer: D

Question: 156

You develop a Microsoft SQL Server 2012 database that contains tables named Employee and Person. The tables have the following definitions:

```
CREATE TABLE [dbo].[Employee] (
    [PersonId] [bigint] NOT NULL,
    [EmployeeNumber] [nvarchar](15) NOT NULL,
    CONSTRAINT [PK_Employee] PRIMARY KEY CLUSTERED
    (
        [PersonId] ASC
    ) ON [PRIMARY]
) ON [PRIMARY]
GO
```

```
CREATE TABLE [dbo].[Person] (
    [Id] [bigint] NOT NULL,
    [FirstName] [nvarchar](25) NOT NULL,
    [LastName] [nvarchar](25) NOT NULL,
    CONSTRAINT [PK_Person] PRIMARY KEY CLUSTERED
    (
        [Id] ASC
    ) ON [PRIMARY]
) ON [PRIMARY]
GO
```

You create a view named VwEmployee as shown in the following Transact-SQL statement.

```

CREATE VIEW [dbo].[VwEmployee]
AS
SELECT
Employee.EmployeeNumber,
Person.FirstName,
Person.LastName,
Person.Id
FROM Employee
INNER JOIN Person
ON Employee.PersonId = Person.Id
GO

```

Users are able to use single INSERT statements or INSERT...SELECT statements into this view. You need to ensure that users are able to use a single statement to insert records into both Employee and Person tables by using the VwEmployee view.

Which Transact-SQL statement should you use?

- A. CREATE TRIGGER TrgVwEmployeeON VwEmployeeFOR INSERTASBEGININSERT INTO Person(Id, FirstName, LastName)SELECT Id, FirstName, LastName, FROM insertedINSERT INTO Employee(PersonId, EmployeeNumber)SELECT Id, EmployeeNumber FROM insertedEND
- B. CREATE TRIGGER TrgVwEmployeeON VwEmployeeINSTEAD OF INSERTASBEGININSERT INTO Person(Id, FirstName, LastName)SELECT Id, FirstName, LastName, FROM insertedINSERT INTO Employee(PersonId, EmployeeNumber)SELECT Id, EmployeeNumber FROM insertedEND
- C. CREATE TRIGGER TrgVwEmployeeON VwEmployeeINSTEAD OF INSERTASBEGINDECLARE @ID INT, @FirstName NVARCHAR(25),@LastName NVARCHAR(25), @PersonID INT,@EmployeeNumber NVARCHAR(15)SELECT @ID = ID, @FirstName = FirstName,@LastName = LastName, @EmployeeNumber = EmployeeNumberFROM insertedINSERT INTO Person(Id, FirstName, LastName)VALUES(@ID, @FirstName, @LastName)INSERT INTO Employee(PersonID, EmployeeNumber)VALUES(@PersonID, @EmployeeNumberEND
- D. CREATE TRIGGER TrgVwEmployeeON VwEmployeeINSTEAD OF INSERTASBEGININSERT INTO Person(Id, FirstName, LastName)SELECT Id, FirstName, LastName FROM VwEmployeeINSERT INTO Employee(PersonID, EmployeeNumber)SELECT Id, EmployeeNumber FROM VwEmployeeEND

Answer: B

Question: 157

You develop a Microsoft SQL Server 2012 database. You create a view from the Orders and OrderDetails tables by using the following definition.

You need to improve the performance of the view by persisting data to disk.

What should you do?

- A. Create an INSTEAD OF trigger on the view.
- B. Create an AFTER trigger on the view.
- C. Modify the view to use the WITH VIEW_METADATA clause.
- D. Create a clustered index on the view.

Answer: D

Question: 158

Your database contains tables named Products and ProductsPriceLog. The Products table contains columns named ProductCode and Price. The ProductsPriceLog table contains columns named ProductCode, OldPrice, and NewPrice. The ProductsPriceLog table stores the previous price in the OldPrice column and the new price in the NewPrice column.

You need to increase the values in the Price column of all products in the Products table by 5 percent.

You also need to log the changes to the ProductsPriceLog table.

Which Transact-SQL query should you use?

- A. UPDATE Products SET Price = Price * 1.05OUTPUT inserted.ProductCode, deleted.Price, inserted.PriceINTO ProductsPriceLog(ProductCode, OldPrice, NewPrice)
- B. UPDATE Products SET Price = Price * 1.05OUTPUT inserted.ProductCode, inserted.Price, deleted.PriceINTO ProductsPriceLog(ProductCode, OldPrice, NewPrice)
- C. UPDATE Products SET Price = Price * 1.05OUTPUT inserted.ProductCode, deleted.Price, inserted.Price *INTO ProductsPriceLog(ProductCode, OldPrice, NewPrice)
- D. UPDATE Products SET Price = Price * 1.05INSERT INTO ProductsPriceLog (ProductCode, CldPnce, NewPrice)SELECT ProductCode, Price, Price * 1.05 FROM Products

Answer: A

Question: 159

A table named Profits stores the total profit made each year within a territory. The Profits table has columns named Territory, Year, and Profit. You need to create a report that displays the profits made by each territory for each year and its previous year.

Which Transact-SQL query should you use?

- A. SELECT Territory, Year, Profit,LEAD(Profit, 1, 0) OVER (PARTITION BY Territory ORDER BY Year) AS PrevProfitFROM Profits
- B. SELECT Territory, Year, Profit,LAG(Profit, 1, 0) OVER (PARTITION BY Year ORDER BY Territory) AS PrevProfitFROM Profits
- C. SELECT Territory, Year, Profit,LAG(Profit, 1, 0) OVER (PARTITION BY Territory ORDER BY Year) AS PrevProfitFROM Profits
- D. SELECT Territory, Year, Profit,LEAD(Profit, 1, 0) OVER (PARTITION BY Year ORDER BY Territory) AS PrevProfitFROM Profits

Answer: C

Question: 160

Your database contains a table named SalesOrders. The table includes a DATETIME column named OrderTime that stores the date and time each order is placed. There is a non-clustered index on the OrderTime column. The business team wants a report that displays the total number of orders placed on the current day.

You need to write a query that will return the correct results in the most efficient manner.

Which Transact-SQL query should you use?

- A. SELECT COUNT(*) FROM SalesOrders WHERE OrderTime = CONVERT(DATE, GETDATE())
- B. SELECT COUNT(*) FROM SalesOrders WHERE OrderTime = GETDATE()
- C. SELECT COUNT(*) FROM SalesOrders WHERE CONVERT(VARCHAR, OrderTime, 112) = CONVERT(VARCHAR, GETDATE(), 112)
- D. SELECT COUNT(*) FROM SalesOrders WHERE OrderTime >= CONVERT(DATE, GETDATE()) AND OrderTime < DATEADD(DAY, 1, CONVERT(DATE, GETDATE()))

Answer: D

Question: 161

You use Microsoft SQL Server 2012 to develop a database application. You create a stored procedure named dbo.ModifyData that can modify rows.

You need to ensure that when the transaction fails, dbo.ModifyData meets the following requirements:

Does not return an error

Closes all opened transactions

Which Transact-SQL statement should you use?

- A. BEGIN TRANSACTION BEGIN TRY EXEC dbo.ModifyData COMMIT TRANSACTION END TRY BEGIN CATCH IF @@TRANCOUNT = 0 ROLLBACK TRANSACTION; END CATCH
- B. BEGIN TRANSACTION BEGIN TRY EXEC dbo.ModifyData COMMIT TRANSACTION END TRY BEGIN CATCH IF @@ERROR != 0 ROLLBACK TRANSACTION; THROW; END CATCH
- C. BEGIN TRANSACTION BEGIN TRY EXEC dbo.ModifyData COMMIT TRANSACTION END TRY BEGIN CATCH IF @@TRANCOUNT = 0 ROLLBACK TRANSACTION; THROW; END CATCH
- D. BEGIN TRANSACTION BEGIN TRY EXEC dbo.ModifyData COMMIT TRANSACTION END TRY BEGIN CATCH IF @@ERROR != 0 ROLLBACK TRANSACTION; END CATCH

Answer: D

Question: 162

You are developing a database application by using Microsoft SQL Server 2012. You have a query that runs slower than expected.

You need to capture execution plans that will include detailed information on missing indexes recommended by the query optimizer.

What should you do?

- A. Add a HASH hint to the query.
- B. Add a LOOP hint to the query.
- C. Add a FORCESEEK hint to the query.
- D. Add an INCLUDE clause to the index.
- E. Add a FORCESCAN hint to the Attach query.
- F. Add a columnstore index to cover the query.
- G. Enable the optimize for ad hoc workloads option.
- H. Cover the unique clustered index with a columnstore index.
- I. Include a SET FORCEPLAN ON statement before you run the query.
- J. Include a SET STATISTICS PROFILE ON statement before you run the query.
- K. Include a SET STATISTICS SHOWPLAN_XML ON statement before you run the query.
- L. Include a SET TRANSACTION ISOLATION LEVEL REPEATABLE READ statement before you run the query.
- M. Include a SET TRANSACTION ISOLATION LEVEL SNAPSHOT statement before you run the query.

N. Include a SET TRANSACTION ISOLATION LEVEL SERIALIZABLE statement before you run the query.

Answer: K

Question: 163

You are developing a database application by using Microsoft SQL Server 2012. An application that uses a database begins to run slowly.

You discover that a large amount of memory is consumed by single-use dynamic queries.

You need to reduce procedure cache usage from these statements without creating any additional indexes.

What should you do?

- A. Add a HASH hint to the query.
- B. Add a LOOP hint to the query.
- C. Add a FORCESEEK hint to the query.
- D. Add an INCLUDE clause to the index.
- E. Add a FORCESCAN hint to the Attach query.
- F. Add a columnstore index to cover the query.
- G. Enable the optimize for ad hoc workloads option.
- H. Cover the unique clustered index with a columnstore index.
- I. Include a SET FORCEPLAN ON statement before you run the query.
- J. Include a SET STATISTICS PROFILE ON statement before you run the query.
- K. Include a SET STATISTICS SHOWPLAN_XML ON statement before you run the query.
- L. Include a SET TRANSACTION ISOLATION LEVEL REPEATABLE READ statement before you run the query.
- M. Include a SET TRANSACTION ISOLATION LEVEL SNAPSHOT statement before you run the query.
- N. Include a SET TRANSACTION ISOLATION LEVEL SERIALIZABLE statement before you run the query.

Answer: G

Question: 164

You create a table that has the StudentCode, SubjectCode, and Marks columns to record mid-year marks for students. The table has marks obtained by 50 students for various subjects.

You need to ensure that the top half of the students arranged by their average marks must be given a rank of 1 and the remaining students must be given a rank of 2.

Which Transact-SQL query should you use?

- A. SELECT StudentCode as Code,RANK() OVER (ORDER BY AVG (Marks) DESC) AS ValueFROM StudentMarksGROUP BY StudentCode
- B. SELECT Id, Name, Marks,DENSE_RANK() OVER (ORDER BY Marks DESC) AS RankFROM StudentMarks
- C. SELECT StudentCode as Code,DENSE_RANK() OVER (ORDER BY AVG (Marks) DESC) AS ValueFROM StudentMarksGROUP BY StudentCode
- D. SELECT StudentCode as Code,NTILE (2) OVER (ORDER BY AVG (Marks) DESC) AS ValueFROM StudentMarksGROUP BY StudentCode
- E. SELECT StudentCode AS Code,Marks AS Value FROM (SELECT StudentCode, Marks AS Marks,RANK() OVER (PARTITION BY SubjectCode ORDER BY Marks ASC) AS RankFROM StudentMarks) tmpWHERE Rank = 1
- F. SELECT StudentCode AS Code,Marks AS Value FROM (SELECT StudentCode, Marks AS Marks,RANK() OVER (PARTITION BY SubjectCode ORDER BY Marks DESC) AS RankFROM StudentMarks) tmpWHERE Rank = 1
- G. SELECT StudentCode AS Code,Marks AS Value FROM (SELECT StudentCode, Marks AS Marks,RANK () OVER (PARTITION BY StudentCode ORDER BY Marks ASC) AS RankFROM StudentMarks) tmpWHERE Rank = 1

H. SELECT StudentCode AS Code,Marks AS Value FROM (SELECT StudentCode, Marks AS Marks,RANNO OVER (PARTITION BY StudentCode ORDER BY Marks DESC) AS RankFROM StudentMarks) tmpWHERE Rank = 1

Answer: D

Question: 165

You develop a database for a travel application.
You need to design tables and other database objects.
You create the Airline_Schedules table.
You need to store the departure and arrival dates and times of flights along with time zone information.
What should you do?

- A. Use the CAST function.
- B. Use the DATE data type.
- C. Use the FORMAT function.
- D. Use an appropriate collation.
- E. Use a user-defined table type.
- F. Use the VARBINARY data type.
- G. Use the DATETIME data type.
- H. Use the DATETIME2 data type.
- I. Use the DATETIMEOFFSET data type.
- J. Use the TODATETIMEOFFSET function.

Answer: I

Question: 166

You develop a database for a travel application.
You need to design tables and other database objects.
You create a stored procedure.
You need to supply the stored procedure with multiple event names and their dates as parameters.
What should you do?

- A. Use the CAST function.
- B. Use the DATE data type.
- C. Use the FORMAT function.
- D. Use an appropriate collation.
- E. Use a user-defined table type.
- F. Use the VARBINARY data type.
- G. Use the DATETIME data type.
- H. Use the DATETIME2 data type.
- I. Use the DATETIMEOFFSET data type.
- J. Use the TODATETIMEOFFSET function.

Answer: E

Question: 167

You develop a Microsoft SQL Server 2012 database. The database is used by two web applications that access a table named Products. You want to create an object that will prevent the applications from accessing the table directly while still providing access to the required data.

You need to ensure that the following requirements are met:

Future modifications to the table definition will not affect the applications' ability to access data.

The new object can accommodate data retrieval and data modification.

You need to achieve this goal by using the minimum amount of changes to the applications.

What should you create for each application?

- A. Synonyms
- B. Common table expressions
- C. Views
- D. Temporary tables

Answer: C

Question: 168

DRAG DROP

You want to add a new GUID column named BookGUID to a table named dbo.Book that already contains data. BookGUID will have a constraint to ensure that it always has a value when new rows are inserted into dbo.Book. You need to ensure that the new column is assigned a GUID for existing rows. Which four Transact-SQL statements should you use? (To answer, move the appropriate SQL statements from the list of statements to the answer area and arrange them in the correct order.)

Answer List Title

Ordered List Title

newid()

newguid()

WITH VALUES

WITH EXISTING

CONSTRAINT DF_BookGuid
CHECK

CONSTRAINT DF_BookGuid
DEFAULT

ALTER TABLE dbo.Book ADD
BookGuid Varchar (10) NOT NULL

ALTER TABLE dbo.Book ADD
BookGuid uniqueidentifier (10)
NOT NULL

Answer:

Ordered List Title

ALTER TABLE dbo.Book ADD
BookGuid uniqueidentifier (10)
NOT NULL

CONSTRAINT DF_BookGuid
DEFAULT

newid()

WITH VALUES

Question: 169

DRAG DROP

You create a view based on the following statement:

```
CREATE VIEW dbo.vwItemList
AS
SELECT
    b.BatchID
    , b.MailItemID
    , c.ContractNum
    , c.FirstName + ' ' + c.LastName as ContractName
    , a.Address1
    , a.City + ', ' + a.State + ' ' + a.Zip
FROM BatchLog b
join Contract c on b.MailItemID = c.ContractID
join Address a on a.ContractID = c.ContractID
WHERE
    b.ProcessDate >= dateadd(d, 1, EOMONTH(GETDATE(), -2));
```

You grant the Select permission to User1 for this view. You need to change the view so that it displays only the records that were processed in the month prior to the current month. You need to ensure that after the changes, the view functions correctly for User1. Which four Transact-SQL statements should you use? (To answer, move the appropriate SQL statements from the list of statements to the answer area and arrange them in the correct order.)

Answer List Title

```
DROP VIEW  
dbo.vwlItemList;  
GO  
CREATE VIEW  
dbo.vwlItemList  
AS
```

```
ALTER VIEW  
dbo.vwlItemList  
AS
```

```
WHERE b.ProcessDate >=  
dateadd (d, 1, EOMONTH  
(GETDATE ( ), -2 ))  
AND b.ProcessDate < =  
EOMONTH (GETDATE (), -1)
```

```
WHERE b.ProcessDate > =  
dateadd (d, 1, EOMONTH  
(GETDATE ( ), -2 ))  
AND b.ProcessDate <  
dateadd (d, 1, EOMONTH  
(GETDATE ( ), -1))
```

```
SELECT  
b.BatchID  
, b.BailItemID  
, c.ContractNum  
, c.FirstName + " "  
c.LastName as  
ContractName  
, a.Address1  
, a.City + ', ' + a.State + ''  
+ a.Zip
```

Ordered List Title

```
FROM BatchLog b  
JOIN Contract c ON
```

Answer:**Ordered List Title**

```
ALTER VIEW  
dbo.vwlItemList  
AS
```

```
SELECT  
    b.BatchID  
, b.BailItemID  
, c.ContractNum  
, c.FirstName + " "  
c.LastName as  
ContractName  
, a.Address1  
, a.City + ', ' + a.State + ''  
+ a.Zip
```

```
FROM BatchLog b  
JOIN Contract c ON  
b.MailItemID = c.ContractID  
JOIN Address a ON  
a.ContractID = c.ContractID
```

```
WHERE b.ProcessDate >=  
dateadd (d, 1, EOMONTH  
(GETDATE ( ), -2 ))  
AND b.ProcessDate <=  
EOMONTH (GETDATE (), -1)
```

<http://msdn.microsoft.com/en-us/library/hh213020.aspx>
<http://msdn.microsoft.com/en-us/library/ms186819.aspx>
<http://msdn.microsoft.com/en-us/library/ms173846.aspx>

Question: 170

DRAG DROP

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 from a Windows batch file.

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.)

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

Answer:

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

Question: 171

You work as the Senior Database Administrator (DBA) at ABC.com. The company has a main office and 10 branch offices. Each branch office contains a single database server running Microsoft SQL Server 2012. The main office has multiple clustered servers running Microsoft SQL Server 2012.

Your role includes the management of the entire Microsoft SQL Server 2012 infrastructure.

The company runs a custom application that stores data in a large Microsoft SQL Server 2012 database.

The primary database is hosted in the main office. Each branch office SQL Server hosts a copy of the database.

You need to configure a solution that will replicate the entire primary database from the main office SQL Server every weekend.

What should you include in your solution?

- A. Transactional Replication
- B. Log Shipping
- C. Snapshot Replication
- D. SQL Server Availability Group

Answer: C

Question: 172

You work as a Database Administrator (DBA) at ABC.com. The infrastructure includes servers running Microsoft SQL Server 2012. All databases are hosted on a SAN (Storage Area Network).

You need to design a database solution for a new application.

You are tasked with designing a high-availability database solution.

The solution must include a single copy of the database to save disk space and the database must remain online in the event of a SQL Server failure. What should you include in your solution?

- A. You should include two servers configured as a failover cluster.
- B. You should include two servers and database mirroring.
- C. You should include two servers and log shipping.
- D. You should include two servers configure as a SQL Server Availability Group

Answer: A

Question: 173

You work as a Database Administrator (DBA) at ABC.com. The infrastructure includes servers running Windows Server 2008 R2 and Microsoft SQL Server 2012. The company uses several custom applications that store data in databases on the Microsoft SQL Server 2012 servers.

A full backup of all databases is taken every night at midnight.

A differential backup of all databases is taken on the hour every hour starting at 3am until the last backup at 11pm.

A log backup is taken every 15 minutes for databases configured with the Full Recovery Model.

One application named ABCApp1 stores data in a database named ABCApp1DB.

ABCApp1DB is configured with the Simple Recovery Model. ABCApp1DB fails at 3:25am.

You discover that the last differential backup of ABCApp1DB failed.

You need to restore ABCApp1DB from backup as quickly as possible and minimize data loss.

Which of the following steps should you perform to restore ABCApp1DB? (Choose one or more answers).

- A. Restore the latest full backup.
- B. Restore the latest differential backup
- C. Restore the latest log backup
- D. Restore each differential backup taken since the last full backup.
- E. Restore each log backup since the last full backup.

Answer: A

Question: 174

You administer a database that has User A, B and C.

User A must be able to create new tables and stored procedures, User B must be able to select, update, delete and

insert data.

User C must be able to provide windows logins to the database
To which role or roles should you add to UserA? Select all that apply.

- A. db_accessadmin
- B. db_ddladmin
- C. db_datawriter
- D. db_datareader
- E. db_owner

Answer: B

Explanation:

User A = db_ddladminUser B= db_datawriter, db_datareaderUser C = db_accessadmin

Question: 175

You are planning on deploying a server that will be dedicated for ETL (Extraction, Transformation, and Loading) processes.

You want to ensure that SSIS (SQL Server Integration Services) packages will run on this dedicated ETL server and not on any other server on which they were started.

Which of the following features must you install on the ETL server in addition to SSIS to accomplish this goal?

- A. Database Engine
- B. SQL Server Reporting Services
- C. SQL Server Analysis Services
- D. Client Tools SDK

Answer: A

Question: 176

You have installed the SQL Server Integration Services (SSIS) feature on a server running Windows Server 2008 R2 SP1.
Which of the following features must you install if you want to ensure that you can run packages in 32-bit mode?

- A. Client Tools SDK
- B. Data Quality Client
- C. SQL Server Data Tools
- D. Client Tools Backwards Compatibility

Answer: C

Question: 177

You want to reproduce the same SQL Server 2012 installation configuration across five servers.
Which of the following files will you generate by using SQL Server Setup to accomplish this goal?

- A. Configuration.xml
- B. Setup.ini

- C. Setup.xml
- D. ConfigurationFile.ini

Answer: D

Question: 178

You want to remove SQL Server Integration Services from a server running the Windows Server 2008 R2 operating system that also has the Database Engine and SQL Server Analysis Services installed.
Which of the following tools can you use to accomplish this goal?

- A. SQL Server Management Studio
- B. SQL Server Configuration Manager
- C. Add/Remove Programs in Control Panel
- D. SQL Server Installation Center

Answer: D

Question: 179

You have recently removed a SQL 2012 Database Engine instance from a computer running the Windows Server 2008 R2 operating system. Prior to the removal of the instance, you had configured affinity so that the default instance used CPU 0 and 1 and the second instance used CPU 2 and 3.

You want to ensure that the default instance can use all processors available to the host.

Which of the following commands would you use to accomplish this goal?

- A. ALTER SERVER CONFIGURATION SET PROCESS AFFINITY CPU = AUTO
- B. ALTER SERVER CONFIGURATION SET PROCESS AFFINITY CPU = 2,3
- C. ALTER SERVER CONFIGURATION SET PROCESS AFFINITY CPU = 0,1
- D. ALTER SERVER CONFIGURATION SET PROCESS AFFINITY CPU = 0,4

Answer: A

Question: 180

Which feature should you enable and configure so session requests addressed to a specific instance can be allocated different processor resources based on session request properties?

- A. Resource Governor
- B. Windows System Resource Manager
- C. Processor affinity
- D. I/O affinity

Answer: A

Explanation:

Resource Governor enables you to allocate session requests to different resources based on the characteristics of the session request properties.

Question: 181

You have configured Resource Governor with three resource pools.
You have assigned the first resource pool a minimum CPU and memory value of 20%.
You have assigned the second resource pool a minimum CPU and memory value of 30%.
You want to assign maximum CPU and memory values to the third resource pool.
What is the maximum CPU and memory value you can assign to this resource pool?

- A. 30%
- B. 50%
- C. 70%
- D. 100%

Answer: D

Explanation:

The maximum resource value assigned to the third pool is 100%; the sum of the minimum resource values assigned to the other pools is 50%.

Question: 182

On which of the following operating systems can you deploy the 64-bit version of SQL Server 2012 Enterprise edition? (Choose all that apply.)

- A. Windows 7 Ultimate (x64) edition
- B. Windows Server 2008 R2 SP1 (x64) Standard edition
- C. Windows Server 2008 SP2 (x64) Enterprise edition
- D. Windows Server 2003 R2 (x64) Enterprise edition

Answer: B,C

Question: 183

Which of the following editions of SQL Server 2012 can you run on a computer that is running the Windows 7 Professional (x64) operating system? (Choose all that apply.)

- A. SQL Server 2012 (x64) Developer edition
- B. SQL Server 2012 (x64) Web edition
- C. SQL Server 2012 (x64) Enterprise edition
- D. SQL Server 2012 (x64) Standard edition

Answer: A,D

Question: 184

Which of the following features can you install if you are installing SQL Server 2012 Enterprise edition on a computer running Windows Server 2008 R2 SP1 Enterprise edition in the Server Core configuration? (Choose all that apply.)

- A. Database Engine Services

- B. SQL Server Replication
- C. Analysis Services
- D. Reporting Services

Answer: A,B,C

Question: 185

What is the minimum recommended amount of RAM for SQL Server 2012 Enterprise?

- A. 512 MB
- B. 1 GB
- C. 2 GB
- D. 4 GB

Answer: D

Explanation:

The minimum required is 1 GB, but the minimum recommend is 4 GB.

References: [https://msdn.microsoft.com/en-us/library/ms143506\(v=sql.110\).aspx](https://msdn.microsoft.com/en-us/library/ms143506(v=sql.110).aspx)

Question: 186

You want to simulate read, write, checkpoint, backup, sort, and read-ahead activities for your organization's SQL Server 2012 deployment.

Which of the following tools would you use to accomplish this goal?

- A. SQLIO
- B. SQLIOSim
- C. SQLIOStress
- D. chkdsk

Answer: B

Question: 187

What is the maximum number of SQL Server 2012 Enterprise edition Database Engine instances that you can deploy on a non-clustered server running Windows Server 2008 R2 Enterprise edition?

- A. 10
- B. 25
- C. 50
- D. 100

Answer: C

Question: 188

Note: This question is part of a series of questions that use the same set of answers choices. An answer choice may be

correct for more than one question in the series.

You administer a Microsoft SQL Server 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	<p>Recovery model:</p> <ul style="list-style-type: none"> • Full <p>Backup schedule:</p> <ul style="list-style-type: none"> • 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	<p>Recovery model:</p> <ul style="list-style-type: none"> • Simple <p>Backup schedule:</p> <ul style="list-style-type: none"> • Full database backup: 01:00 hours daily • Differential database backup: 13:00 hours daily <p>Data updates:</p> <ul style="list-style-type: none"> • 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

One of the hard disk drives that stores the reporting database fails at 23:32 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?

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

recent full backup.

Answer: E

Explanation:

To recover the database, you must restore the latest full backup and then restore the latest differential backup.

Question: 189

DRAG DROP

You administer a Microsoft SQL Server 2012 database named Human_Resources.

You need to ensure that all read activity against any object in the Human_Resources database is audited and written to a text file.

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

Actions

Enable Audit and Audit Specification.

Create a new Audit. For destination, select **File**.

Create a new Audit. For destination, select **Security Log**.

Create a new server Audit Specification. For Audit Action Type, select DATABASE_OBJECT_ACCESS_GROUP.

Create a new Database Audit Specification on Human_Resources. For Audit Action Type, select Select, and for Object Class, select Database.

Create a new Database Audit Specification on Human_Resources. For Audit Action Type, select References, and for Object Class, select Database.

Answer Area



Answer:

Create a new Audit. For destination, select File.

Create a new Database Audit Specification on Human_Resources. For Audit Action Type, select Select, and for Object Class, select Database.

Enable Audit and Audit Specification.

The general process for creating and using an audit is as follows.

References:

<https://msdn.microsoft.com/en-us/library/cc280386%28v=sql.110%29.aspx>

<https://msdn.microsoft.com/en-us/library/cc280663%28v=sql.110%29.aspx>

Question: 190

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

You discover performance issues when complex calculations are performed on large amounts of data under heavy system load.

You need to limit the number of cores that process the calculations.

What should you configure?

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

Answer: B

Explanation:

To carry out multitasking, the operating system sometimes moves process threads among different processors. This is efficient from an operating system point of view, but can reduce SQL Server performance under heavy system loads, as each processor cache is repeatedly reloaded with data. Assigning processors to specific threads can improve performance under these conditions by eliminating processor reloads; such an association between a thread and a processor is called processor affinity.

References:

<https://msdn.microsoft.com/en-us/library/ms189629%28v=sql.110%29.aspx>

Question: 191

DRAG DROP

You administer a Microsoft SQL Server database instance that uses transparent database encryption.

You plan to move the database from the current server to a new server by using Backup and Restore.

You need to ensure that the database can be restored to the new server. You also need to ensure that the database remains encrypted at all times.

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.

Actions	Answer Area
Restore the database	▼
Back up the database	>
Restore the Private Key	^
Back up the Private Key	<
Enable transparent database encryption	▼
Disable transparent database encryption	^
Create a new Private Key from the key backup	<
Use the Database Transfer wizard to move the database to new server	▼

Answer:

Answer Area

Back up the Private Key

Back up the database

Restore the Private Key

Restore the database

References:

<http://sqlsailor.com/2011/12/29/tde-transparent-data-encryption-in-sql-server-2012-rc-0/>

Question: 192

DRAG DROP

You are configuring a Microsoft SQL Server server and setting up a new database.

You need to ensure that the following requirements are met:

Provide access to the database for a Windows group named CORP\Employees.

The database can be moved to another server with no additional changes to the security configuration of the database or server.

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

Actions

Create the database and set the Trustworthy setting to **ON**.

Create the database and set the Containment setting to **Partial**.

Create a login named CORP\Employees on the SQL Server instance.

Create a contained database user named CORP\Employees in the database.

Use sp_configure to change the contained database authentication setting to 1.

Create a database user linked to the CORP\Employees login.

Answer Area**Answer:**

Answer Area

Use sp_configure to change the contained database authentication setting to 1.

Create the database and set the Containment setting to **Partial**.

Create a contained database user named CORP\Employees in the database.

References:

<https://msdn.microsoft.com/en-us/library/ff929139%28v=sql.110%29.aspx>
http://www.sqlcoffee.com/SQLServer2012_0009.htm

Question: 193

Which of the following conditions must exist prior to restoring a system database in SQL Server 2012?

- A. The hard drive must be reformatted.
- B. You must detach the user databases from the SQL 2012 instance.
- C. The SQL Server 2012 instance must be started in single-user mode.
- D. The SQL Server 2012 instance must be removed.

Answer: C

Explanation:

References:

[https://msdn.microsoft.com/en-us/library/ms188236\(v=sql.110\).aspx](https://msdn.microsoft.com/en-us/library/ms188236(v=sql.110).aspx)

Question: 194

Which of the following is the default instance name in an SQL Server 2012 installation?

- A. SQLSERVER12
- B. MSSQLSERVER
- C. MSSQL
- D. 2012SQL

Answer: B

Explanation:

References:

[https://msdn.microsoft.com/en-us/library/ms143547\(v=sql.110\).aspx](https://msdn.microsoft.com/en-us/library/ms143547(v=sql.110).aspx)

Question: 195

In which of the following statements about audit information stored in an SQL Server 2012 environment is TRUE?

- A. It is located in a file specified in the File Path property of the Audit.
- B. It is located in the Audit table in the MSDB database.
- C. Each login has an audit record, which is viewable under Logins -> Audit.
- D. SQL 2012 does not store any audit information.

Answer: A

Explanation:

References:

[https://msdn.microsoft.com/en-us/library/cc280525\(v=sql.110\).aspx](https://msdn.microsoft.com/en-us/library/cc280525(v=sql.110).aspx)

Question: 196

Which of the following transaction safety setting in SQL Server 2012 mirroring forces the mirror to be synchronized with the primary at all times?

- A. SAFETY FULL
- B. SAFETY OFF
- C. MIRROR SYNC
- D. MIRROR 100

Answer: A

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/ms189852%28v=sql.110%29.aspx>

Question: 197

Which of the following is a high availability feature with SQL Server 2012?

- A. Clustering
- B. AlwaysOn
- C. Log Shipping
- D. Active-Active

Answer: B

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/ms190202%28v=sql.110%29.aspx>

Question: 198

Which of the following is NOT a pre-defined server role in SQL Server 2012?

- A. securityadmin
- B. serveradmin
- C. sysdba
- D. dbcreator

Answer: C

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/ms188659%28v=sql.110%29.aspx>

Question: 199

Which of the following is required in order for a differential backup to be useful for recovery purposes?

- A. A full backup taken previous to the differential backup.
- B. Hard drive space that is 2 times the size of the database you want to restore.
- C. Less than 1000 database transactions an hour.
- D. A full backup taken after the differential backup.

Answer: A

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/ms175526%28v=sql.110%29.aspx>

Question: 200

Which of the following statements about the tempdb system database is FALSE?

- A. It is a globally available resource for all connected users.
- B. It can hold explicitly or implicitly created database objects.
- C. It must be sized in accordance with the smallest user-database on the machine.
- D. It is created every time the SQL Server instance is restarted.

Answer: C

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/ms190768%28v=sql.110%29.aspx>

Question: 201

You have an index called Employee_IDX on the table Employees. Which of the following will rebuild this index online?

- A. ALTER INDEX Employee_IDX ON Employees REBUILD WITH (ONLINE = ON);
- B. CREATE INDEX Employee_IDX ON Employees REBUILD WITH (ONLINE = ON);
- C. REBUILD ONLINE INDEX Employee_IDX ON Employees;
- D. ALTER INDEX REBUILD ONLINE Employee_IDX;

Answer: A

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/ms177442%28v=sql.110%29.aspx>

Question: 202

Which of the following is a valid data source which you can import into SQL Server 2012?

- A. Oracle data file
- B. .DOC file
- C. Access 2010
- D. Oracle export file

Answer: C

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/ms141209%28v=sql.110%29.aspxv>

Question: 203

Which of the following SQL Server 2012 indexes stores data in a column-wise fashion instead of the traditional row-wise method?

- A. Bitmap Index
- B. Clustered Index
- C. Function-based Index
- D. Columnstore Index

Answer: C

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/gg492088%28v=sql.110%29.aspx>

Question: 204

Which of the following is the default port for an SQL Server database to communicate over?

- A. 1433
- B. 21
- C. 1344
- D. 1521

Answer: A

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/ms177440%28v=sql.110%29.aspx>

Question: 205

Which of the following SQL Server 2012 indexes is ordered independently of the actual physical order of the table data on which the index is based?

- A. CLUSTERED
- B. BITMAP
- C. NONCLUSTERED
- D. IND_ORDERED

Answer: C

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/ms188783%28v=sql.110%29.aspx>

Question: 206

Which of the following files keeps track of all transactions that occur in an SQL Server database?

- A. Transaction Log
- B. Redo Log
- C. Archive Log
- D. Data File

Answer: A

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/ms190925%28v=sql.110%29.aspx>

Question: 207

Which of the following will show you a history of job errors that have occurred in jobs scheduled to run in an SQL Server 2012 installation?

- A. Look at the sys.all_job_hist table.
- B. In Management Studio, navigate to SQL Server Agent -> Error Logs and look at the log for the corresponding date.
- C. Open the c:\error\job.log file and search for the particular job and the errors you wish to view.
- D. You must use T-SQL to write a job-logging procedure to monitor jobs.

Answer: D

Question: 208

Which of the following SQL Server 2012 tools assists DBAs in running and analyzing trace results?

- A. SSIS
- B. SQL Profiler
- C. AlwaysOn
- D. EXP

Answer: B

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/ms187929%28v=sql.110%29.aspx>

Question: 209

Which of the following statements will set the maximum amount of system memory that is managed by the SQL Server Memory Manager to 4GB?

- A. sp_configure 'max memory', 4;
- B. ALTER SYSTEM SET 'max server memory'=4096;
- C. sp_configure 'max server memory', 4;
- D. sp_configure 'max server memory', 4096;

Answer: D

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/ms178067%28v=sql.110%29.aspx>

Question: 210

Which of the following file systems is supported for an SQL Server 2012 installation?

- A. EXT4
- B. NTFS
- C. FAT16
- D. EXT3

Answer: B

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/ms143506%28v=sql.110%29.aspx#storagetypes>

Question: 211

Which of the following is NOT a method of failover for an SQL Server 2012 mirror?

- A. Automatic Failover

- B. Manual Failover
- C. Forced Failover
- D. Intermediate Failover

Answer: D

Question: 212

Which of the following is a disaster recovery solution offered in SQL Server 2012 and involves maintaining a standby copy of a primary database?

- A. AlwaysOn
- B. Log Shipping
- C. Clustering
- D. DataGuard

Answer: A

Question: 213

Which of the following is a prerequisite for an SQL Server 2012 installation?

- A. .NET Framework 3.5 SP1
- B. Visual Basic 6
- C. Internet Explorer 10
- D. SQL Server Integration Services

Answer: A

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/ms143506%28v=sql.110%29.aspx>

Question: 214

Which of the following SQL Server 2012 features generates numeric values at a defined interval and order?

- A. sequence
- B. number table
- C. index
- D. bigint

Answer: A

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/ff878091%28v=sql.110%29.aspx>

Question: 215

Which of the following DBCC commands can you use to check the physical and logical integrity of an SQL Server 2012 database?

- A. CVU
- B. VERIFYINTEGRITY
- C. CHECKINTEGRITY
- D. CHECKDB

Answer: D

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/ms176064%28v=sql.110%29.aspx>

Question: 216

If you are required to move an SQL 2012 database from one server to another, which of the following will do this at the database level?

- A. You just have to mirror the database.
- B. Detach the database, move the database files, and attach the database on the new server.
- C. Use the SQL Server Move Wizard to define the old and new server as well as the scheduled move time.
- D. The database must be created on the new machine and then the data moved with Export/Import.

Answer: B

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/ms187858%28v=sql.110%29.aspx>

Question: 217

Which of the following is a valid upgrade path for SQL Server 2012?

- A. SQL Server 2000 -> SQL Server 2012
- B. SQL Server 2000 -> SQL Server 2005 -> SQL Server 2012
- C. SQL Server 7 -> SQL Server 2012
- D. Oracle 11g -> SQL Server 2012

Answer: B

Explanation:

References:

<https://technet.microsoft.com/en-us/library/ms143393%28v=sql.110%29.aspx>

<https://technet.microsoft.com/en-us/library/ms143393%28v=sql.90%29.aspx>

Question: 218

Which of the following is NOT a valid recovery model for an SQL 2012 database?

- A. ArchiveLog
- B. Simple
- C. Bulk-logged
- D. Full

Answer: A

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/ms189275%28v=sql.110%29.aspx>

Question: 219

Which of the following is NOT a database role that you can assign users in SQL Server 2012?

- A. db_ddladmin
- B. db_owner
- C. db_datawriter
- D. db_databaseadmin

Answer: D

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/ms189121%28v=sql.110%29.aspx>

Question: 220

Every SQL Server 2012 database must have a datafile and which of the following file types associated with it?

- A. log file
- B. index file
- C. transaction log file
- D. instance file

Answer: C

Question: 221

Before moving an SQL Server 2012 database file to a new location, which of the following must first be accomplished?

- A. The database must be set to OFFLINE.
- B. The SQL Server Service must be stopped.
- C. The database must be deleted.
- D. The database must have the “shrink” operation run.

Answer: A

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/ms345483%28v=sql.110%29.aspx>

Question: 222

Which of the following statements will create an index called “SalesDate” on the DATEOFSALE column on the SALES table residing in the WAREHOUSE database?

- A. CREATE INDEX SalesDate ON SALES (DATEOFSALE);
- B. MAKE INDEX SalesDate ON SALES (DATEOFSALE);
- C. CREATE INDEX ON SALES (DATEOFSALE);
- D. CREATE INDEX SalesDate ON SALES +DATEOFSALE;

Answer: A

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/ms188783%28v=sql.110%29.aspx>

Question: 223

Which of the following SQL Server 2012 database is NOT created by default in a new installation?

- A. model
- B. msdb
- C. tempdb
- D. sql
- E. master

Answer: A

Question: 224

If you find that session ID 42 is blocking several other sessions, which of the following will kill that session?

- A. REMOVE 42;
- B. TERMINATE 42;
- C. KILL SESSION 42;
- D. KILL 42;

Answer: D

Explanation:

References

<https://msdn.microsoft.com/en-us/library/ms173730%28v=sql.110%29.aspx>

Question: 225

Which of the following is NOT a hardware requirement for SQL Server 2012?

- A. 6GB of hard drive space
- B. 1GB of memory
- C. 1GHZ CPU speed
- D. a graphics card with 2GB video memory

Answer: D

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/ms143506%28v=sql.110%29.aspx>

Question: 226

Which of the following SQL Server 2012 tools coordinates transactions across SQL Servers in a clustered environment?

- A. SQL Server Profiler
- B. SQL Server Query Optimizer
- C. SQL Server Management Studio
- D. Microsoft Distributed Transaction Coordinator

Answer: D

Explanation:

References:

<http://blogs.msdn.com/b/alwaysonpro/archive/2014/01/15/msdtc-recommendations-on-sql-failover-cluster.aspx>

Question: 227

Which of the following permissions must a user have in order to query all of the built-in Dynamic Management views?

- A. VIEW ALL
- B. SELECT ALL VIEWS
- C. VIEW SERVER INFO
- D. VIEW SERVER STATE

Answer: D

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/ms188754%28v=sql.110%29.aspx>

Question: 228

Which of the following is NOT a potential Cluster resource when configuring clustering in SQL Server 2012?

- A. SQL Server Database Engine Service

- B. SQL Server Agent Service
- C. SQL Server Table Service
- D. All of the above

Answer: D

Question: 229

Which of the following recovery models must be in use for point-in-time recovery to be possible for an SQL Server 2012 database?

- A. Differential
- B. Full
- C. Simple
- D. ArchiveLog

Answer: B

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/ms189275%28v=sql.110%29.aspx>

Question: 230

Which of the following is the default file extension for an SQL Server 2012 backup file?

- A. .rman
- B. .bac
- C. .bak
- D. .db

Answer: C

Question: 231

If you are restoring and recovering a database, which of the following keywords must you specify if you intend to roll forward a transaction log backup after restoring a database?

- A. NOFINISH
- B. NORECOVERY
- C. TRANSACTIONLOG RECOVER
- D. NEXTLOG

Answer: B

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/ms186858%28v=sql.110%29.aspx>

Question: 232

Which of the following Microsoft SQL Server 2012 components is responsible for executing scheduled administrative tasks?

- A. SQL Server Instance
- B. SQL Server Jobs File
- C. SQL Server Agent
- D. SQL Server SSIS

Answer: C

Explanation:

References:

<https://msdn.microsoft.com/en-us/library/ms189237%28v=sql.110%29.aspx>

Question: 233

Which of the following DBCC commands shows optimizer statistics for objects such as tables?

- A. STATS
- B. SHOW_STATISTICS
- C. OBJECT_STATS
- D. OPTIMIZER

Answer: B

Explanation:

References:

<https://technet.microsoft.com/en-us/library/ms174384%28v=sql.110%29.aspx>

Question: 234

DRAG DROP

You administer a database named SalesDb that has users named UserA, UserB, and UserC.

You need to ensure that the following requirements are met:

UserA must be able to provide Windows logins access to the database.

UserB must be able to select, update, delete, and insert data to the database tablets.

UserC must be able to create new tables and stored procedures.

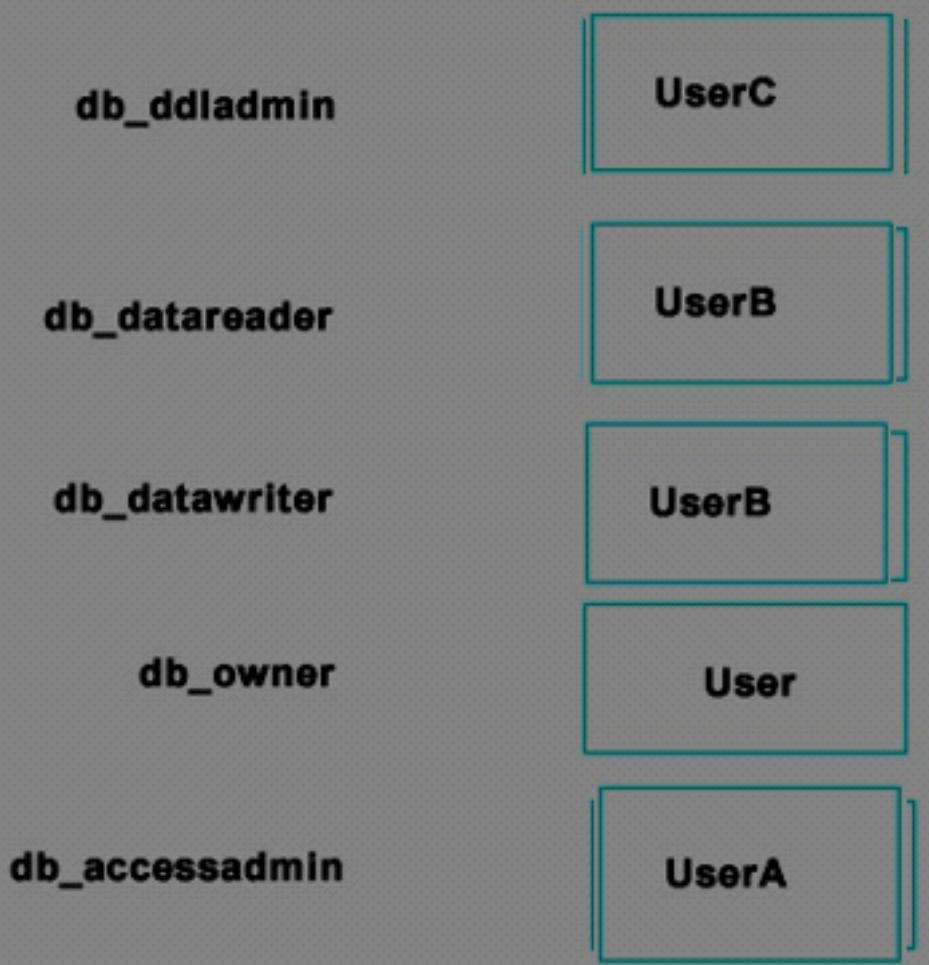
You need to achieve this goal by granting only the minimum permissions required.

To which fixed database role or roles should you add the users? (To answer, drag the appropriate user or users to the correct database role or roles. Answer choices may be used once, more than once, or not at all. Answer targets may be used once or not at all. Additionally, you may need to drag the split bar between panes or scroll to view content.)

Answer Area



Answer:

Answer Area**Fixed Database Role**

UserA: db_accessadmin

Members of the db_accessadmin fixed database role can add or remove access for Windows logins, Windows groups, and SQL Server logins.

UserB: db_datareader, db_datawriter

Members of the db_datareader fixed database role can run a SELECT statement against any table or view in the database.

Members of the db_datawriter fixed database role can add, delete, or change data in all user tables.

UserC: db_ddladmin

Members of the db_ddladmin fixed database role can run any Data Definition Language (DDL) command in a database.

Question: 235

You administer a Microsoft SQL Server database server.

When errors that have severity level of 18 or higher occur, 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. Alerts and operators in SQL Server Agent
- B. An Extended Events session
- C. Policies under Policy-Based Management
- D. SQL Mail

Answer: A

Explanation:

The SQL Server Agent must be configured to use Database Mail to send alerts to an operator via e-mail.

References: <https://blogs.uoregon.edu/shanemcgovern/2015/09/02/database-mail-configuration-wizard-alerts-and-you/>

Question: 236

You have a SQL Server database named DB1.

You plan to load 10 million rows to DB1 by running bcp.exe.

You need to modify DB1 to minimize the amount of space required to store the transaction logs during the load operation. The solution must ensure that you can perform a point-in-time restore.

What data base setting should you modify?

- A. Compatibility level to 120
- B. Recovery model to Bulk logged
- C. Containment type to Partial
- D. Recovery model to Simple

Answer: C

Explanation:

A contained database is a database that is isolated from other databases and from the instance of SQL Server that hosts the database.

Question: 237

DRAG DROP

You have a SQL Server database server that contains a database named CustomerDB. CustomerDB is protected by using transparent data encryption (TDE) and a certificate named TDE_Cert.

The server fails.

You deploy a new server and restore all of the backups to a folder named C:\backups.

You need to restore the database to the new server.

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

Statements**Answer Area**

```

CREATE CERTIFICATE TDE_Cert WITH
SUBJECT = "TDE"

CREATE CERTIFICATE TDE_Cert
FROM FILE = 'c:\backups\TDE_Cert.cer'
DECRYPTION BY PASSWORD - 'MyPassword'

RESTORE DATABASE CustomerDB FROM
DISK = 'C: \backups\CustomerDB.bak'

CREATE MASTER KEY ENCRYPTION BY
PASSWORD- 'MyPassword!'

ALTER DATABASE ENCRYPTION KEY
REGENERATE WITH
AES_256
ENCRYPTION BY SERVER CERTIFICATE
TDE_Cert

```

**Answer:****Answer Area**

```

CREATE MASTER KEY ENCRYPTION BY
PASSWORD- 'MyPassword!'

CREATE CERTIFICATE TDE_Cert
FROM FILE = 'c:\backups\TDE_Cert.cer'
DECRYPTION BY PASSWORD - 'MyPassword'

RESTORE DATABASE CustomerDB FROM
DISK = 'C: \backups\CustomerDB.bak'

```

In order to perform a successful restore, we'll need the database master key in the master database in place and we'll need to restore the certificate used to encrypt the database, but we'll need to make sure we restore it with the private key. In checklist form:

There's a database master key in the master database.

The certificate used to encrypt the database is restored along with its private key.

The database is restored.

Step 1: CREATE MASTER KEY ENCRYPTION BY PASSWORD- 'My Password'

Step 2: Create CERTIFICATE
FROM FILE

DECRYPTION BY PASSWORD

Step 3: RESTORE DATABSE ..

Question: 238

You have a large partitioned fact table in a data warehouse. The table is stored as a clustered index. You need to modify the indexing solution to minimize the amount of disk space required to store the table. What should you do?

- A. Enable row compression for the clustered index.
- B. Enable page compression for the clustered index.
- C. Implement a nonclustered columnstore index.
- D. Implement a clustered columnstore index.

Answer: D

Explanation:

Use a clustered columnstore index for large data warehouse tables.

The clustered columnstore index is more than an index, it is the primary table storage. It achieves high data compression and a significant improvement in query performance on large data warehousing fact and dimension tables. Clustered columnstore indexes are best suited for analytics queries rather than transactional queries, since analytics queries tend to perform operations on large ranges of values rather than looking up specific values.

References: <https://docs.microsoft.com/en-us/sql/relational-databases/indexes/columnstore-indexes-design-guidance>

Question: 239

DRAG DROP

You administer a Microsoft SQL Server database.

Every Sunday afternoon, a process inserts a large volume of data.

- a. Users generate reports and modify additional data throughout the week.

You need to create a backup strategy that:

minimizes the size of the transaction log,

minimizes the size of the backups, and

ensures a 24-hour recovery point objective (RPO).

Which strategy or strategies should you use? (To answer, drag the appropriate strategy or strategies to their corresponding task or tasks in the answer area. Answer choices may be used once, more than once, or not at all. Answer targets may be used once or not at all. Additionally, you may need to drag the split bar between panes or scroll to view content.)

Answer Area

Strategies	Task
FULL recovery model	Recovery Model <i>Strategy</i>
SIMPLE recovery model	Sunday Backup <i>Strategy</i>
BULK_LOGGED recovery model	Nightly Backup <i>Strategy</i>
Full database backup	
Differential database backup	
Transactional log backup	

Answer:

Task

Recovery Model

FULL recovery model

Sunday Backup

Full database backup

Nightly Backup

Transactional log backup

Recovery Model: Full recovery model

Only the Full recovery model provides a 24-hour recovery point objective.

Sunday backup: Full backup

Nightly backup: Transactional log backup

References: <https://docs.microsoft.com/en-us/sql/relational-databases/backup-restore/recovery-models-sql-server>

Question: 240

You administer a Microsoft SQL Server database 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 gather blocking data over an extended period of time. You also need to ensure minimum impact to server performance.

What should you do?

- A. Run the sp_who2 command from a query window and examine the BlkBy column.
- B. 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.
- C. Use sp_configure to set a value for blocked process threshold. Create an extended event session.
- D. 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 ms.
- E. Run the DBCC TRACEON 1222 command from a query window and review the SQL Server event log.

Answer: E

Explanation:

You can track down queries that are causing deadlocks. One solution is using a trace flag to write the deadlock information to the error log. You can implement trace flag 1222 to do just that.

There are two ways to enable global trace flags. You can enable the trace flag when SQL Server starts by using the -

T1222 startup option, or you can use the DBCC TRACEON(1222,-1) command after SQL Server has started.

References:

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

Question: 241

You have a default installation of SQL Server that hosts an Online Transaction Processing (OLTP) application.

Users report that they experience poor overall query performance for the application.

You query the wait statistics and discover that the two top waits are CXPACKET and SOS_SCHEDULER_YIELD.

You need to modify the SQL Server settings to resolve the issue causing the poor query performance.

Which two settings should you modify? Each correct answer presents part of the solution.

- A. max degree of parallelism (MAXDOP)
- B. Minimum Memory
- C. optimize for ad hoc workloads
- D. Boost SQL Server priority
- E. cost threshold for parallelism

Answer: A,E

Explanation:

A: Lower the MAXDOP.

When high CXPACKET values are encountered, a possible issue, even in case when parallelism is evenly distributed, is when the cost of creating the parallel plan is higher than the cost of the serialized thread. This is often something that is overlooked and by the rule of thumb of reaching for altering of the Max Degree of Parallelism (MAXDOP), by setting it to 1 (each and every query will be processed by the single CPU core). Configuring MAXDOP settings to 1 should be the last resource used in troubleshooting excessive CXPACKET wait times.

When a high CXPACKET value is accompanied with a LATCH_XX and with PAGEIOLATCH_XX or SOS_SCHEDULER_YIELD, it is an indicator that slow/inefficient parallelism itself is the actual root cause of the performance issues. And in such a scenario if the LATCH_XX waits is ACCESS_METHODS_DATASET_PARENT or ACCESS_METHODS_SCAN_RANGE_GENERATOR class, then it is highly possible that the parallelism level is the bottleneck and the actual root cause of the query performance issue. This is a typical example when MAXDOP should be reduced.

E: The Cost Threshold for Parallelism (CTFP) value is in seconds and it means that for every query for which SQL Server estimates that running time will be longer than 5 seconds, a parallel plan will be created.

To prevent unwanted parallelism, the CTFP number could be increased and by the aforementioned rule of thumb, a minimum value of 25. Recent analysis indicates that 50 should be the optimal minimal number for modern computers.

References: <https://www.sqlshack.com/troubleshooting-the-cxpacket-wait-type-in-sql-server/>

Question: 242

You administer a Microsoft Azure SQL Database database named Orders.

Users report that a query that filters on OrderDate is taking an exceptionally long time. You discover that an index named IX_OrderDate on the CustomerOrder table is disabled.

You need to ensure that the query can use the IX_OrderDate index.

Which Transact-SQL command should you use?

- A. ALTER INDEX IX_OrderDate ON CustomerOrder DISABLE

- B. ALTER INDEX IX_OrderDate ON CustomerOrder ENABLE
- C. ALTER INDEX IX_OrderDate ON CustomerOrder REORGANIZE
- D. ALTER INDEX IX_OrderDate ON CustomerOrder REBUILD

Answer: B

Explanation:

Enable a disabled index by using the Transact-SQL ALTER INDEX REBUILD command.

Question: 243

DRAG DROP

Your company has a data warehouse that contains all of the sales data for your company. Several business applications read data from the data warehouse.

You plan to deploy an indexing strategy for a 2-TB table named FactSales contains a clustered index.

You need to recommend a solution for index maintenance that meets the following requirements:

Maintenance must be performed only when index fragmentation reaches 50 percent.

Maintenance must minimize the impact on the database reads from the business applications.

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.

Actions

Create a partition function.

Rebuild the clustered index.

Create a partition scheme.

Enable page compression.

Partition the table.

Rebuild the required index partitions.

Answer Area



Answer:

Answer Area

Partition the table.

Create a partition function.

Create a partition scheme.

Rebuild the clustered index.

Step 1: Partition the table

Step 2: Create a partition function

To migrate SQL Server partition definitions to SQL Data Warehouse simply:

Eliminate the SQL Server partition scheme.

Add the partition function definition to your CREATE TABLE.

Step 3: Create a partition scheme

Partitioning requires a partition function and a partition scheme.

Step 4: Rebuild the clustered index

Rebuild the clustered index onto new partition function/scheme.

References:

<https://docs.microsoft.com/en-us/azure/sql-data-warehouse/sql-data-warehouse-tables-partition>

<https://blog.sqlrx.com/2017/02/24/sql-2016-partitioning-an-existing-table-with-a-columnstore-index/>

Question: 244

DRAG DROP

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

You need to enable Transparent Data Encryption.

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.

Actions

Create a master key.

Create a certificate in the user database protected by the 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 a password

Create a database encryption key in the master database and protect it by a password.

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

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

Set the database option to enable encryption.

Answer Area



Answer:

Answer Area

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.

The steps to setup TDE are:

Step 1: Create a master key

We must first create the master key. It must be created in the master database.

Example:

```
USE master;
```

```
GO
```

```
CREATE MASTER KEY ENCRYPTION BY PASSWORD = '<UseStrongPasswordHere>';
```

```
go
```

Step 2: Create or obtain a certificate protected by the master key

Once the master key is created, we will go ahead and create the actual certificate in the master database, not the user database.

Example:

```
CREATE CERTIFICATE MyServerCert WITH SUBJECT = 'My DEK Certificate';
```

```
go
```

```
USE AdventureWorks2012;
```

```
GO
```

Step 3: Create a database encryption key and protect it by the certificate

Now, we must utilize our USE command to switch to the database, the user database, that we wish to encrypt. Then we create a connection or association between the certificate that we just created and the actual database.

Example:

```
USE <DB>
```

```
GO
```

```
CREATE DATABASE ENCRYPTION KEY
```

```
WITH ALGORITHM = AES_256
```

```
ENCRYPTION BY SERVER CERTIFICATE TDE_Cert;
```

```
GO
```

Step 4: Set the database to use encryption

Example:

```
ALTER DATABASE AdventureWorks2012
```

```
SET ENCRYPTION ON;
```

```
GO
```

References:

<https://docs.microsoft.com/en-us/sql/relational-databases/security/encryption/transparent-data-encryption>

Question: 245

You administer a Microsoft SQL Server database named Orders.

Users report that during peak usage periods, certain operations are taking more time than expected. Your initial analysis suggests that blocking is the cause.

You need to gather more data to be able to determine which processes are being blocked and to identify the root cause.

What should you do?

- A. Schedule a SQL Agent job to run every 60 seconds and insert the results of executing the sys.dm_os_wait_stats DMV into a table.
- B. Use System Monitor to catch the Lock Waits/sec event
- C. Use sp_configure to set the blocked process threshold. Start a trace using SQL Server Profiler to catch the Blocked Process Report event.
- D. Start a Trace using SQL Server Profiler to catch the Lock: Deadlock event

Answer: D

Explanation:

The Lock:Deadlock event class is produced when an attempt to acquire a lock is canceled because the attempt was part of a deadlock and was chosen as the deadlock victim.

Use the Lock:Deadlock event class to monitor when deadlocks occur and which objects are involved. You can use this information to determine if deadlocks are significantly affecting the performance of your application. You can then examine the application code to determine if you can make changes to minimize deadlocks.

References: <https://docs.microsoft.com/en-us/sql/relational-databases/event-classes/lock-deadlock-event-class>

Question: 246

HOTSPOT

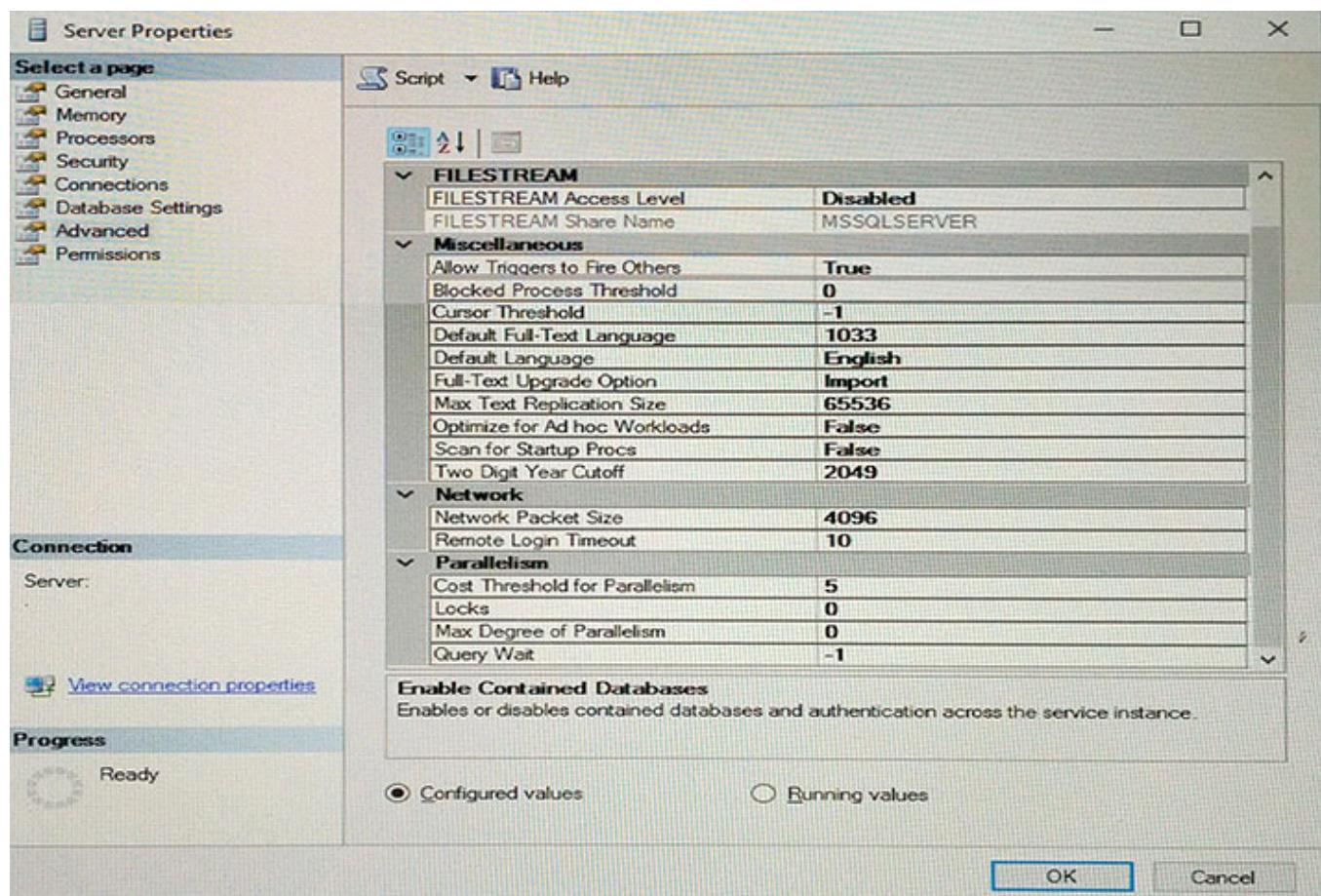
You have a server named SQL1 that has SQL Server 2014 installed. SQL1 has 32 processor cores and 64 GB of RAM.

SQL1 hosts a database used for a public-facing marketing website. SQL1 performs Online Transaction Processing (OLTP) operations only.

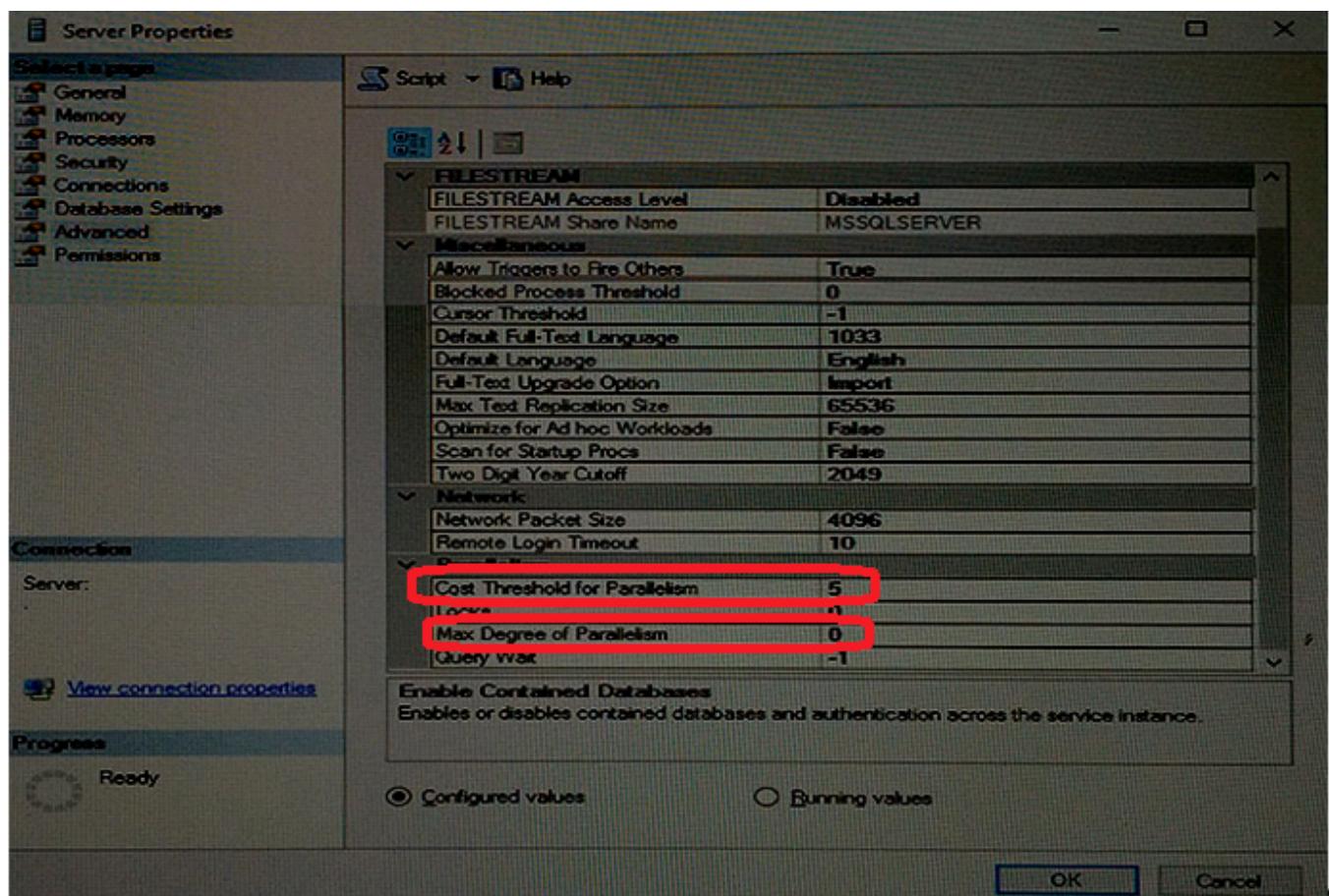
Several of the queries that run on SQL1 use the 32 processor cores and complete in 30 ms.

You need to reduce the number of queries that use multiple cores. The solution must also reduce the number of processor cores used by the queries that require multiple processor cores.

Which two database settings should you modify? To answer, select the appropriate settings in the answer area.



Answer:



Cost Threshold for Parallelism

The cost threshold for parallelism option specifies the threshold at which SQL Server creates and runs parallel plans for queries. SQL Server creates and runs a parallel plan for a query only when the estimated cost to run a serial plan for the same query is higher than the value set in cost threshold for parallelism. The cost refers to an estimated cost required to run the serial plan on a specific hardware configuration, and is not a unit of time. The cost threshold for parallelism option can be set to any value from 0 through 32767. The default value is 5.

Max Degree of Parallelism

When an instance of SQL Server runs on a computer that has more than one microprocessor or CPU, it detects the best degree of parallelism, that is, the number of processors employed to run a single statement, for each parallel plan execution. You can use the max degree of parallelism option to limit the number of processors to use in parallel plan execution.

References:

<https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/configure-the-cost-threshold-for-parallelism-server-configuration-option>

Question: 247

DRAG DROP

You administer two Microsoft SQL Server database servers named ProdSrv1 and ProdSrv2. Each server has a database named Orders.

You need to configure transactional replication from the OrderSummary table in the Orders database on ProdSrv1 to the OrderSummary table in the Orders database on ProdSrv2.

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.

Actions

Configure ProdSrv2 as a Publisher.

Configure ProdSrv1 as a Distributor.

Configure a publication of the Order-Summary table on ProdSrv1.

Configure a publication of the Order-Summary table on ProdSrv2.

Create a subscription of the publication in the Orders database on ProdSrv1.

Create a subscription of the publication in the Orders database on ProdSrv2.

Configure ProdSrv1 as a Publisher.

Answer Area**Answer:****Answer Area**

Configure ProdSrv1 as a Distributor.

Configure ProdSrv1 as a Publisher.

Configure a publication of the Order-Summary table on ProdSrv1.

Create a subscription of the publication in the Orders database on ProdSrv1.

Step 1: Configure ProdSrv1 as a Distributor.

Step 2: Configure ProdSrv1 as a Publisher.

Step 3: Configure a publication of the Order-Summary table on ProdSrv1.

Step 4: Create a subscription of the publication in the Orders database on ProdSrv1.

Question: 248

You have a SQL Server instance that uses database roles. The instance contains two databases named Customers and Sales.

A user named User1 has the required roles to access Customers.

You need to ensure that User1 can access Sales.

Which statement should you execute first?

- A. ALTER ROLE...ADD MEMBER
- B. CREATE USER
- C. CREATE LOGIN
- D. ALTER SERVER ROLE...ADD MEMBER

Answer: A

Explanation:

The ALTER ROLE...ADD MEMBER command adds or removes members to or from a database role.

Example: This example creates a database role named Sales. It adds a database user named Barry to the membership.

CREATE ROLE Sales;

ALTER ROLE Sales ADD MEMBER Barry;

References: <https://docs.microsoft.com/en-us/sql/t-sql/statements/alter-role-transact-sql>

Question: 249

DRAG DROP

You have a server that has SQL Server 2016 installed.

You need to configure native SQL Server backups for a database named Customers. The solution must use backup encryption.

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 orders.

Actions

Back up the database and specify the encryption option.

Create a certificate.

Enable BitLocker Drive Encryption (BitLocker).

Create a master key for the instance.

Back up the master database and specify the encryption option.

Answer Area



Answer:

Answer Area

Create a master key for the instance.

Create a certificate.

Back up the database and specify the encryption option.

The following are prerequisites for encrypting a backup:

References: <https://docs.microsoft.com/en-us/sql/relational-databases/backup-restore/backup-encryption>

Question: 250

You are planning to install a Microsoft SQL Server database server that will be used by a web application.

You need to minimize the attack surface area.

Which two actions should you perform? Each correct answer presents part of the solution.

- A. Use a single user account to start all database services.
- B. Install only the database engine and disable other features.
- C. Install the database server on a server core installation of Windows Server 2008 R2.
- D. Set the database service to start automatically.
- E. Install the database server as a named instance.

Answer: B,C

Explanation:

To reduce the attack surface area and to make sure you are not affected by undiscovered service vulnerabilities, disable any service that is not required

Because Server Core has fewer system services running on it than a Full installation does, there's less attack surface (that is, fewer possible vectors for malicious attacks on the server). This means that a Server Core installation is more secure than a similarly configured Full installation.

References: <https://msdn.microsoft.com/en-us/library/dd184076.aspx>
https://msdn.microsoft.com/en-us/library/ff648664.aspx#c18618429_010

Question: 251

You install SQL Server on a new server named SQL1 and create several databases.

Users report that they fail to connect to any of the databases on SQL1.

You discover that the TCP connections are disabled for the database engine on SQL1.

You need to ensure that the users can connect to the databases on SQL1.

What should you use?

- A. the SQL Server Installation Center
- B. the sp_configure stored procedure
- C. SQL Server Configuration Manager
- D. the ODBC Data Source Administrator

Answer: C

Explanation:

To enable the TCP/IP network protocol

References: [https://technet.microsoft.com/en-us/library/hh231672\(v=sql.110\).aspx](https://technet.microsoft.com/en-us/library/hh231672(v=sql.110).aspx)

Question: 252

You administer a Microsoft SQL Server environment. One of the SQL Server instances contains a database named Contoso.

You plan to migrate Contoso to Microsoft Azure SQL Database.

To do so, you need to implement a contained database.

Which two actions should you perform? Each correct answer presents part of the solution.

- A. Set database containment to CONTAINED.
- B. Enable database property contained database authentication.
- C. Set database containment to PARTIAL.
- D. Set database containment to CLOUD.
- E. Enable server property contained database authentication.
- F. Enable database property encryption enabled.

Answer: B,C

Explanation:

Contained database authentication is defined on the database, not on the server.

A database is converted to a contained database by changing the CONTAINMENT option to partial.

References: <https://docs.microsoft.com/en-us/sql/relational-databases/databases/migrate-to-a-partially-contained-database>

Question: 253

DRAG DROP

You have a two-node SQL Server 2014 cluster that has an AlwaysOn availability group configured in synchronous mode.

You plan to provide a reporting solution by using a third node in the cluster.

You need to add the third node. The solution must prevent any impact on the performance of database writes.

You install another server that has SQL Server installed.

Which three additional 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.

Actions**Answer Area**

Set Readable Secondary to **Read-intent only**.

Add a new availability replica in synchronous mode.

Create a second listener.

Configure read-only routing.

Add a new availability replica in asynchronous mode.

Set Readable Secondary to **Yes**.

**Answer:****Answer Area**

Add a new availability replica in synchronous mode.

Set Readable Secondary to **Read-intent only.**

Configure read-only routing.

Step 1: Add a new availability replica in asynchronous mode.

Asynchronous-commit mode minimizes transaction latency on the secondary databases but allows them to lag behind the primary databases, making some data loss possible.

Incorrect: Add a new availability replica in synchronous mode.

Synchronous-commit mode ensures that once a given secondary database is synchronized with the primary database, committed transactions are fully protected. This protection comes at the cost of increased transaction latency.

Step 2: Set Readable Secondary to Read-intent only.

For the secondary role, select a new value from the Readable secondary drop list, as follows: Read-intent only
Only read-only connections are allowed to secondary databases of this replic

a. The secondary database(s) are all available for read access.

Step 3: Configure read-only routing.

Note: Read-only routing refers to the ability of SQL Server to route qualifying read-only connection requests to an available Always On readable secondary replica (that is, a replica that is configured to allow read-only workloads when running under the secondary role). To support read-only routing, the availability group must possess an availability group listener. Read-only clients must direct their connection requests to this listener, and the client's connection strings must specify the application intent as "read-only." That is, they must be read-intent connection requests.

References: <https://docs.microsoft.com/en-us/sql/database-engine/availability-groups/windows/configure-read-only->

[routing-for-an-availability-group-sql-server](https://docs.microsoft.com/en-us/sql/database-engine/availability-groups/windows/overview-of-always-on-availability-groups-sql-server)
<https://docs.microsoft.com/en-us/sql/database-engine/availability-groups/windows/overview-of-always-on-availability-groups-sql-server>

Question: 254

Note: This question is part of a series of questions that use the same set of answer choices. An answer choice may be correct for more than one question in the series.

You administer a SQL Server database 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 the Regions table.

Which Transact-SQL statement should you use?

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

Answer: C

Question: 255

DRAG DROP

You develop an application that uses data from a Microsoft SQL Server database.

A stored procedure named MyProcedure experiences excessive blocking problems.

You need to enable row versioning. However, you do not want to force every connection to have row versioning enabled.

Which code segment or segments should you use to complete the Transact-SQL statements? To answer, drag the appropriate command or commands to the appropriate position or positions in the answer area to complete the Transact-SQL statements. Answer choices may be used once, more than once, or not at all. Answer targets may be used once. Additionally, you may need to drag the split bar between panes or scroll to view content.

Commands

SET ALLOW_SNAPSHOT_ISOLATION ON

SET CHANGE_TRACKING = ON

SET READ_COMMITTED_SNAPSHOT ON

SET ROW_VERSIONING ON

SET TRANSACTION ISOLATION LEVEL READ COMMITTED

SET TRANSACTION ISOLATION LEVEL REPEATABLE READ

SET TRANSACTION ISOLATION LEVEL SNAPSHOT

Transact-SQL Statements

ALTER DATABASE MyDatabase

COMMAND

CREATE PROCEDURE

AS

SET NOCOUNT ON

COMMAND

Answer:**Transact-SQL Statements**

ALTER DATABASE MvDatabase

SET ALLOW_SNAPSHOT_ISOLATION ON

CREATE PROCEDURE
AS
SET NOCOUNT ON

SET TRANSACTION ISOLATION LEVEL SNAPSHOT

Box 1: SET ALLOW_SNAPSHOT_ISOLATION ON

Database administrators control the database-level settings for row versioning by using the READ_COMMITTED_SNAPSHOT and ALLOW_SNAPSHOT_ISOLATION database options in the ALTER DATABASE statement.

The following Transact-SQL statement will enable ALLOW_SNAPSHOT_ISOLATION:

```
ALTER DATABASE AdventureWorks2008R2
```

```
SET ALLOW_SNAPSHOT_ISOLATION ON;
```

Incorrect: Not READ_COMMITTED_SNAPSHOT

When setting the READ_COMMITTED_SNAPSHOT option, only the connection executing the ALTER DATABASE command is allowed in the database.

Box 2: SET TRANSACTION ISOLATION LEVEL SNAPSHOT

The ALLOW_SNAPSHOT_ISOLATION ON option transactions can specify the SNAPSHOT transaction isolation level.

References:

[https://technet.microsoft.com/en-us/library/ms175095\(v=sql.105\).aspx](https://technet.microsoft.com/en-us/library/ms175095(v=sql.105).aspx)

<https://docs.microsoft.com/en-us/sql/t-sql/statements/alter-database-transact-sql-set-options>

Question: 256

DRAG DROP

You have a consolidated SQL Server instance that contains databases for several applications.

You need to limit the maximum degree of parallelism for an application named App1. 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.

NOTE: More than one order of answer choices is correct. You will receive credit for any of the correct orders you select.

Actions	Answer Area
Write a classifier function.	
Restart SQL Server.	
Enable Resource Governor.	(Right Arrow)
Configure Policy-Based Management.	(Left Arrow)
Create a workload group.	
Create a resource pool.	(Up Arrow) (Down Arrow)

Answer:

Answer Area
Enable Resource Governor.
Create a resource pool.
Create a workload group.
Write a classifier function.

Step 1: Enable Resource Governor

The Resource Governor is turned off by default. You can enable the Resource Governor by using either SQL Server Management Studio or Transact-SQL.

Step 2: Create a resource pool.

In the SQL Server Resource Governor, a resource pool represents a subset of the physical resources of an instance of the Database Engine.

Step 3: Create a workload group

In the SQL Server Resource Governor, a workload group serves as a container for session requests that have similar classification criteria

a. A workload allows for aggregate monitoring of the sessions, and defines policies for the sessions. Each workload group is in a resource pool, which represents a subset of the physical resources of an instance of the Database Engine. When a session is started, the Resource Governor classifier assigns the session to a specific workload group, and the session must run using the policies assigned to the workload group and the resources defined for the resource pool.

Step 4: Write a classifier function.

The SQL Server resource governor classification process assigns incoming sessions to a workload group based on the characteristics of the session. You can tailor the classification logic by writing a user-defined function, called a classifier function.

Question: 257

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. Configure the AgentPortalUser user as a member of SQLAgentOperatorRole in the msdb database.
- B. Configure the Microsoft SQL Server Agent to use Database Mail.
- C. Enable the guest user in the msdb database.
- D. Configure the AgentPortalUser user as a member of DatabaseMailUserRole in the msdb database.

Answer: D

Explanation:

To send Database Mail, you must be a member of the DatabaseMailUserRole database role in the msdb database.

Question: 258

You administer a Microsoft SQL Server environment. You purchase a new server and plan to migrate your database from an existing server to the new server.

You want to evaluate the new server's performance based on the workloads of the existing server.

To do so, you need to run the workloads captured from the existing server against the new server from multiple computers.

Which SQL Server tool should you use?

- A. Distributed Replay
- B. Data Tools
- C. Migration Assistant
- D. Upgrade Advisor

Answer: A

Explanation:

With Distributed Replay, you can replay a workload from multiple computers and better simulate a mission-critical workload.

References: [https://technet.microsoft.com/en-us/library/ff878183\(v=sql.110\).aspx](https://technet.microsoft.com/en-us/library/ff878183(v=sql.110).aspx)

Question: 259

You have the following table.

```
CREATE TABLE KnowledgeBase
    (ProblemId INT IDENTITY (1,1),
Problem varchar(max),
Solution varchar(max))
CONSTRAINT PK_KnowledgeBase PRIMARY KEY (ProblemId)
```

You need to create a full-text index for the table.

Which two statements should you execute? Each correct answer presents part of the solution.

- A. CREATE RULE KnowledgeBaseRuleAS @Problem LIKE ‘%’
- B. CREATE FULLTEXT STOPLIST KnowledgeBaseStopListFROM KnowledgeBase
- C. CREATE INDEX OurIndex ON KnowledgeBase(Problem, Solution) ON [Catalog]
- D. CREATE FULLTEXT CATALOG [Catalog] WITH ACCENT_SENSITIVITY = ONAUTORIZATION [dbo]
- E. CREATE FULLTEXT INDEX ON KnowledgeBase(Problem, Solution) KEY INDEX PK_KnowledgeBase ON OurKB

Answer: D,E

Explanation:

The CREATE FULLTEXT INDEX ON table_name command creates a full-text index on a table or indexed view in a database in SQL Server.

Example: The following example creates a full-text catalog, production_catalog, in the AdventureWorks sample database. The example then creates a full-text index that uses this new catalog.

```
CREATE FULLTEXT CATALOG production_catalog;
```

```
GO
```

```
CREATE FULLTEXT INDEX ON Production.ProductReview
```

References: <https://docs.microsoft.com/en-us/sql/t-sql/statements/create-fulltext-index-transact-sql>

Question: 260

You administer a database that has User A, B and C.

User A must be able to create new tables and stored procedures, User B must be able to select, update, delete and insert data.

User C must be able to provide windows logins to the database

To which role or roles should you add to UserB? Select all that apply.

- A. db_accessadmin
- B. db_ddladmin
- C. db_datawriter
- D. db_datareader
- E. db_owner

Answer: C,D

Explanation:

User A = db_ddladmin

User B= db_datawriter, db_datareader

User C = db_accessadmin

Question: 261

You administer a database that has User A, B and C.

User A must be able to create new tables and stored procedures, User B must be able to select, update, delete and insert data.

User C must be able to provide windows logins to the database

To which role or roles should you add to UserC? Select all that apply.

- A. db_accessadmin
- B. db_ddladmin
- C. db_datawriter
- D. db_datareader
- E. db_owner

Answer: A

Explanation:

User A = db_ddladmin

User B= db_datawriter, db_datareader

User C = db_accessadmin

Question: 262

HOTSPOT

You administer a Microsoft SQL Server database.

The database is in the Simple recovery mode.

You schedule the following backup plan:

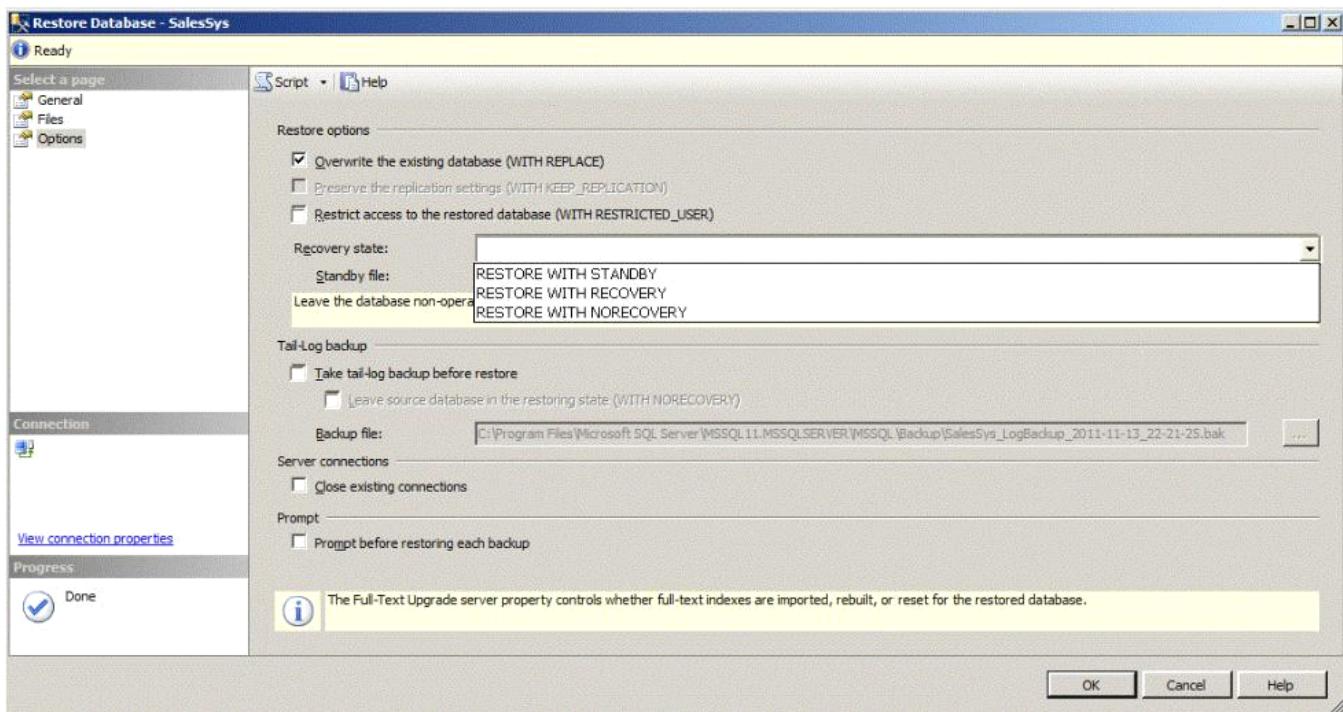
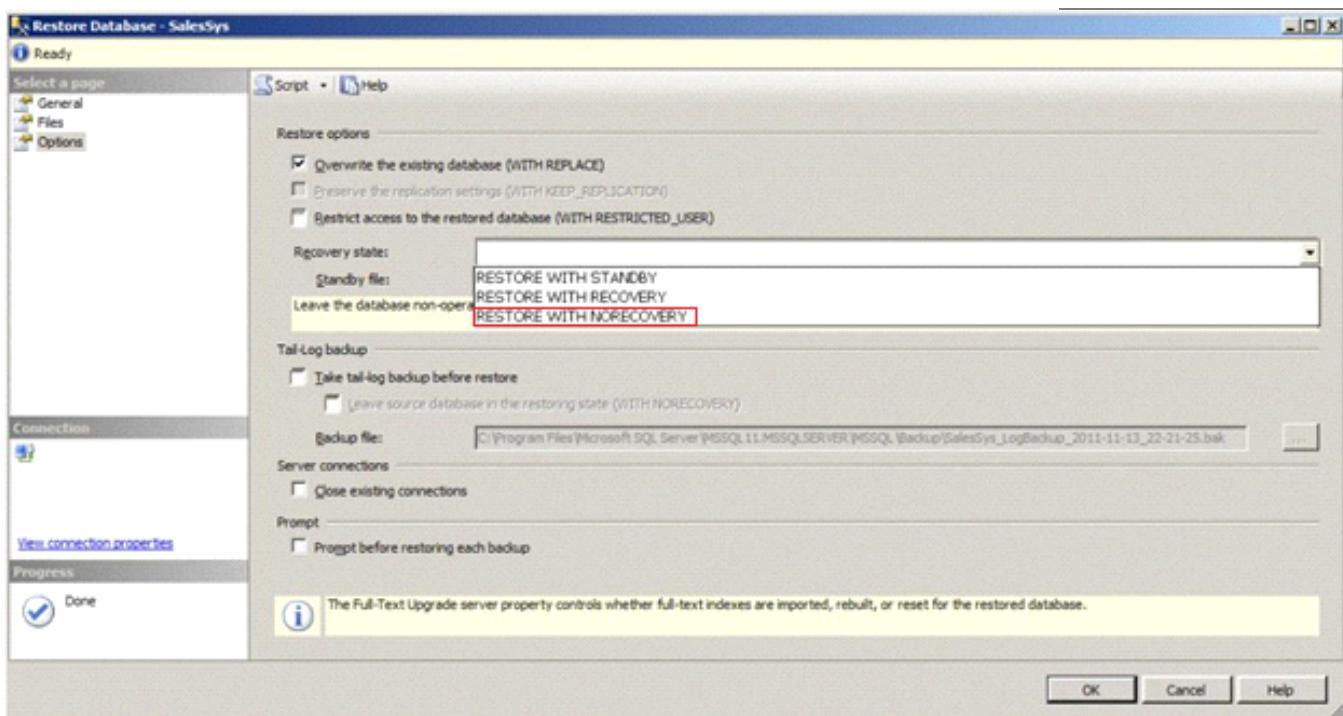
Full backup every day at midnight

Differential backups every hour on the hour, except at midnight

The database fails at 20:45 hours.

You need to use SQL Server Management Studio (SSMS) to begin restoring the database with a minimum amount of data loss.

Which options should you select on the Options page of the Restore Database window? (To answer, configure the appropriate option or options in the dialog box in the answer area.)

**Answer:**

First, restore full database backup, differential database backup and all transaction log backups WITH NORECOVERY Option. After that, bring back database online using WITH RECOVERY option.

References: <https://blog.sqlauthority.com/2009/07/15/sql-server-restore-sequence-and-understanding-norecovery-and-recovery/>

Question: 263

HOTSPOT

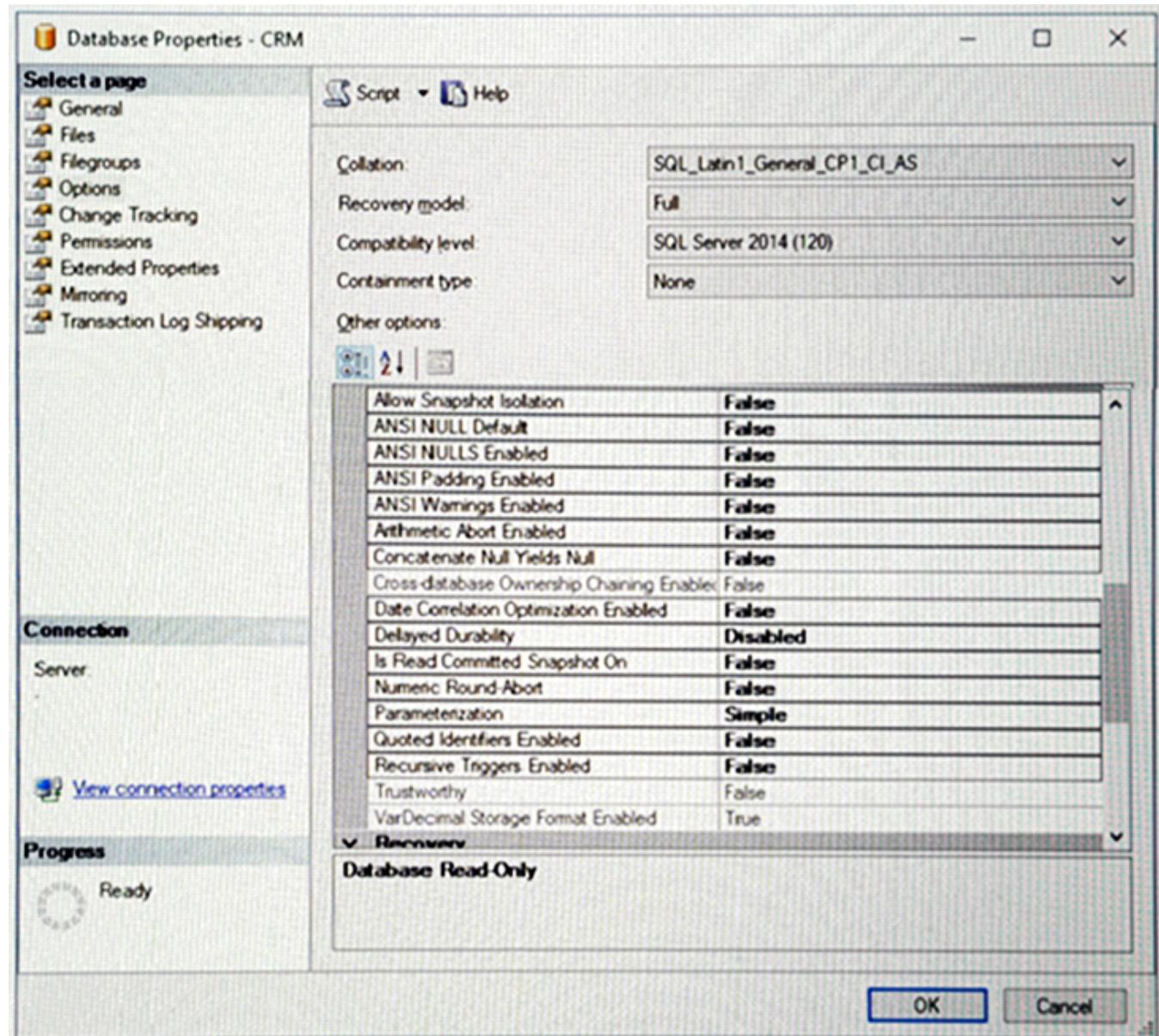
You have a server named SQL1 that hosts a reporting database named REPORTING. REPORTING contains data that is also stored in a production database.

You discover many blocking locks in REPORTING. The blocked queries are SELECT statements. The queries that hold

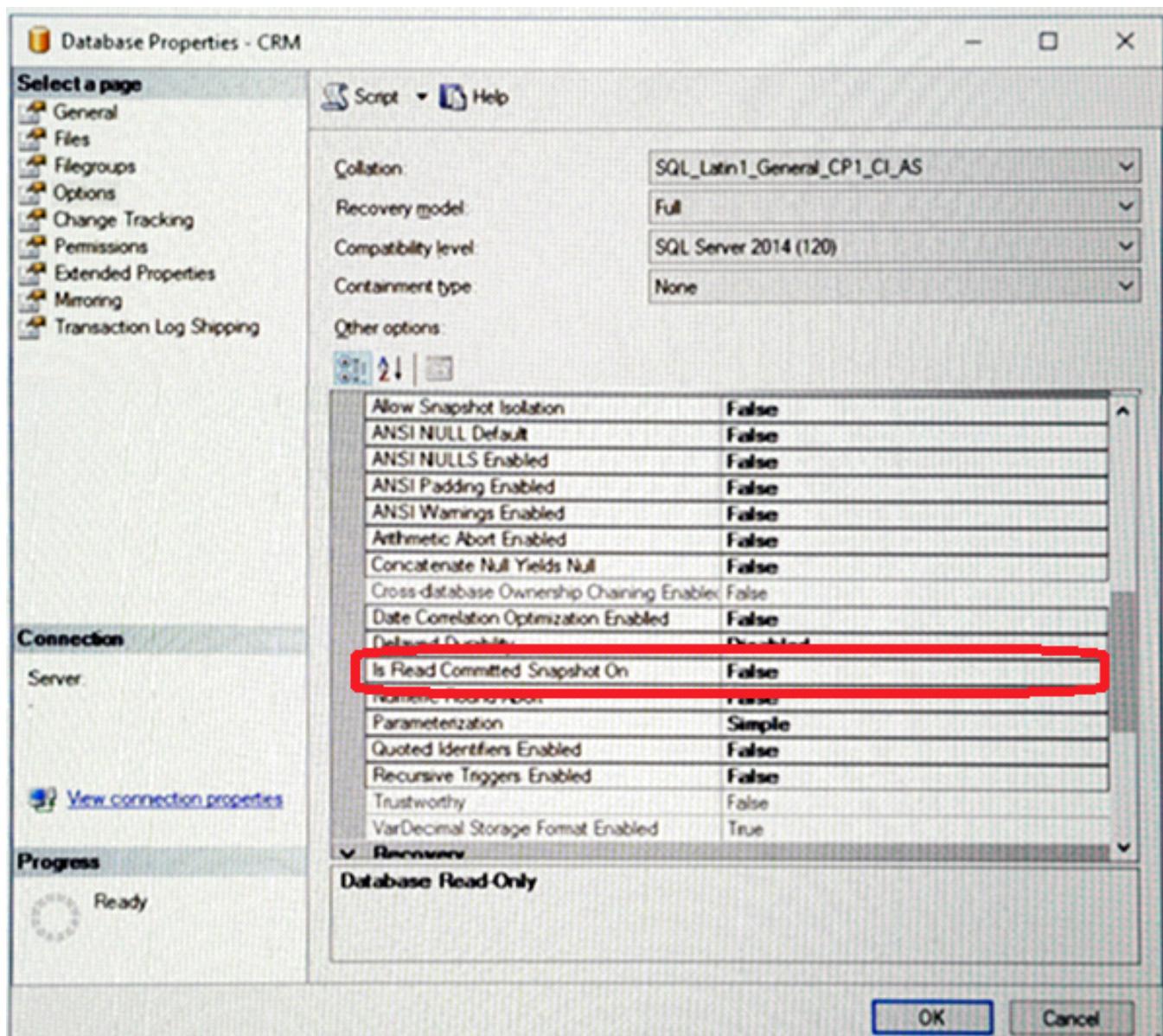
the blocking locks are INSERT statements that wait on the WRITELOG wait type.

You need to prevent the INSERT statements from creating the blocking locks. The solution must also minimize the amount of time the INSERT statements wait on the WRITELOG wait type.

Which two database settings should you modify? To answer, select the appropriate settings in the answer area.



Answer:



Is Read Committed Snapshot On: True

Snapshot isolation enhances concurrency for OLTP applications.

Understanding Snapshot Isolation and Row Versioning

Once snapshot isolation is enabled, updated row versions for each transaction are maintained in tempdb. A unique transaction sequence number identifies each transaction, and these unique numbers are recorded for each row version. The transaction works with the most recent row versions having a sequence number before the sequence number of the transaction. Newer row versions created after the transaction has begun are ignored by the transaction.

The term "snapshot" reflects the fact that all queries in the transaction see the same version, or snapshot, of the database, based on the state of the database at the moment in time when the transaction begins. No locks are acquired on the underlying data rows or data pages in a snapshot transaction, which permits other transactions to execute without being blocked by a prior uncompleted transaction. Transactions that modify data do not block transactions that read data, and transactions that read data do not block transactions that write data, as they normally would under the default READ COMMITTED isolation level in SQL Server. This non-blocking behavior also significantly reduces the likelihood of deadlocks for complex transactions.

References: <https://docs.microsoft.com/en-us/dotnet/framework/data/adonet/sql/snapshot-isolation-in-sql-server>

Question: 264

A network administrator creates a virtual machine from a template that has SQL Server installed. You need to ensure that you can create SQL Server databases on the new virtual machine. Which two actions should you perform to complete the server configuration? Each correct answer presents part of the solution.

- A. Execute the SP_ADDSERVER statement.
- B. Edit the Instance Names registry key.
- C. Execute the SP_SERVER_DIAGNOSTICS statement.
- D. Execute the SP_DROPSERVER statement.
- E. Run setup.exe and specify the upgrade option.

Answer: A,D

Explanation:

All you should need to do is run sp_dropserver then sp_addserver to change the server name after the template is renamed. The restart the SQL instance.

```
exec sp_dropserver 'OldserverName'  
go  
exec sp_addserver 'NewServerName', 'LOCAL'  
go
```

References: <https://serverfault.com/questions/377377/creating-a-sql-template-for-vmware>

Question: 265

You have a server named SPS1 that has Microsoft SharePoint Server 2013 installed.

You have several Power View reports that are created in Microsoft Excel 2016.

You need to configure SPS1 to display the Power View reports.

Which two SQL Server components should you install on SPS1? Each correct answer presents part of the solution.

- A. SQL Server Analysis Services (SSAS) in Multidimensional and Data Mining Mode
- B. SQL Server Reporting Services (SSRS) in SharePoint mode
- C. the PowerPivot for SharePoint 2013 add-in
- D. SQL Server Analysis Services (SSAS) in SharePoint mode
- E. SQL Server Analysis Services (SSAS) in Tabular Mode

Answer: B,C

Explanation:

Power Pivot for SharePoint is a middle-tier data engine that loads, queries, and refreshes data models hosted in SharePoint. It is used to implement Power Pivot and Excel data models in SharePoint.

Power View is an interactive data exploration, visualization, and presentation experience that encourages intuitive ad-hoc reporting. Power View is a feature of Microsoft Excel 2013, and of Microsoft SharePoint Server 2010 and 2013 as part of the SQL Server 2012 Service Pack 1 Reporting Services Add-in for Microsoft SharePoint Server Enterprise Edition.

References: <https://support.office.com/en-us/article/Power-View-Explore-visualize-and-present-your-data-98268d31-97e2-42aa-a52b-a68cf460472e>

Question: 266

You administer a Microsoft SQL Server 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...MODIFY FILE command along with the name and maxsize parameters.
- C. Use the ALTER DATABASE...MODIFY FILEGROUP command along with the name and maxsize parameters.
- D. Use the ALTER DATABASE...AUTO_SHRINK command along with the On parameter.

Answer: B

Explanation:

MODIFY FILE specifies the file that should be modified. The file could be a log file.
MAXSIZE { max_size | UNLIMITED } specifies the maximum file size to which the file can grow.
References: [https://technet.microsoft.com/en-us/library/bb522469\(v=sql.105\).aspx](https://technet.microsoft.com/en-us/library/bb522469(v=sql.105).aspx)

Question: 267

DRAG DROP

You administer a Microsoft SQL Server 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.)

WHERE	
FILTER ON	
CarrierTrackingNumber IS NOT NULL;	
ON dbo.OrderDetail (SalesOrderID)	
ON dbo.OrderDetail (SalesOrderID) AS FILTERED_INDEX	
CREATE NONCLUSTERED INDEX FIndx_CarrierTrackingNumber	
CREATE NONCLUSTERED FILTERED INDEX FIndx_CarrierTrackingNumber	



Answer:

```
CREATE NONCLUSTERED INDEX
FIdx_CarrierTrackingNumber
ON dbo.OrderDetail (SalesOrderID)
WHERE
CarrierTrackingNumber IS NOT NULL;
```

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: 268

You administer a Microsoft SQL Server 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. The database is configured to use the FULL recovery model.

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? Each correct answer presents part of the solution.

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

Answer: A,E

Question: 269

You need to install SQL Server on a server. The server must meet the following requirements:

- Include SQL Server Integration Services (SSIS)
- Be able to run 32-bit SSIS legacy packages

You add the Integration Services shared feature to the installation. Which other shared feature should you add to the installation?

- A. Master Data Services (MDS)
- B. Client Tools Connectivity
- C. Management Tools - Complete
- D. SQL Server Data Tools

Answer: D

Question: 270

You manage a server that has SQL Server installed and hosts databases for five applications. Each application has a different login to the SQL Server instance.

You need to create a TCP endpoint to be used only by a login named Application3. The solution must ensure that Application only uses the new endpoint.

Which three statements should you execute? Each correct answer presents part of the solution.

- A. **DENY CONNECT ON ENDPOINT::[TSQL Default TCP] TO Application3**
- B. **CREATE ENDPOINT Application3_EndPoint STATE= STARTED AS TCP (LISTENER_PORT=1388)**
- C. **GRANT CONNECT ON ENDPOINT::Application3_EndPoint TO Public**
- D. **GRANT CONNECT ON ENDPOINT::[TSQL Default TCP] TO PUBLIC**
- E. **GRANT CONNECT ON ENDPOINT::[TSQL Default TCP] TO Application3**
- F. **REVOKE CONNECT ON ENDPOINT:: [TSQL Default TCP] TO Application3**

- A. Option A
- B. Option B
- C. Option C
- D. Option D
- E. Option E
- F. Option F

Answer: CEF

Question: 271

You are the senior database administrator for a Microsoft SQL Server environment that uses Windows Azure SQL Database.

You need to grant a junior database administrator only the permissions required to create new logins.

Which Windows Azure SQL Database role should you assign the junior database administrator?

- A. securityadmin
- B. loginmanager
- C. serveradmin
- D. setupadmin

Answer: B

Question: 272

You have a server named SQL1 that has SQL Server installed. SQU hosts several applications. You plan to deploy a third-party application to SQU. The application must have the following:

- *A vendor-provided password for the sa account
- *A vendor-provided user account that is a member of the sysadmin fixed server role
- *A vendor-provided user account that is a member of the db.owner fixed database role in the msdb database
- *A vendor-provided user account that is a member of the db.owner fixed database role in the master database
- *A vendor-provided user account that is a member of the SQLAgentOperatorRole fixed database role in the msdb Database

You need to identify the minimum number of SQL Server instances that you must add to SQL1 to support the application requirements. The solution must use the principle of least privilege

How many SQL Server instances should you add to SQL1?

- A. 0
- B. 1
- C. 2
- D. 3

Answer: D
