

Microsoft 70-457 Exam Questions & Answers

Number: 70-457
Passing Score: 700
Time Limit: 300 min
File Version: 42.2



Microsoft 70-457 Exam Questions & Answers

Exam Name: Transition Your MCTS on SQL Server 2008 to MCSA: SQL
Server 2012, Part 1

Exam A

QUESTION 1

You are writing a set of queries against a FILESTREAM-enabled database. You create a stored procedure that will update multiple tables within a transaction. You need to ensure that if the stored procedure raises a run-time error, the entire transaction is terminated and rolled back. Which Transact-SQL statement should you include at the beginning of the stored procedure?

- A. SET TRANSACTION ISOLATION LEVEL SERIALIZABLE
- B. SET XACT_ABORT OFF
- C. SET TRANSACTION ISOLATION LEVEL SNAPSHOT
- D. SET IMPLICIT_TRANSACTIONS ON
- E. SET XACT_ABORT ON
- F. SET IMPLICIT_TRANSACTIONS OFF

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

Verified answer as correct.

Reference: <http://msdn.microsoft.com/en-us/library/ms188792.aspx>

QUESTION 2

You have a Microsoft SQL Server 2012 database that contains tables named Customers and Orders. The tables are related by a column named CustomerID. You need to create a query that meets the following requirements:

- Returns the CustomerName for all customers and the OrderDate for any orders that they have placed.
- Results must include customers who have not placed any orders.

Which Transact-SQL query should you use?

- A.

```
SELECT CustomerName, OrderDate
FROM Customers
RIGHT OUTER JOIN Orders
ON Customers.CustomerID = Orders.CustomerID
```
- B.

```
SELECT CustomerName, CrderDate
FROM Customers
JOIN Orders
ON Customers.CustomerID = Orders.CustomerID
```
- C.

```
SELECT CustomerName, OrderDate
FROM Customers
CROSS JOIN Orders
ON Customers.CustomerID = Orders.CustomerID
```
- D.

```
SELECT CustomerName, OrderDate
FROM Customers
LEFT OUTER JOIN Orders
ON Customers.CustomerID = Orders.CustomerID
```

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

Verified answer as correct.

Reference: <http://msdn.microsoft.com/en-us/library/ms177634.aspx>

QUESTION 3

You create a stored procedure that will update multiple tables within a transaction. You need to ensure that if the stored procedure raises a run-time error, the entire transaction is terminated and rolled back. Which Transact-SQL statement should you include at the beginning of the stored procedure?

- A. SET XACT_ABORT ON
- B. SET ARITHABORT ON
- C. TRY
- D. BEGIN
- E. SET ARITHABORT OFF
- F. SET XACT_ABORT OFF

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

Verified answer as correct.

Reference: <http://msdn.microsoft.com/en-us/library/ms190306.aspx>

Reference: <http://msdn.microsoft.com/en-us/library/ms188792.aspx>

QUESTION 4

Your database contains two tables named DomesticSalesOrders and InternationalSalesOrders. Both tables contain more than 100 million rows. Each table has a Primary Key column named SalesOrderId. The data in the two tables is distinct from one another. Business users want a report that includes aggregate information about the total number of global sales and total sales amounts. You need to ensure that your query executes in the minimum possible time. Which query should you use?

- A.

```
SELECT COUNT(*) AS NumberOfSales, SUM(SalesAmount) AS TotalSalesAmount
FROM (
    SELECT SalesOrderId, SalesAmount
    FROM DomesticSalesOrders
    UNION ALL
    SELECT SalesOrderId, SalesAmount
    FROM InternationalSalesOrders
) AS p
```
- B.

```
SELECT COUNT(*) AS NumberOfSales, SUM(SalesAmount) AS TotalSalesAmount
FROM (
    SELECT SalesOrderId, SalesAmount
    FROM DomesticSalesOrders
    UNION
    SELECT SalesOrderId, SalesAmount
    FROM InternationalSalesOrders
) AS p
```
- C.

```
SELECT COUNT(*) AS NumberOfSales, SUM(SalesAmount) AS TotalSalesAmount
FROM DomesticSalesOrders
UNION
SELECT COUNT(*) AS NumberOfSales, SUM(SalesAmount) AS TotalSalesAmount
FROM InternationalSalesOrders
```
- D.

```
SELECT COUNT(*) AS NumberOfSales, SUM(SalesAmount) AS TotalSalesAmount
```

```
FROM DomesticSalesOrders
UNION ALL
SELECT COUNT(*) AS NumberOfSales, SUM(SalesAmount) AS TotalSalesAmount
FROM InternationalSalesOrders
```

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

Verified answer as correct.

Reference: <http://msdn.microsoft.com/en-us/library/ms180026.aspx>

Reference: <http://blog.sqlauthority.com/2009/03/11/sql-server-difference-between-union-vs-union-all-optimal-performance-comparison/>

QUESTION 5

You use a Microsoft SQL Server 2012 database. You want to create a table to store Microsoft Word documents. You need to ensure that the documents must only be accessible via Transact-SQL queries. Which Transact-SQL statement should you use?

- A.

```
CREATE TABLE DocumentStore
(
    [Id] INT NOT NULL PRIMARY KEY,
    [Document] VARBINARY(MAX) NULL
)
GO
```
- B.

```
CREATE TABLE DocumentStore
(
    [Id] hierarchyid,
    [Document] NVARCHAR NOT NULL
)
GO
```
- C.

```
CREATE TABLE DocumentStore AS FileTable
```
- D.

```
CREATE TABLE DocumentStore
(
    [Id] [uniqueidentifier] ROWGUIDCOL NOT NULL UNIQUE,
    [Document] VARBINARY(MAX) FILESTREAM NULL
)
GO
```

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

--Burgos - YES

Verified answer as correct.

Reference: <http://msdn.microsoft.com/en-us/library/gg471497.aspx>

Reference: <http://msdn.microsoft.com/en-us/library/ff929144.aspx>

QUESTION 6

You administer a Microsoft SQL Server 2012 instance named SQL2012 that hosts an OLTP database of 1 terabyte in size. The database is modified by users only from Monday through Friday from 09:00 hours to 17:00 hours. Users modify more than 30 percent of the data in the database during the week. Backups are performed

as shown in the following schedule:

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.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

QUESTION 7

You administer a Microsoft SQL Server 2012 database that contains a table named OrderDetail. You discover that the NCI_OrderDetail_CustomerID non-clustered index is fragmented. You need to reduce fragmentation. You need to achieve this goal without taking the index offline. Which Transact-SQL batch should you use?

- A. `CREATE INDEX NCI_OrderDetail_CustomerID ON OrderDetail.CustomerID WITH DROP EXISTING`
- B. `ALTER INDEX NCI_OrderDetail_CustomerID ON OrderDetail.CustomerID REORGANIZE`
- C. `ALTER INDEX ALL ON OrderDetail REBUILD`
- D. `ALTER INDEX NCI_OrderDetail_CustomerID ON OrderDetail.CustomerID REBUILD`

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

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

QUESTION 8

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

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

QUESTION 9

You administer a Microsoft SQL Server 2012 server. You plan to deploy new features to an application. You need to evaluate existing and potential clustered and non-clustered indexes that will improve performance. What should you do?

- A. Query the sys.dm_db_index_usage_stats DMV.
- B. Query the sys.dm_db_missing_index_details DMV.
- C. Use the Database Engine Tuning Advisor.
- D. Query the sys.dm_db_missing_index_columns DMV.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

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

QUESTION 10

You administer a Microsoft SQL Server 2012 database named Contoso on a server named Server01. You need to be notified immediately when fatal errors occur on Server01. What should you create?

- A. an Alert
- B. a Server Audit Specification
- C. an Extended Event session

- D. a Resource Pool
- E. a Policy
- F. a SQL Profiler Trace
- G. a Database Audit Specification

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

--Burgos - YES

QUESTION 11

You administer a Microsoft SQL Server 2012 database named Contoso on a server named Server01. You need to diagnose deadlocks that happen when executing a specific set of stored procedures by recording events and playing them back on a different test server. What should you create?

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

Correct Answer: F

Section: (none)

Explanation

Explanation/Reference:

QUESTION 12

You administer a Microsoft SQL Server 2012. A process that normally runs in less than 10 seconds has been running for more than an hour. You examine the application log and discover that the process is using session ID 60. You need to find out whether the process is being blocked. Which Transact-SQL statement should you use?

- A. EXEC sp_who 60
- B. SELECT * FROM sys.dm_exec_sessions WHERE sessionid = 60
- C. EXEC sp_helpdb 60
- D. DBCC INPUTBUFFER (60)

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

--Burgos - YES

Reference: <http://msdn.microsoft.com/en-us/library/ms174313.aspx>

Reference: <http://msdn.microsoft.com/en-us/library/ms176013.aspx>

Reference: <http://msdn.microsoft.com/en-us/library/ms178568.aspx>

Reference: <http://msdn.microsoft.com/en-us/library/ms187730.aspx>

QUESTION 13

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

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

Correct Answer: H

Section: (none)

Explanation

Explanation/Reference:

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

QUESTION 14

You administer a Microsoft SQL Server 2012 instance that has several SQL Server Agent jobs configured. When SQL Server Agent jobs fail, the error messages returned by the job steps do not provide the required detail. The following error message is an example error message:

"The job failed. The Job was invoked by User CONTOSO\ServiceAccount. The last step to run was step 1 (Subplan_1)."

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

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

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

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

QUESTION 15

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

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

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

--Burgos - YES

QUESTION 16

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

```
CREATE MASTER KEY ENCRYPTION BY PASSWORD = 'MyPassword1!'
CREATE CERTIFICATE TDE_Certificate WITH SUBJECT = 'TDE Certificate';

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

CREATE DATABASE ENCRYPTION KEY
WITH ALGORITHM = AES_256
ENCRYPTION BY SERVER CERTIFICATE TDE_Certificate;

ALTER DATABASE Orders SET ENCRYPTION ON;
```

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

- A. ALTER DATABASE Master SET ENCRYPTION OFF;
- B. CREATE CERTIFICATE TDE_Certificate FROM FILE = 'd:\TDE_Certificate.cer' WITH PRIVATE KEY (FILE = 'D:\TDE_Certificate.key', DECRYPTION BY PASSWORD = 'MyPassword1!');
- C. CREATE CERTIFICATE TDE_Certificate WITH SUBJECT = 'TDE Certificate'; USE Orders; CREATE DATABASE ENCRYPTION KEY WITH ALGORITHM = AES_256 ENCRYPTION BY SERVER CERTIFICATE TDE_Certificate;
- D. CREATE CERTIFICATE TDE_Certificate FROM FILE = 'd:\TDE_Certificate.cer';

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

--Burgos - YES

QUESTION 17

You administer a SQL Server 2012 server that contains a database named SalesDb. SalesDb contains a schema named Customers that has a table named Regions. A user named UserA is a member of a role named Sales. UserA is granted the Select permission on the Regions table. The Sales role is granted the Select permission on the Customers schema. You need to ensure that UserA is disallowed to select from any of the tables in the Customers schema. Which Transact-SQL statement should you use?

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

Correct Answer: H

Section: (none)

Explanation

Explanation/Reference:

QUESTION 18

You administer a Microsoft SQL Server 2012 failover cluster that contains two nodes named Node A and Node B. A single instance of SQL Server is installed on the cluster. An additional node named Node C has been added to the existing cluster. You need to ensure that the SQL Server instance can use all nodes of the cluster. What should you do?

- A. 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.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

--Burgos - YES

Verified answer as correct.

QUESTION 19

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

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

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

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

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

--Burgos - YES

QUESTION 20

You are creating an application that will connect to the AgentPortal database by using a SQL login named AgentPortalUser. Stored procedures in the database will use sp_send_dbmail to send email messages. You create a user account in the msdb database for the AgentPortalUser login. You use the Database Mail Configuration Wizard to create a Database Mail profile. Security has not been configured for the Database Mail profile. You need to ensure that AgentPortalUser can send email messages. What should you do?

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

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

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

QUESTION 21

You administer a Microsoft SQL Server 2012 default instance. The instance is hosted by a server that has a local firewall configured. The firewall only allows inbound connections on port 1433. The server only hosts a single instance of SQL Server. You need to ensure that the instance is configured to allow remote connections even if the SQL Server is unresponsive to client connections. What should you do? Choose all that apply.

- A. Enable inbound connections on TCP port 1434 in the Windows Firewall on the server.
- B. Execute the following Transact-SQL command:
sp_configure 'remote admin connections',
- C. Execute the Reconfigure command.

- D. Execute the following Transact-SQL command:
sp_configure 'remote access', 1
- E. Restart the SQL Server Agent Service.
- F. Enable inbound connections on TCP port 135 in the Windows Firewall on the server.

Correct Answer: ABC

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

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

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

QUESTION 22

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

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

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

--Burgos - YES

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

QUESTION 23

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 existing applications.

What should you create for each application?

- A. views
- B. table partitions
- C. table-valued functions
- D. stored procedures

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

--Burgos - YES

QUESTION 24

You develop a Microsoft SQL Server 2012 database. You need to create a batch process that meets the following requirements:

- Returns a result set based on supplied parameters.
- Enables the returned result set to perform a join with a table.

Which object should you use?

- A. Inline user-defined function
- B. Stored procedure
- C. Table-valued user-defined function
- D. Scalar user-defined function

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

--Burgos - YES

QUESTION 25

You administer a Microsoft SQL Server 2012 server that hosts a transactional database and a reporting database. The transactional database is updated through a web application and is operational throughout the day. The reporting database is only updated from the transactional database. The recovery model and backup schedule are configured as shown in the following table:

Database	Description
Transactional database	Recovery model: <ul style="list-style-type: none"> Full Backup schedule: <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	Recovery model: <ul style="list-style-type: none"> Simple Backup schedule: <ul style="list-style-type: none"> Full database backup: 01:00 hours daily Differential database backup: 13:00 hours daily Data updates: <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.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

QUESTION 26

You administer a Microsoft SQL Server 2012 server that hosts a transactional database and a reporting database. The transactional database is updated through a web application and is operational throughout the day. The reporting database is only updated from the transactional database. The recovery model and backup schedule are configured as shown in the following table:

Database	Description
Transactional database	<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 need to ensure that the databases are restored. You also need to ensure that data loss is minimal. What should you do?

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

Correct Answer: H

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

QUESTION 27

You administer a Microsoft SQL Server 2012 server that hosts a transactional database and a reporting database. The transactional database is updated through a web application and is operational throughout the day. The reporting database is only updated from the transactional database. The recovery model and backup schedule are configured as shown in the following table:

Database	Description
Transactional database	<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.

Correct Answer: F

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

QUESTION 28

You administer a Microsoft SQL Server 2012 database. You create an availability group named haContosoDbs. Your primary replica is available at Server01\Contoso01. You need to configure the availability group to have the highest availability. You also need to ensure that no data is lost. Which Transact-SQL statement should you use?

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

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

QUESTION 29

You administer several Microsoft SQL Server 2012 database servers. Merge replication has been configured for an application that is distributed across offices throughout a wide area network (WAN). Many of the tables involved in replication use the XML and varchar(max) data types. Occasionally, merge replication fails due to timeout errors. You need to reduce the occurrence of these timeout errors. What should you do?

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

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

QUESTION 30

You administer a Microsoft SQL Server 2012 instance that has several SQL Server Agent jobs configured. When SQL Server Agent jobs fail, the error messages returned by the job steps are truncated. The following error message is an example of the truncated error message:

"Executed as user CONTOSO\ServiceAccount. ...0.4035.00 for 64-bit Copyright (C) Microsoft Corp 1984-2011. All rights reserved. Started 63513 PM Error 2012-06-23 183536.87 Code 0XC001000E Source UserImport Description Code 0x00000000 Source Log Import Activity Descript... The package execution fa... The step

failed."

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

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

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO (I had in my exam another version of this question)

QUESTION 31

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

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

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

QUESTION 32

You administer a Microsoft SQL Server 2012 database. The database has a table named Customers owned by UserA and another table named Orders owned by UserB. You also have a stored procedure named GetCustomerOrderInfo owned by UserB. GetCustomerOrderInfo selects data from both tables.

You create a new user named UserC. You need to ensure that UserC can call the GetCustomerOrderInfo stored procedure. You also need to assign only the minimum required permissions to UserC. Which permission or permissions should you assign to UserC? Choose all that apply.

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

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

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

Reference:

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

<http://stackoverflow.com/questions/2212044/sql-server-how-to-permission-schemas>

http://sqlservercentral.com/blogs/steve_jones/2012/03/14/ownership-chains-in-sql-server

QUESTION 33

You administer a Microsoft SQL Server 2012 database named ContosoDb. The database contains a table named Suppliers and a column named IsActive in the Purchases schema. You create a new user named ContosoUser in ContosoDb. ContosoUser has no permissions to the Suppliers table. You need to ensure that ContosoUser can delete rows that are not active from Suppliers. You also need to grant ContosoUser only the minimum required permissions. Which Transact-SQL statement should you use?

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

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

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

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

QUESTION 34

You use a contained database named ContosoDb within a domain. You need to create a user who can log on to the ContosoDb database. You also need to ensure that you can port the database to different database servers within the domain without additional user account configurations. Which type of user should you create?

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

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

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

QUESTION 35

You are the lead database administrator (DBA) of a Microsoft SQL Server 2012 environment. All DBAs are members of the DOMAIN\JrDBAs Active Directory group. You grant DOMAIN\JrDBAs access to the SQL Server. You need to create a server role named SpecialDBARole that can perform the following functions:

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

You need to add DOMAIN\JrDBAs to the server role. You also need to provide the least level of privileges necessary. Which SQL statement or statements should you use? Choose all that apply.

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

Correct Answer: BCF

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

The original answer is missing the "ALTER SERVER ROLE..." choice and included the answer with "...authorization serveradmin". However, I believe it is necessary to actually add the group to the role and that serveradmin can't be used with securityadmin to create the same server role.

QUESTION 36

You administer a Microsoft SQL Server 2012 database that has Trustworthy set to On. You create a stored procedure that returns database-level information from Dynamic Management Views. You grant User1 access to execute the stored procedure. You need to ensure that the stored procedure returns the required information when User1 executes the stored procedure. You need to achieve this goal by granting the minimum permissions required. What should you do? (Each correct answer presents a complete solution. Choose all that apply.)

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

Correct Answer: BC

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

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

QUESTION 37

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;
```

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

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

QUESTION 38

You administer a Microsoft SQL Server 2012 database. You provide temporary securityadmin access to User1 to the database server. You need to know if User1 adds logins to securityadmin. Which server-level audit action group should you use?

- A. SERVER_STATE_CHANGE_GROUP
- B. SERVER_PRINCIPAL_IMPERSONATION_GROUP

- C. SUCCESSFUL_LOGIN_GROUP
- D. SERVER_ROLE_MEMBER_CHANGE_GROUP

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

Verified answer as correct.

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

QUESTION 39

You administer a Microsoft SQL Server 2012 instance that contains a financial database hosted on a storage area network (SAN). The financial database has the following characteristics:

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

The database is continually modified by users during business hours from Monday through Friday between 09:00 hours and 17:00 hours. Five percent of the existing data is modified each day. The Finance department loads large CSV files into a number of tables each business day at 11:15 hours and 15:15 hours by using the BCP or BULK INSERT commands. Each data load adds 3 GB of data to the database. These data load operations must occur in the minimum amount of time. A full database backup is performed every Sunday at 10:00 hours. Backup operations will be performed every two hours (11:00, 13:00, 15:00, and 17:00) during business hours. You need to ensure that your backup will continue if any invalid checksum is encountered. Which backup option should you use?

- A. STANDBY
- B. Differential
- C. FULL
- D. CHECKSUM
- E. BULK_LOGGED
- F. CONTINUE_AFTER_ERROR
- G. SIMPLE
- H. DBO_ONLY
- I. COPY_ONLY
- J. SKIP
- K. RESTART
- L. Transaction log
- M. NO_CHECKSUM
- N. NORECOVERY

Correct Answer: F

Section: (none)

Explanation

Explanation/Reference:

Verified answer as correct.

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

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

QUESTION 40

You administer a Microsoft SQL Server 2012 instance that contains a financial database hosted on a storage area network (SAN). The financial database has the following characteristics:

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

The database is continually modified by users during business hours from Monday through Friday between 09:00 hours and 17:00 hours. Five percent of the existing data is modified each day. The Finance department loads large CSV files into a number of tables each business day at 11:15 hours and 15:15 hours by using the BCP or BULK INSERT commands. Each data load adds 3 GB of data to the database. These data load operations must occur in the minimum amount of time. A full database backup is performed every Sunday at 10:00 hours. Backup operations will be performed every two hours (11:00, 13:00, 15:00, and 17:00) during business hours. On Wednesday at 10:00 hours, the development team requests you to refresh the database on a development server by using the most recent version. You need to perform a full database backup that will be restored on the development server. Which backup option should you use?

- A. NORECOVERY
- B. FULL
- C. NO_CHECKSUM
- D. CHECKSUM
- E. Differential
- F. BULK_LOGGED
- G. STANDBY
- H. RESTART
- I. SKIP
- J. Transaction log
- K. DBO ONLY
- L. COPY_ONLY
- M. SIMPLE
- N. CONTINUE AFTER ERROR

Correct Answer: L

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

Verified answer as correct.

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

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

QUESTION 41

You administer a Microsoft SQL Server 2012 instance that contains a financial database hosted on a storage area network (SAN). The financial database has the following characteristics:

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

The database is continually modified by users during business hours from Monday through Friday between 09:00 hours and 17:00 hours. Five percent of the existing data is modified each day. The Finance department

loads large CSV files into a number of tables each business day at 11:15 hours and 15:15 hours by using the BCP or BULK INSERT commands. Each data load adds 3 GB of data to the database. These data load operations must occur in the minimum amount of time. A full database backup is performed every Sunday at 10:00 hours. Backup operations will be performed every two hours (11:00, 13:00, 15:00, and 17:00) during business hours. You need to ensure that the backup size is as small as possible. Which backup should you perform every two hours?

- A. BULK_LOGGED
- B. NO_CHECKSUM
- C. FULL
- D. RESTART
- E. CHECKSUM
- F. STANDBY
- G. DBO.ONLY
- H. NORECOVERY
- I. SIMPLE
- J. Transaction log
- K. Differential
- L. CONTINUE_AFTER_ERROR
- M. COPY_ONLY
- N. SKIP

Correct Answer: J

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

Verified answer as correct.

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

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

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

QUESTION 42

You administer a Microsoft SQL Server 2012 database. You need to ensure that the size of the transaction log file does not exceed 2 GB. What should you do?

- A. Execute sp_configure 'max log size', 2G.
- B. use the ALTER DATABASE...SET LOGFILE command along with the maxsize parameter.
- C. In SQL Server Management Studio, right-click the instance and select Database Settings. Set the maximum size of the file for the transaction log.
- D. in SQL Server Management Studio, right-click the database, select Properties, and then click Files. Open the Transaction log Autogrowth window and set the maximum size of the file.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

--Burgos - YES (this question is duplicated, I don't remember which are the wrong questions)

Verified answer as correct.

QUESTION 43

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. 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.

Correct Answer: I

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

Reference: <http://msdn.microsoft.com/en-us/library/ms188344.aspx>

QUESTION 44

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.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

Verified answer as correct.

QUESTION 45

You develop a Microsoft SQL Server 2012 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

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

Reference: <http://technet.microsoft.com/en-us/library/ms189857.aspx>

Reference: <http://msdn.microsoft.com/en-us/library/ms187373.aspx>

QUESTION 46

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 Purchases
WHERE PurchaseTime = CONVERT(DATE, GETDATE())
```
- B.

```
SELECT COUNT(*)
FROM Purchases
WHERE PurchaseTime = GETDATE()
```
- C.

```
SELECT COUNT(*)
FROM Purchases
WHERE CONVERT(VARCHAR, PurchaseTime, 112) = CONVERT(VARCHAR, GETDATE(), 112)
```
- D.

```
SELECT COUNT(*)
FROM Purchases
WHERE PurchaseTime >= CONVERT(DATE, GETDATE())
AND PurchaseTime < DATEADD(DAY, 1, CONVERT(DATE, GETDATE()))
```

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

D use SARG (Searchable arguments) and C do not use. If you create this table with this indexes in a table with millions and this column is "selective" for a day, you will see the difference.

--\Burgos

Two answers will return the correct results (the "WHERE CONVERT..." and "WHERE ... AND ..." answers). The correct answer for Microsoft would be the answer that is most "efficient". Anybody have a clue as to which is most efficient? In the execution plan, the one that I've selected as the correct answer is the query with the shortest duration. Also, the query answer with "WHERE CONVERT..." threw warnings in the execution plan...something about affecting CardinalityEstimate and SeekPlan.

I also found this article, which leads me to believe that I have the correct answer:

<http://technet.microsoft.com/en-us/library/ms181034.aspx>

QUESTION 47

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.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: <http://msdn.microsoft.com/en-us/library/hh213505.aspx>

QUESTION 48

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 PRIMARY KEY CLUSTERED,
CustomerID int NOT NULL PRIMARY KEY CLUSTERED,
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 UQ_Customer UNIQUE CLUSTERED  
(SourceID, CustomerID));
```

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

--Burgos - YES - I tried to change choices to reflect situations in my exam. Originally, the correct choice was D by creating PK, in my exam appears UNIQUE and wrong syntaxes to create PK in other choices.

Verified the answer as correct.

D option, I met in test, goes with unique key on 2 combined columns. Still choose this.

QUESTION 49

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 TrgVwEmployee
ON VwEmployee
FOR INSERT
AS
BEGIN
INSERT INTO Person(Id, FirstName, LastName)
SELECT Id, FirstName, LastName, FROM inserted

INSERT INTO Employee(PersonId, EmployeeNumber)
SELECT Id, EmployeeNumber FROM inserted

END
- B. CREATE TRIGGER TrgVwEmployee
ON VwEmployee
INSTEAD OF INSERT
AS
BEGIN
INSERT INTO Person(Id, FirstName, LastName)
SELECT Id, FirstName, LastName, FROM inserted

INSERT INTO Employee(PersonId, EmployeeNumber)
SELECT Id, EmployeeNumber FROM inserted

END
- C. CREATE TRIGGER TrgVwEmployee
ON VwEmployee
INSTEAD OF INSERT
AS
BEGIN

DECLARE @ID INT, @FirstName NVARCHAR(25), @LastName NVARCHAR(25), @PersonID
INT, @EmployeeNumber NVARCHAR(15)

SELECT @ID = ID, @FirstName = FirstName, @LastName = LastName, @EmployeeNumber
= EmployeeNumber
FROM inserted

INSERT INTO Person(Id, FirstName, LastName)
VALUES(@ID, @FirstName, @LastName)

INSERT INTO Employee(PersonID, EmployeeNumber)

```
VALUES (@PersonID, @EmployeeNumber

End
D. CREATE TRIGGER TrgVwEmployee
ON VwEmployee
INSTEAD OF INSERT
AS
BEGIN
INSERT INTO Person(Id, FirstName, LastName)
SELECT Id, FirstName, LastName FROM VwEmployee

INSERT INTO Employee(PersonID, EmployeeNumber)
SELECT Id, EmployeeNumber FROM VwEmployee

End
```

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

--Burgos - YES

Verified answer as correct.

QUESTION 50

You use Microsoft SQL Server 2012 database to develop a shopping cart application. You need to rotate the unique values of the ProductName field of a table-valued expression into multiple columns in the output. Which Transact-SQL operator should you use?

- A. CROSS JOIN
- B. CROSS APPLY
- C. PIVOT
- D. UNPIVOT

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

--Burgos - YES

<http://technet.microsoft.com/en-us/library/ms177634.aspx>

QUESTION 51

Your application contains a stored procedure for each country. Each stored procedure accepts an employee identification number through the @EmplID parameter. You plan to build a single process for each employee that will execute the stored procedure based on the country of residence. Which approach should you use?

- A. a recursive stored procedure
- B. Trigger
- C. An UPDATE statement that includes CASE
- D. Cursor
- E. The foreach SQLCLR statement

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

QUESTION 52

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

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

Verified answer as correct.

QUESTION 53

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 during reads, the transaction experiences blocking from concurrent updates. You need to ensure that throughout the transaction the data maintains the original version. 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.

Correct Answer: M

Section: (none)

Explanation

Explanation/Reference:

QUESTION 54

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.

Correct Answer: K

Section: (none)

Explanation

Explanation/Reference:

--Burgos - YES

QUESTION 55

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.

Correct Answer: G

Section: (none)

Explanation

Explanation/Reference:

--Burgos - YES

Reference: <http://msdn.microsoft.com/en-us/library/cc645587.aspx>

QUESTION 56

You are developing a database application by using Microsoft SQL Server 2012. An application that uses a database begins to run slowly. Your investigation shows the root cause is a query against a read-only table that has a clustered index. The query returns the following six columns:

- One column in its WHERE clause contained in a non-clustered index
- Four additional columns
- One COUNT (*) column based on a grouping of the four additional columns.

You need to optimize the statement. 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.

Correct Answer: F

Section: (none)

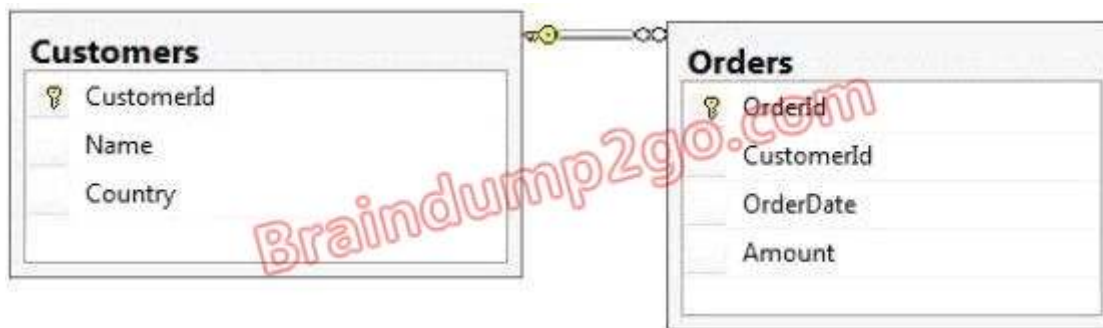
Explanation

Explanation/Reference:

--Burgos - YES

QUESTION 57

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?

- 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`
- F. `SELECT Name, Country, OrderId, 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')`

Correct Answer: G

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

Verified answer as correct.

QUESTION 58

You develop a Microsoft SQL Server 2012 server database that supports an application. The application contains a table that has the following definition:

```
CREATE TABLE Inventory (
  ItemID int NOT NULL PRIMARY KEY,
  ItemsInStore int NOT NULL,
  ItemsInWarehouse int NOT NULL)
```

You need to create a computed column that returns the sum total of the ItemsInStore and ItemsInWarehouse values for each row. The new column is expected to be queried heavily, and you need to be able to index the column. Which Transact-SQL statement should you use?

- A. `ALTER TABLE Inventory ADD TotalItems AS ItemsInStore + ItemsInWarehouse`
- B. `ALTER TABLE Inventory ADD TotalItems AS ItemsInStore + ItemsInWarehouse PERSISTED`
- C. `ALTER TABLE Inventory ADD TotalItems AS SUM(ItemsInStore, ItemsInWarehouse) PERSISTED`
- D. `ALTER TABLE Inventory`

```
ADD TotalItems AS SUM(ItemsInStore, ItemsInWarehouse)
```

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Verified answer as correct.

Reference: <http://msdn.microsoft.com/en-us/library/ms174979.aspx>

QUESTION 59

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

```
CREATE TABLE [dbo].[Customers] (
    [CustomerId] [bigint] NOT NULL,
    [MobileNumber] [nvarchar](25) NOT NULL,
    [HomeNumber] [nvarchar](25) NULL,
    [Name] [nvarchar](50) NOT NULL,
    [Country] [nvarchar](25) NOT NULL,
    CONSTRAINT [PK_Customers] PRIMARY KEY CLUSTERED
(
    [CustomerId] ASC
) ON [PRIMARY]
) ON [PRIMARY]
```

You need to create an audit record only when either the MobileNumber or HomeNumber column is updated. Which Transact-SQL query should you use?

- A.

```
CREATE TRIGGER TrgPhoneNumberChange
ON Customers FOR UPDATE
AS
IF COLUMNS_UPDATED (HomeNumber, MobileNumber)
-- Create Audit Records
```
- B.

```
CREATE TRIGGER TrgPhoneNumberChange
ON Customers FOR UPDATE
AS
IF EXISTS ( SELECT HomeNumber FROM inserted) OR
EXISTS (SELECT MobileNumber FROM inserted)
-- Create Audit Records
```
- C.

```
CREATE TRIGGER TrgPhoneNumberChange
ON Customers FOR UPDATE
AS
IF COLUMNS_CHANGED (HomeNumber, MobileNumber)
-- Create Audit Records
```
- D.

```
CREATE TRIGGER TrgPhoneNumberChange
ON Customers FOR UPDATE
AS
IF UPDATE (HomeNumber) OR UPDATE (MobileNumber)
-- Create Audit Records
```

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

B is totally wrong (wouldn't work). Mobile Number is NOT NULL, so, in an UPDATETRIGGER always have a value in inserted table, including in case of the value is not changed. Home Number will be audit in cases when the final state is FILLED, independently of it's changed or NOT. The command below would work, but still worse than D.

```
IF EXISTS (SELECT TOP 1 1 FROM inserted it INNER JOIN deleted de ON
de.CustomerID = it.CustomerID WHERE it.MobileNumber <> de.MobileNumber OR
coalesce(it.HomeNumber, '') <> coalesce(de.HomeNumber, ''))
```

--\Burgos

Previous version thinks the answer was B. I think it should go with D.

--Derek

Verified answer as correct.

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

Reference: <http://msdn.microsoft.com/en-us/library/ms186329.aspx>

QUESTION 60

You develop a Microsoft SQL Server 2012 database that has two tables named SavingAccounts and LoanAccounts. Both tables have a column named AccountNumber of the nvarchar data type. You use a third table named Transactions that has columns named TransactionId, AccountNumber, Amount, and TransactionDate. You need to ensure that when multiple records are inserted in the Transactions table, only the records that have a valid AccountNumber in the SavingAccounts or LoanAccounts are inserted. Which Transact-SQL statement should you use?

- A. CREATE TRIGGER TrgValidateAccountNumber
ON Transactions
INSTEAD OF INSERT
AS
BEGIN
 INSERT INTO Transactions
 SELECT TransactionID, AccountNumber, Amount, TransactionDate FROM inserted
 WHERE AccountNumber IN
 (SELECT AccountNumber FROM LoanAccounts
 UNION SELECT AccountNumber FROM SavingAccounts))
END
- B. CREATE TRIGGER TrgValidateAccountNumber
ON Transactions
FOR INSERT
AS
BEGIN
 INSERT INTO Transactions
 SELECT TransactionID, AccountNumber, Amount, TransactionDate FROM inserted
 WHERE AccountNumber IN
 (SELECT AccountNumber FROM LoanAccounts
 UNION SELECT AccountNumber FROM SavingAccounts))
END
- C. CREATE TRIGGER TrgValidateAccountNumber
ON Transactions
INSTEAD OF INSERT
AS
BEGIN
 IF EXISTS (
 SELECT AccountNumber FROM inserted EXCEPT
 (SELECT AccountNumber FROM LoanAccounts
 UNION SELECT AccountNumber FROM SavingAccounts))
 BEGIN
 ROLLBACK TRAN
 END
END

```

D. CREATE TRIGGER TrgValidateAccountNumber
ON Transactions
FOR INSERT
AS
BEGIN
    IF EXISTS (
        SELECT AccountNumber FROM inserted EXCEPT
        (SELECT AccountNumber FROM LoanAccounts
         UNION SELECT AccountNumber FROM SavingAccounts))
    BEGIN
        ROLLBACK TRAN
    END
END

```

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

--Burgos - YES (different order)

Options C and D inserts rows only if 100% of rows in multiple insert pass for the rule, otherwise, inserts NO ROWS.

Options B and D would try to duplicate transactions.

--\Burgos

Verified answer as correct.

QUESTION 61

You develop a Microsoft SQL Server 2012 database. You create a view that performs the following tasks:

- Joins 8 tables that contain up to 500,000 records each.
- Performs aggregations on 5 fields.

The view is frequently used in several reports. You need to improve the performance of the reports.

What should you do?

- A. Convert the view into a table-valued function.
- B. Convert the view into a Common Table Expression (CTE).
- C. Convert the view into an indexed view.
- D. Convert the view into a stored procedure and retrieve the result from the stored procedure into a temporary table.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

Better is build a "DW" with results of this query and populate this "DW" in the correct moment (daily, in "low-consuming" time, for example). If business rules need data of current day, the "stored procedure" that use this data would join "DW" with transactions of current day and recalculate the "aggregations" before show it.

--\Burgos

Verified answer as correct.

Reference: <http://msdn.microsoft.com/en-us/library/ms191432.aspx>

QUESTION 62

You are a database developer of a Microsoft SQL Server 2012 database. The database contains a table named Customers that has the following definition:

```
CREATE TABLE Customer
(CustomerID INT NOT NULL PRIMARY KEY,
 CustomerName VARCHAR(255) NOT NULL,
 CustomerAddress VARCHAR(1000) NOT NULL)
```

You are designing a new table named Orders that has the following definition:

```
CREATE TABLE Orders
(OrderID INT NOT NULL PRIMARY KEY,
 CustomerID INT NOT NULL,
 OrderDescription VARCHAR(2000))
```

You need to ensure that the CustomerId column in the Orders table contains only values that exist in the CustomerId column of the Customer table. Which Transact-SQL statement should you use?

- A. ALTER TABLE Orders
ADD CONSTRAINT FK_Orders_CustomerID FOREIGN KEY (CustomerID) REFERENCES
Customer (CustomerID)
- B. ALTER TABLE Customer
ADD CONSTRAINT FK_Customer_CustomerID FOREIGN KEY (CustomerID) REFERENCES
Orders (CustomerID)
- C. ALTER TABLE Orders
ADD CONSTRAINT CK_Orders_CustomerID
CHECK (CustomerID IN (SELECT CustomerId FROM Customer))
- D. ALTER TABLE Customer
ADD OrderID INT NOT NULL;

ALTER TABLE Customer
ADD CONSTRAINT FK_Customer_OrderID FOREIGN KEY (OrderID) REFERENCES Orders
(OrderID);
- E. ALTER TABLE Orders
ADD CONSTRAINT PK_Orders_CustomerID PRIMARY KEY (CustomerID)

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO
Verified answer as correct.

Reference: <http://msdn.microsoft.com/en-us/library/ms189049.aspx>

QUESTION 63

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?

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

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO


Verified answer as correct.


Reference: <http://msdn.microsoft.com/en-us/library/ms187956.aspx>

QUESTION 64

You have a database that contains the tables shown in the exhibit. (Click the Exhibit button.)

OrderDetails			
	Column Name	Data Type	Allow Nulls
	ListPrice	money	<input type="checkbox"/>
	Quantity	int	<input type="checkbox"/>
			<input type="checkbox"/>

Customers			
	Column Name	Data Type	Allow Nulls
	CustomerID	int	<input type="checkbox"/>
	FirstName	varchar(100)	<input type="checkbox"/>
	LastName	varchar(100)	<input type="checkbox"/>
			<input type="checkbox"/>

Orders			
	Column Name	Data Type	Allow Nulls
	OrderID	int	<input type="checkbox"/>
	OrderDate	datetime	<input type="checkbox"/>
	CustomerID	int	<input type="checkbox"/>
			<input type="checkbox"/>

You need to create a view named uv_CustomerFullName to meet the following requirements:

- The code must NOT include object delimiters.
- The view must be created in the Sales schema.
- Columns must only be referenced by using one-part names.
- The view must return the first name and the last name of all customers.
- The view must prevent the underlying structure of the customer table from being changed.
- The view must be able to resolve all referenced objects, regardless of the user's default schema.

Which code segment should you use?

To answer, type the correct code in the answer area.

A.

```
CREATE VIEW Sales.uv_CustomerFullName
with Schemabinding
AS
SELECT FirstName, LastName
```

```
FROM Customers
B. CREATE VIEW Sales.uv_CustomerFullName
AS
SELECT FirstName, LastName
FROM Customers
```

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

```
CREATE VIEW Sales.uv_CustomerFullName
with Schemabinding
AS
SELECT FirstName, LastName
FROM Customers
```

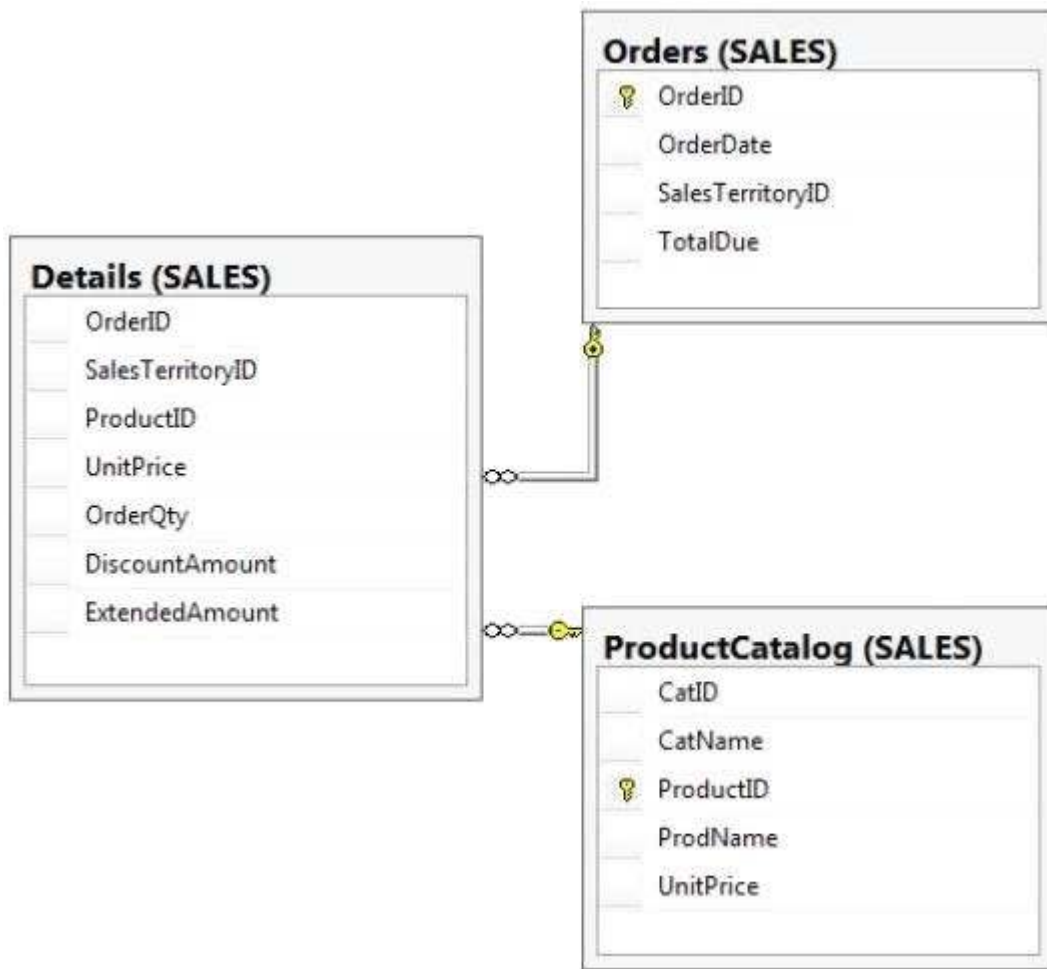
--Derek

```
Previous answer:
CREATE VIEW Sales.uv_CustomerFullName
AS
SELECT FirstName, LastName
FROM Customers
```

Reference: <http://msdn.microsoft.com/en-us/library/ms187956.aspx>

QUESTION 65

You have a database that contains the tables shown in the exhibit. (Click the Exhibit button.)



You need to create a query that calculates the total sales of each OrderId from the Sales.Details table. The solution must meet the following requirements:

- Use one-part names to reference columns.
- Sort the order of the results from OrderId.
- NOT depend on the default schema of a user.
- Use an alias of TotalSales for the calculated ExtendedAmount.
- Display only the OrderId column and the calculated TotalSales column.

Which code segment should you use?

To answer, type the correct code in the answer area.

- A. `SELECT OrderID, SUM(ExtendedAmount) AS TotalSales
FROM Sales.Details
GROUP BY OrderID
ORDER BY OrderID`
- B. `SELECT OrderID, SUM(ExtendedAmount) AS TotalSales
FROM Sales.Details
ORDER BY OrderID`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

```

SELECT OrderID, SUM(ExtendedAmount) AS TotalSales
FROM Sales.Details
GROUP BY OrderID
ORDER BY OrderID

```

--Derek

Previous one:

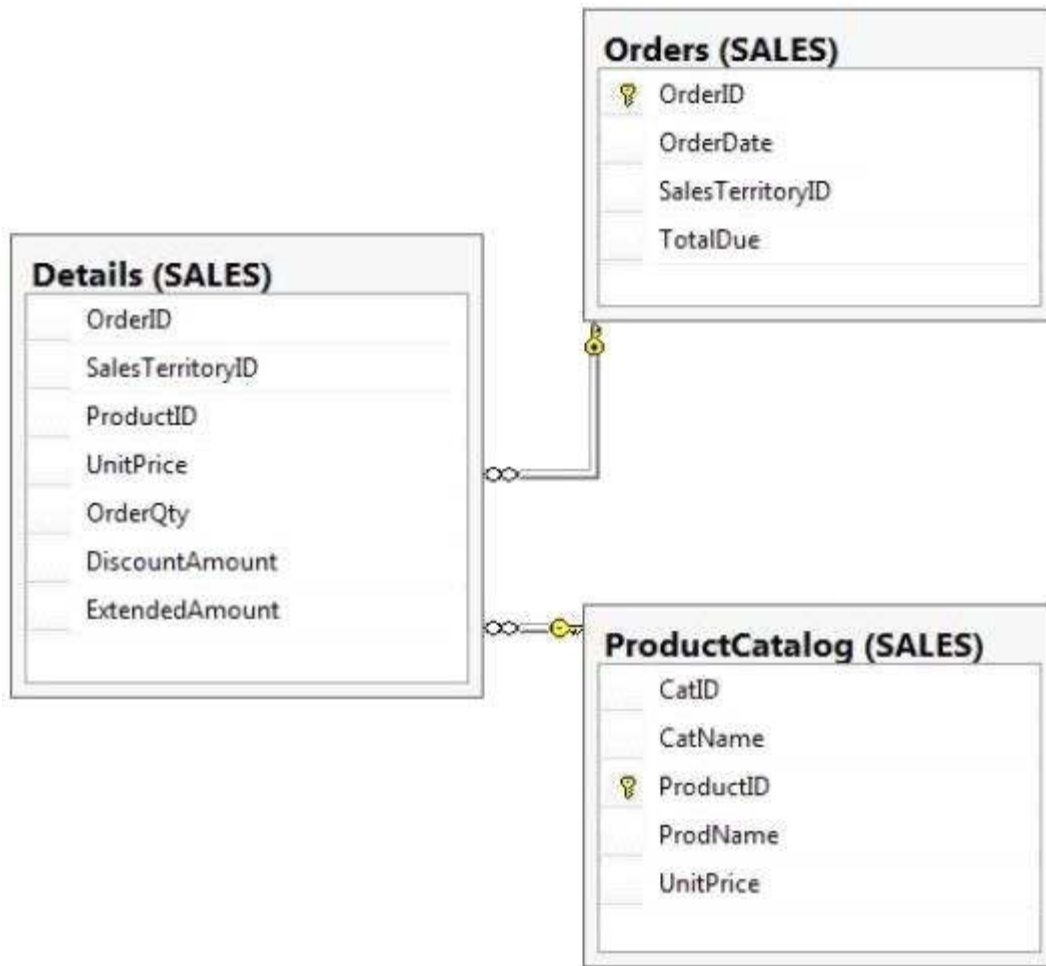
```

SELECT OrderID, SUM(ExtendedAmount) AS TotalSales
FROM Sales.Details
ORDER BY OrderID

```

QUESTION 66

You have a database that contains the tables as shown in the exhibit. (Click the Exhibit button.)



You have the following query:

```

SELECT SalesTerritoryID,
       ProductID,
       AVG(UnitPrice),
       MAX(OrderQty),
       MAX(DiscountAmount)
FROM Sales.Details

```

You need to recreate the query to meet the following requirements:

- Reference columns by using one-part names only.
- Sort aggregates by SalesTerritoryID, and then by ProductID.
- Order the results in descending order from SalesTerritoryID to ProductID.
- The solution must use the existing SELECT clause and FROM clause.

Which code segment should you use?

To answer, type the correct code in the answer area.

- A. `SELECT SalesTerritoryID,
ProductID,
AVG(UnitPrice),
MAX(OrderQty),
MAX(DiscountAmount)
FROM Sales.Details
GROUP BY SalesTerritoryID,ProductID
ORDER BY SalesTerritoryID DESC, ProductID DESC`
- B. `SELECT SalesTerritoryID,
ProductID,
AVG(UnitPrice),
MAX(OrderQty),
MAX(DiscountAmount)
FROM Sales.Details
ORDER BY SalesTerritoryID DESC, ProductID DESC`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

```
SELECT SalesTerritoryID,  
ProductID,  
AVG(UnitPrice),  
MAX(OrderQty),  
MAX(DiscountAmount)  
FROM Sales.Details  
GROUP BY SalesTerritoryID,ProductID  
ORDER BY SalesTerritoryID DESC, ProductID DESC
```

--Derek

=====


The previous answer missed "Group by"


```
SELECT SalesTerritoryID,  
ProductID,  
AVG(UnitPrice),  
MAX(OrderQty),  
MAX(DiscountAmount)  
FROM Sales.Details  
ORDER BY SalesTerritoryID DESC, ProductID DESC
```

QUESTION 67

You have a database that contains the tables shown in the exhibit. (Click the Exhibit button).

OrderDetails			
	Column Name	Data Type	Allow Nulls
	ListPrice	money	<input type="checkbox"/>
	Quantity	int	<input type="checkbox"/>
			<input type="checkbox"/>

Customers			
	Column Name	Data Type	Allow Nulls
	CustomerID	int	<input type="checkbox"/>
	FirstName	varchar(100)	<input type="checkbox"/>
	LastName	varchar(100)	<input type="checkbox"/>
			<input type="checkbox"/>

Orders			
	Column Name	Data Type	Allow Nulls
	OrderID	int	<input type="checkbox"/>
	OrderDate	datetime	<input type="checkbox"/>
	CustomerID	int	<input type="checkbox"/>
			<input type="checkbox"/>

You need to create a query for a report. The query must meet the following requirements:

- NOT use object delimiters.
- Return the most recent orders first.
- Use the first initial of the table as an alias.
- Return the most recent order date for each customer.
- Retrieve the last name of the person who placed the order.
- Return the order date in a column named MostRecentOrderDate that appears as the last column in the report.

The solution must support the ANSI SQL-99 standard.

Which code segment should you use?

To answer, type the correct code in the answer area.

A.

```
SELECT c.CustomerID -- optional
      c.LastName, max(o.OrderDate) 'MostRecentOrderDate'
FROM Customer c LEFT OUTER JOIN Orders o ON o.CustomerID = c.CustomerID
GROUP BY c.CustomerID, c.LastName
ORDER BY 3 DESC
```

- B. `select C.Lastname, P.MostRecentOrderDate
from customers AS C inner join
(
select customID, MostRecentOrderDate=max(orderDate) from orders
group by customID
) P
on C.customerID=P.CustomerID
order by P.MostRecentOrderDate desc`
- C. `SELECT C.LastName, O.OrderDate AS MostRecentOrderDate
FROM Customers AS C INNER JOIN Orders AS O
ON C.CustomerID = O.CustomerID
ORDER BY O.OrderDate DESC`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

```
--Burgos - NO
Command equal to Derek, but without subquery. I Think that is better put
c.CustomerID to identifies duplicated LastName. I used "OUTER JOIN" to permit
that customers that had "no orders" appears too.
SELECT c.CustomerID -- optional
c.LastName, max(o.OrderDate) 'MostRecentOrderDate'
FROM Customer c LEFT OUTER JOIN Orders o ON o.CustomerID = c.CustomerID
GROUP BY c.CustomerID, c.LastName
ORDER BY o.OrderDate DESC
--\Burgos
```

According to the table spec, lastname is not unique key. So my answer is

```
select C.Lastname, P.MostRecentOrderDate
from customers AS C inner join
(
select customID, MostRecentOrderDate=max(orderDate) from orders
group by customID
) P
on C.customerID=P.CustomerID
order by P.MostRecentOrderDate desc
```

--Derek

=====

The previous one missed "Group By" and did not consider the case of duplicate last names.

```
SELECT C.LastName, O.OrderDate AS MostRecentOrderDate
FROM Customers AS C INNER JOIN Orders AS O
ON C.CustomerID = O.CustomerID
ORDER BY O.OrderDate DESC
```

QUESTION 68

You have an XML schema collection named Sales.InvoiceSchema. You need to declare a variable of the XML type named XML1. The solution must ensure that XML1 is validated by using Sales.InvoiceSchema.

Which code segment should you use?

To answer, type the correct code in the answer area.

- A. `Declare @XML1=XML(Sales.InvoiceSchema)`
- B. `DECLARE @XML1 XML
@XML1 = Sales.InvoiceSchema
CREATE XML SCHEMA COLLECTION XML1 AS @XML1`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

```
Declare @XML1=XML(Sales.InvoiceSchema)
```

--Derek

Maybe the previous one is correct but definitely not concise.

=====

```
DECLARE @XML1 XML
```

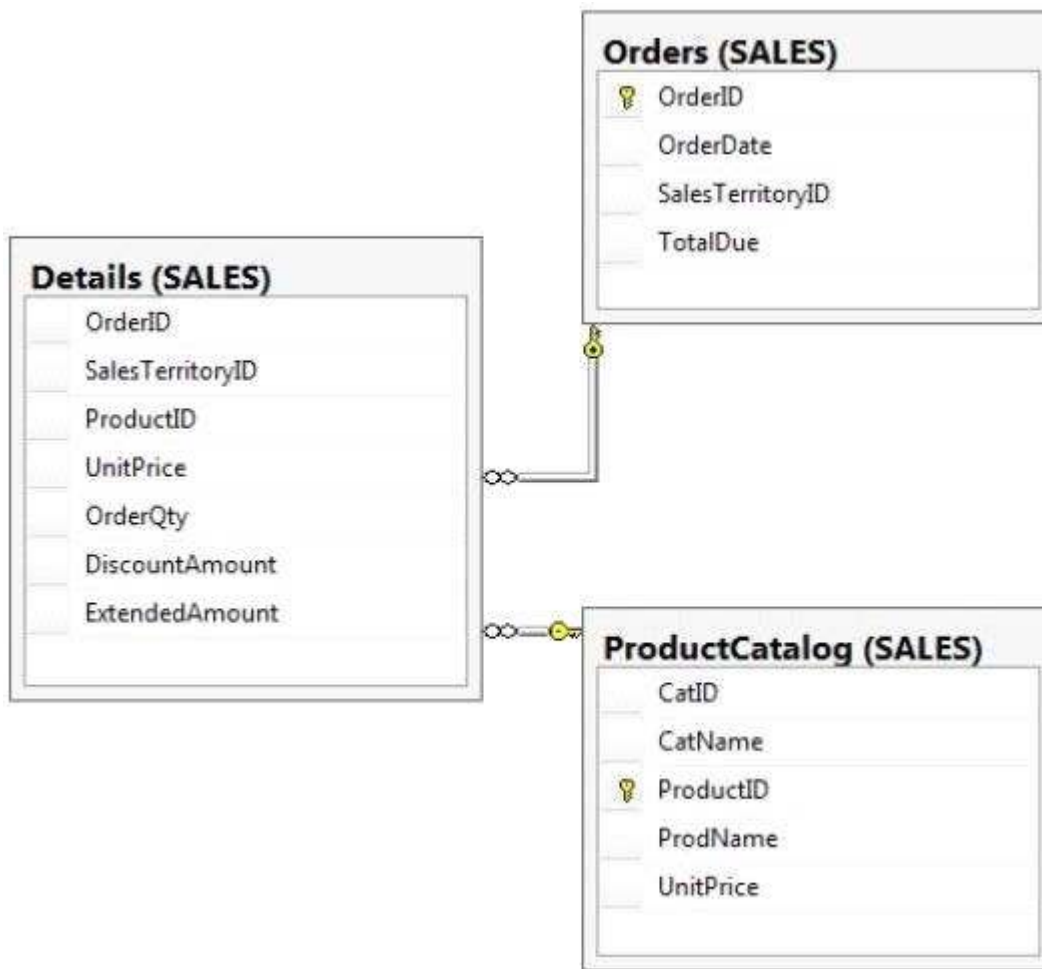
```
@XML1 = Sales.InvoiceSchema
```

```
CREATE XML SCHEMA COLLECTION XML1 AS @XML1
```

Reference: <http://msdn.microsoft.com/en-us/library/ms176009.aspx>

QUESTION 69

You have a database that contains the tables as shown in the exhibit. (Click the Exhibit button.)



You need to create a query that returns a list of products from Sales.ProductCatalog. The solution must meet the following requirements:

- UnitPrice must be returned in descending order.

- The query must use two-part names to reference the table.
- The query must use the RANK function to calculate the results.
- The query must return the ranking of rows in a column named PriceRank.
- The list must display the columns in the order that they are defined in the table.
- PriceRank must appear last.

Which code segment should you use?

To answer, type the correct code in the answer area.

- A. `SELECT ProductCatalog.CatID, ProductCatalog.CatName, ProductCatalog.ProductID, ProductCatalog.ProdName, ProductCatalog.UnitPrice, RANK() OVER (ORDER BY ProductCatalog.UnitPrice DESC) AS PriceRank FROM Sales.ProductCatalog ORDER BY ProductCatalog.UnitPrice DESC`
- B. `SELECT ProductCatalog.CatID, ProductCatalog.CatName, ProductCatalog.ProductID, ProductCatalog.ProdName, ProductCatalog.UnitPrice, RANK() OVER (PARTITION BY ProductCatalog.UnitPrice ORDER BY ProductCatalog.UnitPrice DESC) AS PriceRank FROM Sales.ProductCatalog ORDER BY ProductCatalog.UnitPrice DESC`

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

I test two options and "PARTITION BY" cause an problem: All rank in "PriceRank" column stiull with value 1 because the roe will be "firt position" in partition. Only A is totally correct.

--\Burgos

I did not any reason we need "partition by" in this case

```
SELECT ProductCatalog.CatID, ProductCatalog.CatName, ProductCatalog.ProductID,
ProductCatalog.ProdName, ProductCatalog.UnitPrice,
RANK() OVER (ORDER BY ProductCatalog.UnitPrice DESC) AS PriceRank
FROM Sales.ProductCatalog
ORDER BY ProductCatalog.UnitPrice DESC
```

--Derek


=====


```
SELECT ProductCatalog.CatID, ProductCatalog.CatName, ProductCatalog.ProductID,
ProductCatalog.ProdName, ProductCatalog.UnitPrice,
RANK() OVER (PARTITION BY ProductCatalog.UnitPrice ORDER BY
ProductCatalog.UnitPrice DESC) AS PriceRank
FROM Sales.ProductCatalog
ORDER BY ProductCatalog.UnitPrice DESC
```

QUESTION 70

You have a database that contains the tables shown in the exhibit. (Click the Exhibit button.)

OrderDetails			
	Column Name	Data Type	Allow Nulls
	ListPrice	money	<input type="checkbox"/>
	Quantity	int	<input type="checkbox"/>
			<input type="checkbox"/>

Customers			
	Column Name	Data Type	Allow Nulls
	CustomerID	int	<input type="checkbox"/>
	FirstName	varchar(100)	<input type="checkbox"/>
	LastName	varchar(100)	<input type="checkbox"/>
			<input type="checkbox"/>

Orders			
	Column Name	Data Type	Allow Nulls
	OrderID	int	<input type="checkbox"/>
	OrderDate	datetime	<input type="checkbox"/>
	CustomerID	int	<input type="checkbox"/>
			<input type="checkbox"/>

You have an application named Appl. You have a parameter named @Count that uses the int data type. App1 is configured to pass @Count to a stored procedure. You need to create a stored procedure named usp_Customers for Appl. Usp_Customers must meet the following requirements:

- NOT use object delimiters.
- Minimize sorting and counting.
- Return only the last name of each customer in alphabetical order.
- Return only the number of rows specified by the @Count parameter.
- The solution must NOT use BEGIN and END statements.

Which code segment should you use?

To answer, type the correct code in the answer area.

A.

```
CREATE PROCEDURE usp_Customers @Count int
AS
SELECT TOP (@Count) LastName
FROM Customers
ORDER BY LastName
```

Correct Answer: A

Section: (none)**Explanation****Explanation/Reference:**


```
--Burgos - NO  
Retiring optional aliases  
--\Burgos
```

```
CREATE PROCEDURE usp_Customers @Count int  
AS  
SELECT TOP(@Count) Customers.LastName  
FROM Customers  
ORDER BY Customers.LastName
```


QUESTION 71

You have a database that contains the tables as shown below:

OrderDetails			
	Column Name	Data Type	Allow Nulls
	ListPrice	money	<input type="checkbox"/>
	Quantity	int	<input type="checkbox"/>
			<input type="checkbox"/>

Customers			
	Column Name	Data Type	Allow Nulls
	CustomerID	int	<input type="checkbox"/>
	FirstName	varchar(100)	<input type="checkbox"/>
	LastName	varchar(100)	<input type="checkbox"/>
			<input type="checkbox"/>



Orders			
	Column Name	Data Type	Allow Nulls
	OrderID	int	<input type="checkbox"/>
	OrderDate	datetime	<input type="checkbox"/>
	CustomerID	int	<input type="checkbox"/>
			<input type="checkbox"/>

You have a stored procedure named Procedure1. Procedure1 retrieves all order ids after a specific date. The rows for Procedure1 are not sorted. Procedure1 has a single parameter named Parameter1. Parameter1 uses the varchar type and is configured to pass the specific date to Procedure1. A database administrator discovers

that OrderDate is not being compared correctly to Parameter1 after the data type of the column is changed to datetime. You need to update the SELECT statement to meet the following requirements:

- The code must NOT use aliases.
- The code must NOT use object delimiters.
- The objects called in Procedure1 must be able to be resolved by all users.
- OrderDate must be compared to Parameter1 after the data type of Parameter1 is changed to datetime.

Which SELECT statement should you use?

To answer, type the correct code in the answer area.

- A.

```
SELECT OrderID
FROM Orders
WHERE OrderDate>CONVERT(datetime,@Parameter1)
```
- B.

```
SELECT Orders.OrderID
FROM Orders
WHERE Orders.OrderDate>CONVERT(datetime,@Parameter1)
```

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO
Command NOT use aliases, so, I change the previous answer extracting "orders"
alias.
--\Burgos

```
SELECT Orders.OrderID
FROM Orders
WHERE Orders.OrderDate>CONVERT(datetime,@Parameter1)
```

QUESTION 72

You use Microsoft SQL Server 2012 database to develop a shopping cart application. You need to invoke a table-valued function for each row returned by a query. Which Transact-SQL operator should you use?

- A. CROSS JOIN
- B. UNPIVOT
- C. PIVOT
- D. CROSS APPLY

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

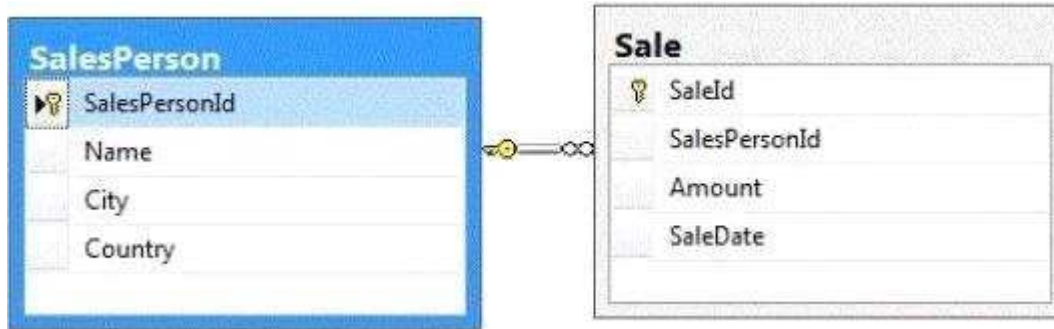
--Burgos - NO

Verified answer as correct.

Reference: <http://msdn.microsoft.com/en-us/library/ms175156.aspx>

QUESTION 73

You support a database structure shown in the exhibit. (Click the Exhibit button.)



You need to write a query that displays the following details:

- Total sales made by sales people, year, city, and country
- Sub totals only at the city level and country level
- A grand total of the sales amount

Which Transact-SQL query should you use?

- SELECT SalesPerson.Name, Country, City, DatePart(yyyy, SaleDate) AS Year, Sum(Amount) AS Total
FROM Sale INNER JOIN SalesPerson
ON Sale.SalesPersonID = SalesPerson.SalesPersonID
GROUP BY GROUPING SETS((SalesPerson.Name, Country, City, DatePart(yyyy, SaleDate)), (Country, City), (Country), ())
- SELECT SalesPerson.Name, Country, City, DatePart(yyyy, SaleDate) AS Year, Sum(Amount) AS Total
FROM Sale INNER JOIN SalesPerson
ON Sale.SalesPersonID = SalesPerson.SalesPersonID
GROUP BY CUBE(SalesPerson.Name, Country, City, DatePart(yyyy, SaleDate))
- SELECT SalesPerson.Name, Country, City, DatePart(yyyy, SaleDate) AS Year, Sum(Amount) AS Total
FROM Sale INNER JOIN SalesPerson
ON Sale.SalesPersonID = SalesPerson.SalesPersonID
GROUP BY CUBE(SalesPerson.Name, DatePart(yyyy, SaleDate), City, Country)
- SELECT SalesPerson.Name, Country, City, DatePart(yyyy, SaleDate) AS Year, Sum(Amount) AS Total
FROM Sale INNER JOIN SalesPerson
ON Sale.SalesPersonID = SalesPerson.SalesPersonID
GROUP BY ROLLUP(SalesPerson.Name, DatePart(yyyy, SaleDate), City, Country)

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

--Burgos - YES

Verified answer as correct.

Reference: <http://www.grapefruitmoon.net/diving-into-t-sql-grouping-sets/>

Reference: <http://msdn.microsoft.com/en-us/library/ms177673.aspx>

QUESTION 74

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?

- Two servers configured in the same data center

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

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

--Burgos - YES

Reference: <http://msdn.microsoft.com/en-us/library/ms151832.aspx>

QUESTION 75

You administer all the deployments of Microsoft SQL Server 2012 in your company. You need to ensure that an OLTP database that uses a storage area network (SAN) remains available if any of the servers fail. You also need to minimize the amount of storage used by the database. Which configuration should you use?

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

Correct Answer: H

Section: (none)

Explanation

Explanation/Reference:

QUESTION 76

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

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

--Burgos - YES

Reference: <http://msdn.microsoft.com/en-us/library/ms173763.aspx>

QUESTION 77

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_sessions WHERE session_id = 60`
- B. `DBCC OPENTRAN`
- C. `EXEC sp_helpdb 60`
- D. `SELECT * FROM sys.dm_exec_requests WHERE session_id = 60`

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO (I had another version of this question that have no choice with dm_exec_requests (sp_who instead).

Reference: <http://msdn.microsoft.com/en-us/library/ms177648.aspx>

QUESTION 78

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 Value
FROM StudentMarks
GROUP BY StudentCode`
- B. `SELECT Id, Name, Marks,
DENSE_RANK() OVER (ORDER BY Marks DESC) AS Rank
FROM StudentMarks`
- C. `SELECT StudentCode as Code,
DENSE_RANK() OVER (ORDER BY AVG (Marks) DESC) AS Value
FROM StudentMarks`

- GROUP BY StudentCode
- D. SELECT StudentCode as Code,
NTILE (2) OVER (ORDER BY AVG (Marks) DESC) AS Value
FROM StudentMarks
GROUP 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 Rank
FROM StudentMarks) tmp
WHERE 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 Rank
FROM StudentMarks) tmp
WHERE 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 Rank
FROM StudentMarks) tmp
WHERE Rank = 1
- H. SELECT StudentCode AS Code,Marks AS Value FROM (
SELECT StudentCode, Marks AS Marks,
RANXO OVER (PARTITION BY StudentCode ORDER BY Marks DESC) AS Rank
FROM StudentMarks) tmp
WHERE Rank = 1

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

QUESTION 79

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 following requirements are met:

- Students must be ranked based on their average marks.
- If one or more students have the same average, the same rank must be given to these students.
- Consecutive ranks must be skipped when the same rank is assigned.

Which Transact-SQL query should you use?

- A. SELECT StudentCode as Code,
RANK() OVER(ORDER BY AVG (Marks) DESC) AS Value
FROM StudentMarks
GROUP BY StudentCode
- B. SELECT Id, Name, Marks,
DENSE_RANK() OVER(ORDER BY Marks DESC) AS Rank
FROM StudentMarks
- C. SELECT StudentCode as Code,
DENSE_RANK() OVER(ORDER BY AVG (Marks) DESC) AS Value
FROM StudentMarks
GROUP BY StudentCode
- D. SELECT StudentCode as Code,
NTILE(2) OVER(ORDER BY AVG (Marks) DESC) AS Value
FROM StudentMarks
GROUP 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 Rank
 FROM StudentMarks) tmp
WHERE 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 Rank
 FROM StudentMarks) tmp
WHERE 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 Rank
 FROM StudentMarks) tmp
WHERE Rank = 1
- H. SELECT StudentCode AS Code,Marks AS Value FROM (
 SELECT StudentCode, Marks AS Marks,
 RANXO OVER(PARTITION BY StudentCode ORDER BY Marks DESC) AS Rank
 FROM StudentMarks) tmp
WHERE Rank = 1

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - NO

Reference: <http://msdn.microsoft.com/en-us/library/ms189798.aspx>

### QUESTION 80

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 retrieve the students who scored the highest marks for each subject along with the marks. Which Transact-SQL query should you use?

- A. SELECT StudentCode as Code, RANK() OVER(ORDER BY AVG(Marks) DESC) AS Value  
FROM StudentMarks  
GROUP BY StudentCode
- B. SELECT Id, Name, Marks, DENSE\_RANK() OVER(ORDER BY Marks DESC) AS Rank  
FROM StudentMarks
- C. SELECT StudentCode as Code, DENSE\_RANK() OVER(ORDER BY AVG(Marks) DESC) AS Value  
FROM StudentMarks  
GROUP BY StudentCode
- D. SELECT StudentCode as Code, NTILE(2) OVER(ORDER BY AVG(Marks) DESC) AS Value  
FROM StudentMarks  
GROUP 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 Rank
 FROM StudentMarks) tmp
WHERE 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 Rank
 FROM StudentMarks) tmp
WHERE 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 Rank
 FROM StudentMarks) tmp
WHERE Rank = 1
H. SELECT StudentCode AS Code, Marks AS Value FROM (
 SELECT StudentCode, Marks AS Marks,
 RANXO OVER(PARTITION BY StudentCode ORDER BY Marks DESC) AS Rank
 FROM StudentMarks) tmp
WHERE Rank = 1

```

**Correct Answer:** F

**Section:** (none)

**Explanation**

**Explanation/Reference:**

--Burgos - NO

### QUESTION 81

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.

**Correct Answer:** I

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Reference: <http://msdn.microsoft.com/en-us/library/ff848733.aspx>

Reference: <http://msdn.microsoft.com/en-us/library/bb630289.aspx>

### QUESTION 82

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.

**Correct Answer:** E

**Section:** (none)

**Explanation**

**Explanation/Reference:**

--Burgos - YES

#### **QUESTION 83**

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

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

--Burgos - YES

Reference: <http://msdn.microsoft.com/en-us/library/ms190174.aspx>

#### **QUESTION 84**

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

--Burgos - NO

#### **QUESTION 85**

You administer a Microsoft SQL Server database that supports a banking transaction management application.

You need to retrieve a list of account holders who live in cities that do not have a branch location. Which Transact-SQL query or queries should you use? (Each correct answer presents a complete solution. Choose all that apply.)

- A. 

```
SELECT AccountHolderID
FROM AccountHolder
WHERE CityID NOT IN (SELECT CityID FROM BranchMaster)
```
- B. 

```
SELECT AccountHolderID
FROM AccountHolder
WHERE CityID <> ALL (SELECT CityID FROM BranchMaster)
```
- C. 

```
SELECT AccountHolderID
FROM AccountHolder
WHERE CityID <> SOME (SELECT CityID FROM BranchMaster)
```
- D. 

```
SELECT AccountHolderID
FROM AccountHolder
WHERE CityID <> ANY (SELECT CityID FROM BranchMaster)
```

**Correct Answer:** AB

**Section:** (none)

**Explanation**

**Explanation/Reference:**

--Burgos - YES

Verified the answers as correct.

Reference: <http://msdn.microsoft.com/en-us/library/ms188047.aspx>

Reference: <http://msdn.microsoft.com/en-us/library/ms177682.aspx>

Reference: <http://msdn.microsoft.com/en-us/library/ms173545.aspx>

#### QUESTION 86

You administer a Microsoft SQL Server 2012 database. The database contains a table named Employee. Part of the Employee table is shown in the exhibit. (Click the Exhibit button.)



| Column Name  | Condensed Type |
|--------------|----------------|
| EmployeeID   | int            |
| EmployeeNum  | char(10)       |
| LastName     | nvarchar(200)  |
| FirstName    | nvarchar(200)  |
| MiddleName   | nvarchar(200)  |
| DateHired    | date           |
| DepartmentID | int            |
| JobTitle     | varchar(200)   |
| ReportsToID  | int            |

| Column name    | Description                                                                                                                                               |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| EmployeeID(pk) | Uniquely identifies the employee record in the table<br>Used throughout the database by all the other tables that reference the Employee table            |
| EmployeeNum    | An alphanumeric value calculated according to company requirements<br>Has to be unique within the Employee table<br>Exists only within the Employee table |
| DepartmentID   | References another table named Department that contains data for each department in the company                                                           |
| ReportsToID    | Contains the EmployeeID of the manager to whom an employee reports                                                                                        |
| ReportsToID    | Contains the EmployeeID of the manager to whom an employee reports                                                                                        |

Confidential information about the employees is stored in a separate table named EmployeeData. One record exists within EmployeeData for each record in the Employee table. You need to assign the appropriate constraints and table properties to ensure data integrity and visibility. On which column in the Employee table should you create a unique constraint?

- A. DateHired
- B. DepartmentID
- C. EmployeeID
- D. EmployeeNum
- E. FirstName
- F. JobTitle
- G. LastName
- H. MiddleName
- I. ReportsToID

**Correct Answer:** D

**Section:** (none)

**Explanation**

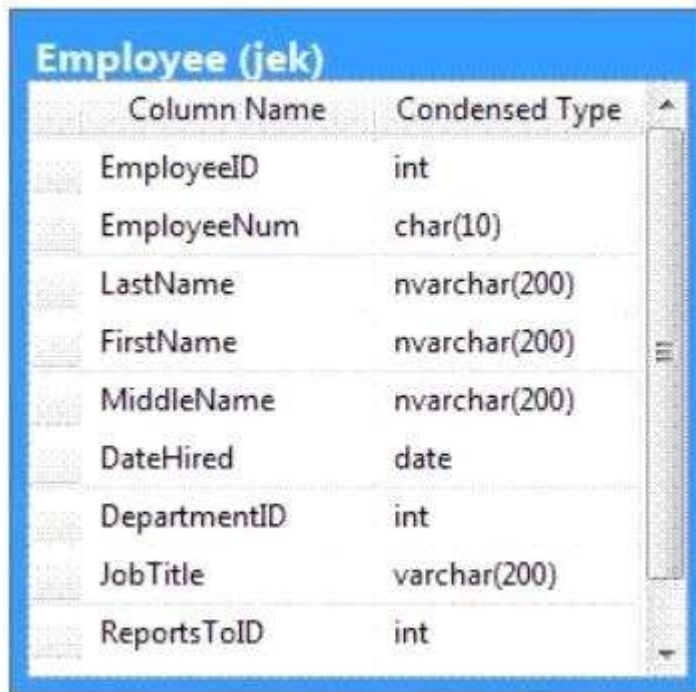
**Explanation/Reference:**

--Burgos - NO

Verified answer as correct.

**QUESTION 87**

You administer a Microsoft SQL Server 2012 database. The database contains a table named Employee. Part of the Employee table is shown in the exhibit. (Click the Exhibit button.)

The image is a screenshot of a SQL Server Enterprise Manager window showing the structure of a table named 'Employee (jek)'. The window has a blue title bar and a light blue header. Below the header, there is a table with two columns: 'Column Name' and 'Condensed Type'. The table lists the following columns and their data types: EmployeeID (int), EmployeeNum (char(10)), LastName (nvarchar(200)), FirstName (nvarchar(200)), MiddleName (nvarchar(200)), DateHired (date), DepartmentID (int), JobTitle (varchar(200)), and ReportsToID (int). A vertical scrollbar is visible on the right side of the table.

| Column Name  | Condensed Type |
|--------------|----------------|
| EmployeeID   | int            |
| EmployeeNum  | char(10)       |
| LastName     | nvarchar(200)  |
| FirstName    | nvarchar(200)  |
| MiddleName   | nvarchar(200)  |
| DateHired    | date           |
| DepartmentID | int            |
| JobTitle     | varchar(200)   |
| ReportsToID  | int            |

| Column name  | Description                                                                                                                                               |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| EmployeeID   | Uniquely identifies the employee record in the table<br>Used throughout the database by all the other tables that reference the Employee table            |
| EmployeeNum  | An alphanumeric value calculated according to company requirements<br>Has to be unique within the Employee table<br>Exists only within the Employee table |
| DepartmentID | References another table named Department that contains data for each department in the company                                                           |
| ReportsToID  | Contains the EmployeeID of the manager to whom an employee reports                                                                                        |

Confidential information about the employees is stored in a separate table named EmployeeData. One record exists within EmployeeData for each record in the Employee table. You need to assign the appropriate constraints and table properties to ensure data integrity and visibility. On which column in the Employee table should you use an identity specification to include a seed of 1,000 and an increment of 1?

- A. DateHired
- B. DepartmentID
- C. EmployeeID
- D. EmployeeNum
- E. FirstName
- F. JobTitle
- G. LastName
- H. MiddleName
- I. ReportsToID

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

--Burgos - NO

Verified answer as correct.

#### QUESTION 88

You administer a Microsoft SQL Server 2012 database that includes a table named Products. The Products table has columns named ProductId, ProductName, and CreatedDateTime. The table contains a unique

constraint on the combination of ProductName and CreatedDateTime. You need to modify the Products table to meet the following requirements:

- Remove all duplicates of the Products table based on the ProductName column.
- Retain only the newest Products row.

Which Transact-SQL query should you use?

- A. WITH CTEDupRecords  
AS  
(  
    SELECT MAX(CreatedDateTime) AS CreatedDateTime, ProductName  
    FROM Products  
    GROUP BY ProductName  
    HAVING COUNT(\*) > 1  
)  
DELETE p  
FROM Products p  
JOIN CTEDupRecords cte ON  
p.ProductName = cte.ProductName  
AND p.CreatedDateTime > cte.CreatedDateTime
- B. WITH CTEDupRecords  
AS  
(  
    SELECT MAX(CreatedDateTime) AS CreatedDateTime, ProductName  
    FROM Products  
    GROUP BY ProductName  
    HAVING COUNT(\*) > 1  
)  
DELETE p  
FROM Products p  
JOIN CTEDupRecords cte ON  
cte.ProductName = p.ProductName  
AND cte.CreatedDateTime > p.CreatedDateTime
- C. WITH CTEDupRecords  
AS  
(  
    SELECT MIN(CreatedDateTime) AS CreatedDateTime, ProductName  
    FROM Products  
    GROUP BY ProductName  
)  
DELETE p  
FROM Products p  
JOIN CTEDupRecords cte ON  
p.ProductName = cte.ProductName
- D. WITH CTEDupRecords  
AS  
(  
    SELECT MAX(CreatedDateTime) AS CreatedDateTime, ProductName  
    FROM Products  
    GROUP BY ProductName  
    HAVING COUNT(\*) > 1  
)  
DELETE p  
FROM Products p  
JOIN CTEDupRecords cte ON  
p.ProductName = cte.ProductName

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**



--Burgos - NO

I changed answer to B (previous was A) because is imposible to delete products with CreateDateTime greater than MAX(CreateDateTime). In fact will exists ONE AND ONLY ONE record with CreateDateTime EQUAL TO MAX(CreateDateTime), all records with same ProductName have a lower than MAX(CreateDateTime).

I tested both choices and ONLY B is correct.

Use the code below to test (note that SELECT will catch only rows to be deleted):

```
--Exam A Q028
CREATE TABLE Products (
ProductId int identity (1, 1) not null,
ProductName varchar (10) not null,
CreatedDateTime datetime not null,
constraint PK_Products PRIMARY KEY CLUSTERED (ProductId)
)
GO
ALTER TABLE Products ADD CONSTRAINT UQ_Products UNIQUE (ProductName,
CreatedDateTime)
GO
INSERT INTO Products (ProductName, CreatedDateTime) VALUES ('Product 1', '2010-
10-10')
INSERT INTO Products (ProductName, CreatedDateTime) VALUES ('Product 1', '2011-
11-11')
INSERT INTO Products (ProductName, CreatedDateTime) VALUES ('Product 1', '2012-
12-12')
INSERT INTO Products (ProductName, CreatedDateTime) VALUES ('Product 2', '2010-
10-10')
INSERT INTO Products (ProductName, CreatedDateTime) VALUES ('Product 2', '2012-
12-12')
INSERT INTO Products (ProductName, CreatedDateTime) VALUES ('Product 3', '2010-
10-10')
GO
WITH CTEDupRecords AS
(
 SELECT MAX(CreateDateTime) AS CreatedDateTime, ProductName
 FROM Products
 GROUP BY ProductName
 HAVING COUNT(*) > 1
)
select p.*
FROM Products p
JOIN CTEDupRecords cte ON
p.ProductName = cte.ProductName
AND p.CreatedDateTime > cte.CreatedDateTime
GO
WITH CTEDupRecords
AS
(
 SELECT MAX(CreateDateTime) AS CreatedDateTime, ProductName
 FROM Products
 GROUP BY ProductName
 HAVING COUNT(*) > 1
)
select p.*
FROM Products p
JOIN CTEDupRecords cte ON
cte.ProductName = p.ProductName
AND cte.CreatedDateTime > p.CreatedDateTime
GO
```

PS: In v.2012-10-17.by.Alex.142q this exercise appears with choice A using "<" instead of ">", so, in Alex we have two correct answers (A and B).

--Burgos

Verified answer as correct.

#### QUESTION 89

You develop three Microsoft SQL Server 2012 databases named Database1, Database2, and Database3. You have permissions on both Database1 and Database2. You plan to write and deploy a stored procedure named dbo.usp\_InsertEvent in Database3. dbo.usp\_InsertEvent must execute other stored procedures in the other databases. You need to ensure that callers that do not have permissions on Database1 or Database2 can execute the stored procedure. Which Transact-SQL statement should you use?

- A. USE Database2
- B. EXECUTE AS OWNER
- C. USE Database1
- D. EXECUTE AS CALLER

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Verified answer as correct.

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

Reference: <http://blog.sqlauthority.com/2007/10/06/sql-server-executing-remote-stored-procedure-calling-stored-procedure-on-linked-server/>

#### QUESTION 90

You develop a Microsoft SQL Server 2012 database that contains tables named Customers and Orders. The tables are related by a column named CustomerId. You need to create a query that meets the following requirements:

- Returns the CustomerName for all customers and the OrderDate for any orders that they have placed.
- Results must not include customers who have not placed any orders.

Which Transact-SQL query should you use?

- A. 

```
SELECT CustomerName, OrderDate
FROM Customers
LEFT OUTER JOIN Orders
ON Customers.CustomerId = Orders.CustomerId
```
- B. 

```
SELECT CustomerName, OrderDate
FROM Customers
RIGHT OUTER JOIN Orders
ON Customers.CustomerID = Orders.CustomerId
```
- C. 

```
SELECT CustomerName, OrderDate
FROM Customers
CROSS JOIN Orders
ON Customers.CustomerId = Orders.CustomerId
```
- D. 

```
SELECT CustomerName, OrderDate
FROM Customers
JOIN Orders
ON Customers.CustomerId = Orders.CustomerId
```

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - NO

Verified answer as correct.

Reference: <http://msdn.microsoft.com/en-us/library/ms177634.aspx>

#### QUESTION 91

You develop a Microsoft SQL Server 2012 database. You need to create a batch process that meets the following requirements:

- Status information must be logged to a status table.
- If the status table does not exist at the beginning of the batch, it must be created.

Which object should you use?

- A. Scalar user-defined function
- B. Inline user-defined function
- C. Table-valued user-defined function
- D. Stored procedure

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - NO

Verified answer as correct.

Reference: <http://msdn.microsoft.com/en-us/library/ms186755.aspx>

#### QUESTION 92

You administer a database that includes a table named Customers that contains more than 750 rows. You create a new column named PartitionNumber of the int type in the table. You need to assign a PartitionNumber for each record in the Customers table. You also need to ensure that the PartitionNumber satisfies the following conditions:

- Always starts with 1.
  - Starts again from 1 after it reaches 100.
- Which Transact-SQL statement should you use?

- A. 

```
CREATE SEQUENCE CustomerSequence AS int
START WITH 0
INCREMENT BY 1
MINVALUE 1
MAXVALUE 100
UPDATE Customers SET PartitionNumber = NEXT VALUE FOR CustomerSequence
DROP SEQUENCE CustomerSequence
```
- B. 

```
CREATE SEQUENCE CustomerSequence AS int
START WITH 1
INCREMENT BY 1
MINVALUE 1
MAXVALUE 100
CYCLE
UPDATE Customers SET PartitionNumber = NEXT VALUE FOR CustomerSequence
DROP SEQUENCE CustomerSequence
```
- C. 

```
CREATE SEQUENCE CustomerSequence AS int
START WITH 1
INCREMENT BY 1
MINVALUE 1
MAXVALUE 100
UPDATE Customers SET PartitionNumber = NEXT VALUE FOR CustomerSequence + 1
DROP SEQUENCE CustomerSequence
```

```
D. CREATE SEQUENCE CustomerSequence AS int
 START WITH 1
 INCREMENT BY 1
 MINVALUE 0
 MAXVALUE 100
 CYCLE
 UPDATE Customers SET PartitionNumber = NEXT VALUE FOR CustomerSequence
 DROP SEQUENCE CustomerSequence
```

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - NO

Verified answer as correct.

Reference: <http://msdn.microsoft.com/en-us/library/ff878091.aspx>

### QUESTION 93

You use a Microsoft SQL Server 2012 database that contains a table named BlogEntry that has the following columns:

| Column name   | Data type     |
|---------------|---------------|
| Id            | bigint        |
| EntryDateTime | datetime      |
| Summary       | nvarchar(max) |

Id is the Primary Key.

You need to append the "This is in a draft stage" string to the Summary column of the recent 10 entries based on the values in EntryDateTime. Which Transact-SQL statement should you use?

- A. 

```
UPDATE TOP(10) BlogEntry
 SET Summary.WRITE(N' This is in a draft stage', NULL, 0)
```
- B. 

```
UPDATE BlogEntry
 SET Summary = CAST(N' This is in a draft stage' as nvarchar(max))
 WHERE Id IN(SELECT TOP(10) Id FROM BlogEntry ORDER BY EntryDateTime DESC)
```
- C. 

```
UPDATE BlogEntry
 SET Summary.WRITE(N' This is in a draft stage', NULL, 0) FROM (
 SELECT TOP(10) Id FROM BlogEntry ORDER BY EntryDateTime DESC) AS s
 WHERE BlogEntry.Id = s.ID
```
- D. 

```
--this option was diferent im my exam
UPDATE BlogEntry
 SET Summary.WRITE(N' This is in a draft stage', 0, 0)
 WHERE Id IN(SELECT TOP(10) Id FROM BlogEntry ORDER BY EntryDateTime DESC)
```

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - YES, and different from original test. I changed to B

Verified answer as correct.

#### QUESTION 94

You use Microsoft SQL Server 2012 to develop a database application. You create a stored procedure named DeleteJobCandidate. You need to ensure that if DeleteJobCandidate encounters an error, the execution of the stored procedure reports the error number. Which Transact-SQL statement should you use?

- A. 

```
DECLARE @ErrorVar INT;
DECLARE @RowCountVar INT;

EXEC DeleteJobCandidate

SELECT @ErrorVar = @@ERROR, @RowCountVar = @@ROWCOUNT;
IF (@ErrorVar <> 0)
 PRINT N'Error = ' + CAST(@@ErrorVar AS NVARCHAR(8)) +
 N', Rows Deleted = ' + CAST(@@RowCountVar AS NVARCHAR(8));
GO
```
- B. 

```
DECLARE @ErrorVar INT;
DECLARE @RowCountVar INT;

EXEC DeleteJobCandidate

SELECT @ErrorVar = ERROR_STATE(), @RowCountVar = @@ROWCOUNT;
IF (@ErrorVar <> 0)
 PRINT N'Error = ' + CAST(ERRORSTATE() AS NVARCHAR(8)) +
 N', Rows Deleted = ' + CAST(@@RowCountVar AS NVARCHAR(8));
GO
```
- C. 

```
EXEC DeleteJobCandidate

IF (ERROR_STATE() != 0)
 PRINT N'Error = ' + CAST(@@ERROR AS NVARCHAR(8)) +
 N', Rows Deleted = ' + CAST(@@ROWCOUNT AS NVARCHAR(8));
GO
```
- D. 

```
EXEC DeleteJobCandidate

PRINT N'Error = ' + CAST(@@ERROR AS NVARCHAR(8)) +
 N', Rows Deleted = ' + CAST(@@ROWCOUNT AS NVARCHAR(8));
GO
```

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - NO

Verified answer as correct.

Reference: <http://msdn.microsoft.com/en-us/library/ms190193.aspx>

Reference: <http://msdn.microsoft.com/en-us/library/ms188790.aspx>

#### QUESTION 95

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

```

CREATE VIEW vOrders
WITH SCHEMABINDING
AS
SELECT o.ProductID,
 o.OrderDate,
 SUM(od.UnitPrice * od.OrderQty) AS Amount
FROM OrderDetails AS od INNER JOIN
 Orders AS o ON od.OrderID = o.OrderID
WHERE od.SalesOrderID = o.SalesOrderID
GROUP BY o.OrderDate, o.ProductID
GO

```

You need to ensure that users are able to modify data by using the view. What should you do?

- A. Create an AFTER trigger on the view.
- B. Modify the view to use the WITH VIEW\_METADATA clause.
- C. Create an INSTEAD OF trigger on the view.
- D. Modify the view to an indexed view.

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - NO

Verified answer as correct.

Reference: <http://msdn.microsoft.com/en-us/library/ms187956.aspx>

#### QUESTION 96

You have a view that was created by using the following code:

```

CREATE VIEW Sales.OrdersByTerritory
AS
SELECT OrderID
 ,OrderDate
 ,SalesTerritoryID
 ,TotalDue
FROM Sales.Orders;

```

You need to create an inline table-valued function named Sales.fn\_OrdersByTerritory, which must meet the following requirements:

- Accept the @T integer parameter.
- Use one-part names to reference columns.
- Filter the query results by SalesTerritoryID.
- Return the columns in the same order as the order used in OrdersByTerritoryView.

Which code segment should you use?

To answer, type the correct code in the answer area.

- A. 

```
CREATE FUNCTION Sales.fn_OrdersByTerritory (@T int)
RETURNS TABLE
```

```
AS
RETURN
(
 SELECT OrderID,OrderDate,SalesTerritoryID,TotalDue
 FROM Sales.OrdersByTerritory
 WHERE SalesTerritoryID = @T
)
```

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

--Burgos - NO

```
CREATE FUNCTION Sales.fn_OrdersByTerritory (@T int)
RETURNS TABLE
AS
RETURN
(
 SELECT OrderID,OrderDate,SalesTerritoryID,TotalDue
 FROM Sales.OrdersByTerritory
 WHERE SalesTerritoryID = @T
)
```

#### **QUESTION 97**

You have a database that contains the tables shown in the exhibit. (Click the Exhibit button.)

| OrderDetails |             |           |                          |
|--------------|-------------|-----------|--------------------------|
|              | Column Name | Data Type | Allow Nulls              |
|              | ListPrice   | money     | <input type="checkbox"/> |
|              | Quantity    | int       | <input type="checkbox"/> |
|              |             |           | <input type="checkbox"/> |

| Customers |             |              |                          |
|-----------|-------------|--------------|--------------------------|
|           | Column Name | Data Type    | Allow Nulls              |
|           | CustomerID  | int          | <input type="checkbox"/> |
|           | FirstName   | varchar(100) | <input type="checkbox"/> |
|           | LastName    | varchar(100) | <input type="checkbox"/> |
|           |             |              | <input type="checkbox"/> |

| Orders |             |           |                          |
|--------|-------------|-----------|--------------------------|
|        | Column Name | Data Type | Allow Nulls              |
|        | OrderID     | int       | <input type="checkbox"/> |
|        | OrderDate   | datetime  | <input type="checkbox"/> |
|        | CustomerID  | int       | <input type="checkbox"/> |
|        |             |           | <input type="checkbox"/> |

You deploy a new server that has SQL Server 2012 installed. You need to create a table named Sales.OrderDetails on the new server. Sales.OrderDetails must meet the following requirements:

- Write the results to a disk.
- Contain a new column named LineItemTotal that stores the product of ListPrice and Quantity for each row.
- The code must NOT use any object delimiters.

The solution must ensure that LineItemTotal is stored as the last column in the table. Which code segment should you use?

To answer, type the correct code in the answer area.

- A. `CREATE TABLE Sales.OrderDetails (`  
`ListPrice money not null,`  
`Quantity int not null,`  
`LineItemTotal as (ListPrice * Quantity) PERSISTED)`
- B. `CREATE TABLE Sales.OrderDetails (`  
`ListPrice money not null,`  
`Quantity int not null,`  
`LineItemTotal as (ListPrice * Quantity))`

**Correct Answer: A**



**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - NO

"PERSISTED" is better to have.

My answer:

```
CREATE TABLE Sales.OrderDetails (
ListPrice money not null,
Quantity int not null,
LineItemTotal as (ListPrice * Quantity) PERSISTED)
```

--Derek

The previous answer is as below.

```
CREATE TABLE Sales.OrderDetails (
ListPrice money not null,
Quantity int not null,
LineItemTotal as (ListPrice * Quantity))
```

Verified answer as correct.

Reference: <http://msdn.microsoft.com/en-us/library/ms174979.aspx>

Reference: <http://technet.microsoft.com/en-us/library/ms188300.aspx>

#### **QUESTION 98**

You are developing a database that will contain price information. You need to store the prices that include a fixed precision and a scale of six digits. Which data type should you use?

- A. Float
- B. Money
- C. Smallmoney
- D. Numeric

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - YES

In my test on Dec 20 in MN, USA, D option goes with "decimal", which is the same as "Numeric".

Numeric is the only one in the list that can give a fixed precision and scale.

Reference: <http://msdn.microsoft.com/en-us/library/ms179882.aspx>

#### **QUESTION 99**

You use Microsoft SQL Server 2012 to create a stored procedure as shown in the following code segment. (Line numbers are included for reference only.)

```

01 CREATE PROCEDURE DeleteCandidate
02 @InputCandidateID INT;
03 AS
04 BEGIN
05 BEGIN TRANSACTION;
06 BEGIN TRY
07 DELETE HumanResources.JobCandidate
08 WHERE JobCandidateID = @InputCandidateID;
09 INSERT INTO Audit.Log(Operation,OperationDate)
10 VALUES ('Delete',SYSDATETIME());
11 COMMIT TRANSACTION;
12 END TRY
13 BEGIN CATCH
14
15 COMMIT TRANSACTION
16 ELSE
17 ROLLBACK TRANSACTION;
18 END CATCH
19 END;

```

The procedure can be called within other transactions. You need to ensure that when the DELETE statement from the HumanResourcesJobCandidate table succeeds, the modification is retained even if the insert into the Audit.Log table fails. Which code segment should you add to line 14?

- A. IF @@TRANCOUNT = 0
- B. IF (XACT\_STATE ()) = 0
- C. IF (XACT\_STATE ()) = 1
- D. IF @@TRANCOUNT = 1

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - NO

IF (XACT\_STATE()) = 1 -- Test whether the transaction is committable.

IF (XACT\_STATE()) = -1 -- Test whether the transaction is uncommittable.

@@TRANCOUNT count number of transactions opened. In this case ALWAYS BE at least 1, because CATCH will be invoked only on error before COMMIT.

--\Burgos

Verified answer as correct.

Reference: <http://msdn.microsoft.com/en-us/library/ms189797.aspx>

Reference: <http://msdn.microsoft.com/en-us/library/ms187967.aspx>

### QUESTION 100

You use Microsoft SQL Server 2012 to develop a database application. Your application sends data to an NVARCHAR(MAX) variable named @var. You need to write a Transact-SQL statement that will find out the success of a cast to a decimal (36,9). Which code segment should you use?select

- A. BEGIN TRY  
SELECT convert(decimal(36,9), @var) AS Value, 'True' AS BadCast

```

END TRY
BEGIN CATCH
 SELECT convert(decimal(36,9), @var) AS Value, 'False' AS BadCast
END CATCH
B. TRY (
 SELECT convert(decimal(36,9), @var)
 SELECT 'True' AS BadCast
)
CATCH (
 SELECT 'False' AS BadCast
)
C. SELECT
 CASE
 WHEN convert(decimal(36,9), @var) IS NULL
 THEN 'True'
 ELSE 'False'
 END
 AS BadCast
D. SELECT
 IIF(TRY_PARSE(@var AS decimal(36,9)) IS NULL, 'True', 'False')
 AS BadCast

```

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - NO

Two new functions on SQL2012:

IIF (imediact IF, I remember Clipper with it): <http://msdn.microsoft.com/en-us/library/hh213574.aspx>

TRY\_PARSE: <http://msdn.microsoft.com/en-us/library/hh213126.aspx>

D works only on SQL2012.

To obtain same effect in SQL2008, try code below:

```

DECLARE @var NVARCHAR(MAX), @var2 NVARCHAR(MAX)
SELECT @var = '1234.88' -- or '12tt34.88' to BadCast
BEGIN TRY
 SELECT @var2 = convert(decimal(36,9), @var)
 SELECT 'False' AS BadCast
END TRY
BEGIN CATCH
 SELECT 'True' AS BadCast
END CATCH
--\Burgos

```

Verified answer as correct.

Reference: <http://msdn.microsoft.com/en-us/library/hh213126.aspx>

### QUESTION 101

You administer all the deployments of Microsoft SQL Server 2012 in your company. You need to ensure that an OLTP database that includes up-to-the-minute reporting requirements can be off-loaded from the primary database to another server. You also need to be able to add indexes to the secondary database. Which configuration should you use?

- A. Two servers configured in different data centers
  - SQL Server Availability Group configured in Synchronous-Commit Availability Mode
  - One server configured as an Active Secondary
- B. Two servers configured in the same data center
  - SQL Server Availability Group configured in Asynchronous-Commit Availability Mode
  - One server configured as an Active Secondary

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

**Correct Answer:** F

**Section:** (none)

**Explanation**

**Explanation/Reference:**

--Burgos - YES

This answer seems to be correct due to the requirement to add indexes to the secondary database.

Reference:

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

#### **QUESTION 102**

You administer all the deployments of Microsoft SQL Server 2012 in your company. You need to ensure that data changes are sent to a non-SQL Server database server in near real time. You also need to ensure that data on the primary server is unaffected. Which configuration should you use?

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

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

--Burgos - YES

Reference: <http://technet.microsoft.com/en-us/library/ms151738.aspx>

**QUESTION 103**

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.ShippingCountry
FROM Customer c
INNER JOIN
 (SELECT CustomerID, ShippingCountry,
 COUNT(OrderAmount) DESC) AS OrderAmount
 FROM Orders
 GROUP BY CustomerID, ShippingCountry) AS o
ON c.CustomerID = o.CustomerID
ORDER BY OrderAmount DESC
```

**Correct Answer: A**

**Section: (none)**

**Explanation**

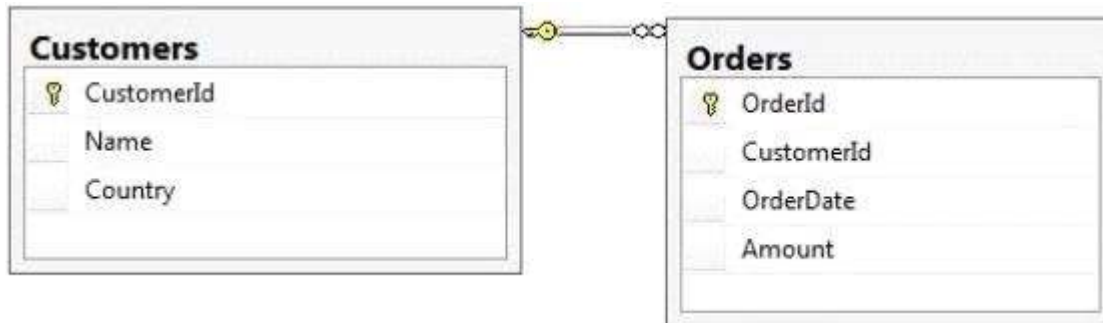
**Explanation/Reference:**

--Burgos - NO

Verified answer as correct.

#### QUESTION 104

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.

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

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
```

- F. `SELECT Name, Country, OrderId, 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')`

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - NO

Verified. I changed same wrong choices to avoid syntax errors.

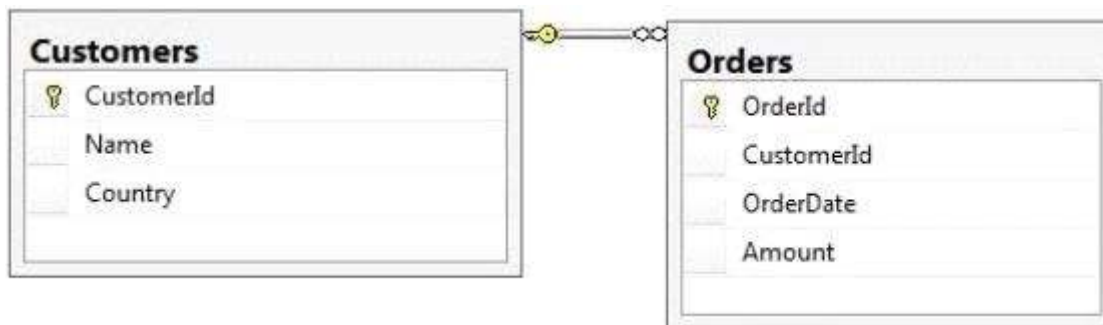
--\Burgos

Verified answer as correct.

Reference: <http://msdn.microsoft.com/en-us/library/ms188273.aspx>

### QUESTION 105

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">
 <ORDERS OrderID="1" OrderDate="2001-01-01" Amount="3400.00" />
 <ORDERS OrderID="2" OrderDate="2002-01-01" Amount="4300.00" />
</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
- F. SELECT Name, Country, OrderId, 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')

**Correct Answer: E**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - NO

Verified. I changed same wrong choices to avoid syntax errors.

--\Burgos

Verified answer as correct.

#### QUESTION 106

You administer a Microsoft SQL Server 2012 server. One of the databases on the server supports a highly active OLTP application. Users report abnormally long wait times when they submit data into the application. You need to identify which queries are taking longer than 1 second to run over an extended period of time. What should you do?

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

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - NO



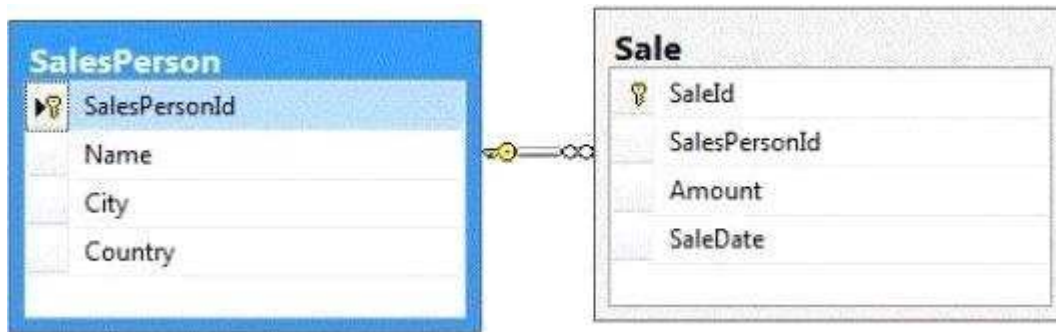
Trace 1222 is used for deadlocks. To take slow queries better to use Profile!  
--\Burgos

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

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

#### QUESTION 107

You support a database structure shown in the exhibit. (Click the Exhibit button.)



You need to write a query that displays the following details:

- Total sales made by sales people, year, city, and country
- Sub totals only at the city level and country level
- A grand total of the sales amount

Which Transact-SQL query should you use?

- A. `SELECT SalesPerson.Name, Country, City, DatePart(yyyy, SaleDate) AS Year, Sum(Amount) AS Total FROM Sale INNER JOIN SalesPerson ON Sale.SalesPersonID = SalesPerson.SalesPersonID GROUP BY GROUPING SETS((SalesPerson.Name, Country, City, DatePart(yyyy, SaleDate)), (Country, City), (Country), ())`
- B. `SELECT SalesPerson.Name, Country, City, DatePart(yyyy, SaleDate) AS Year, Sum(Amount) AS Total FROM Sale INNER JOIN SalesPerson ON Sale.SalesPersonID = SalesPerson.SalesPersonID GROUP BY CUBE(SalesPerson.Name, Country, City, DatePart(yyyy, SaleDate))`
- C. `SELECT SalesPerson.Name, Country, City, DatePart(yyyy, SaleDate) AS Year, Sum(Amount) AS Total FROM Sale INNER JOIN SalesPerson ON Sale.SalesPersonID = SalesPerson.SalesPersonID GROUP BY CUBE(SalesPerson.Name, DatePart(yyyy, SaleDate), City, Country)`
- D. `SELECT SalesPerson.Name, Country, City, DatePart(yyyy, SaleDate) AS Year, Sum(Amount) AS Total FROM Sale INNER JOIN SalesPerson ON Sale.SalesPersonID = SalesPerson.SalesPersonID GROUP BY ROLLUP(SalesPerson.Name, DatePart(yyyy, SaleDate), City, Country)`

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - YES

Verified answer as correct.

Reference: <http://www.grapefruitmoon.net/diving-into-t-sql-grouping-sets/>

Reference: <http://msdn.microsoft.com/en-us/library/ms177673.aspx>

**QUESTION 108**

You administer a Microsoft SQL Server 2012 instance. You need to stop a blocking process that has an SPID of 64 without stopping other processes. What should you do?

- A. Execute the following Transact-SQL statement:

```
EXECUTE sp_KillSPID 64
```

- B. Restart the SQL Server service.

- C. Execute the following Transact-SQL statement:

```
KILL 64
```

- D. Execute the following Transact-SQL statement:

```
ALTER SESSION KILL '64'
```

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - NO

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

**QUESTION 109**

You administer a Microsoft SQL Server 2012 database. Users report that an application that accesses the database displays an error, but the error does not provide meaningful information. No entries are found in the SQL Server log or Windows event logs related to the error. You need to identify the root cause of the issue by retrieving the error message. What should you do?

- A. Create an Extended Events session by using the sqlserver.error\_reported event.

- B. Create a SQL Profiler session to capture all ErrorLog and EventLog events.

- C. Flag all stored procedures for recompilation by using sp\_recompile.

- D. Execute sp\_who.

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

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

**QUESTION 110**

You administer a Microsoft SQL Server 2012 server. One of the databases on the server supports a highly active OLTP application. Users report abnormally long wait times when they submit data into the application. You need to identify which queries are taking longer than 1 second to run over an extended period of time. What should you do?

- A. Use SQL Profiler to trace all queries that are processing on the server. Filter queries that have a Duration value of more than 1,000.

- B. Use sp\_configure to set a value for blocked process threshold. Create an extended event session.

- C. Run the sp\_who command from a query window.

- D. Run the DBCC TRACEON 1222 command from a query window and review the SQL Server event log.
- E. Use the Job Activity monitor to review all processes that are actively running. Review the Job History to find out the duration of each step.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

--Burgos - NO

Trace 1222 is used for deadlocks. To take slow queries better to use Profile!

--\Burgos

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

Reference: <http://www.mssqltips.com/sqlservertip/2130/finding-sql-server-deadlocks-using-trace-flag-1222/>

Reference: <http://msdn.microsoft.com/en-us/library/ms188396.aspx>

#### QUESTION 111

You administer a Microsoft SQL Server 2012 server. The MSSQLSERVER service uses a domain account named CONTOSO\SQLService. You plan to configure Instant File Initialization. You need to ensure that Data File Autogrow operations use Instant File Initialization. What should you do? Choose all that apply.

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

**Correct Answer:** CD

**Section:** (none)

**Explanation**

**Explanation/Reference:**

--Burgos - NO

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

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

#### QUESTION 112

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

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

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

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

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

--Burgos - YES

Reference: <http://msdn.microsoft.com/en-us/library/cc280449.aspx>

Reference: <http://msdn.microsoft.com/en-us/library/cc280464.aspx>

Reference: <http://msdn.microsoft.com/en-us/library/cc280576.aspx>

Reference: <http://msdn.microsoft.com/en-us/library/ee240835.aspx>

#### **QUESTION 113**

You administer a Microsoft SQL Server 2012 instance. After a routine shutdown, the drive that contains tempdb fails. You need to be able to start the SQL Server. What should you do?

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

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

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

#### **QUESTION 114**

You administer a single server that contains a Microsoft SQL Server 2012 default instance. You plan to install a new application that requires the deployment of a database on the server. The application login requires sysadmin permissions. You need to ensure that the application login is unable to access other production databases. What should you do?

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

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

--Burgos - YES

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

Reference: <http://msdn.microsoft.com/en-us/library/ms187104.aspx>

#### QUESTION 115

You administer a Microsoft SQL Server 2012 Enterprise Edition server that uses 64 cores. You discover performance issues when large amounts of data are written to tables under heavy system load. You need to limit the number of cores that handle I/O. What should you configure?

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

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - YES

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

#### QUESTION 116

You have an XML schema collection named Sales.InvoiceSchema. You need to declare a variable of the XML type named XML1. The solution must ensure that XML1 is validated by using Sales.InvoiceSchema. Which code segment should you use?

To answer, type the correct code in the answer area.

- A. `Declare @XML1=XML(Sales.InvoiceSchema)`
- B. `DECLARE @XML1 XML`  
`@XML1 = Sales.InvoiceSchema`  
`CREATE XML SCHEMA COLLECTION XML1 AS @XML1`

**Correct Answer: A**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - NO

`Declare @XML1=XML(Sales.InvoiceSchema)`

--Derek

Maybe the previous one is correct but definitely not concise.

```
=====
DECLARE @XML1 XML
@XML1 = Sales.InvoiceSchema
CREATE XML SCHEMA COLLECTION XML1 AS @XML1
```

Reference: <http://msdn.microsoft.com/en-us/library/ms176009.aspx>

## Exam D

### QUESTION 1

#### DRAG AND DROP

You administer several Microsoft SQL Server 2012 servers. Your company has a number of offices across the world connected by using a wide area network (WAN). Connections between offices vary significantly in both bandwidth and reliability. You need to identify the correct replication method for each scenario. What should you do? (To answer, drag the appropriate replication method or methods to the correct location or locations in the answer area. Each replication method may be used once, more than once, or not at all.)

#### Select and Place:

Replication Method	Scenario
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.

#### Correct 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.
	An order summary table is repopulated once a week. This table must be replicated to all databases.
	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.
	Information in an order-tracking database must be replicated across a low-latency connection as changes occur to multiple reporting databases.

**Section: (none)**

**Explanation**

**Explanation/Reference:**

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

**QUESTION 2**

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

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

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

You notice the following entry in the SQL Server log:

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

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

**Build List and Reorder:**

Ordered List Title	Answer Choices Title
<div><div>▲</div><div>▼</div></div>	<div>Restart the SQL Server.</div> <div>Leave the certificate blank in the drop-down list on the CERTIFICATES tab.</div> <div>Choose the new root-level certificate from the drop-down list on the CERTIFICATES tab.</div> <div>Install Certificate Services on the SQL Server, and create a new root-level certificate.</div> <div>From the SQL Configuration Manager on the SQL Server, open the PROTOCOLS properties for the SQL instance.</div> <div>Choose the server certificate provided by the network administrators from the drop-down list on the CERTIFICATES tab.</div> <div>From the SQL Configuration Manager on every client computer that will be connecting to SQL Server, open the PROTOCOLS properties for the SQL instance.</div>
	<div>&lt;&lt; Move</div> <div>Remove &gt;&gt;</div>

**Correct Answer:**

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

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

Restart the SQL Server.

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - NO

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

**QUESTION 3**

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.)

**Build List and Reorder:**

Ordered List Title	Answer Choices Title
<div><div>▲▼</div><div></div></div>	<div>Pause Node B.</div> <div>Pause Node A.</div> <div>Failover from Node B to Node A.</div> <div>Failover from Node A to Node B.</div> <div>Install the security patch on Node B.</div> <div>Install the security patch on Node A.</div> <div>Stop the SQL Server services on both nodes.</div>
	<div>&lt;&lt; Move</div> <div>Remove &gt;&gt;</div>

**Correct Answer:**

Install the security patch on Node A.

Failover from Node B to Node A.

Install the security patch on Node B.

**Section: (none)**

**Explanation**



**Explanation/Reference:**

--Burgos - YES (I dont remember if was with NodeA or NodeB active)

**QUESTION 4**

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

**Build List and Reorder:**

Ordered List Title	Answer Choices Title
<div><div>▲</div><div>▼</div></div>	<div>Backup Contoso on SQLServer01 by using a full backup.</div> <div>Backup Contoso on SQLServer01 by using a full backup followed by a transaction log backup by using the NORECOVERY option.</div> <div>Backup Contoso on SQLServer01 by using a transaction log backup. Restore the transaction log backup by using the RECOVERY option on SQLServer02.</div> <div>Backup Contoso on SQLServer01 by using a transaction log backup. Restore the transaction log backup by using the NORECOVERY option on SQLServer02.</div> <div>Restore the full database backup of Contoso by using the NORECOVERY option on SQLServer02 as Contoso.</div> <div>Restore the full database backup of Contoso by using the NORECOVERY option on SQLServer02 as Contoso_Mirror.</div>

<< Move

Remove >>

**Correct Answer:**

Backup Contoso on SQLServer01 by using a full backup.

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

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

**Section: (none)**  
**Explanation**

**Explanation/Reference:**

--Burgos - YES

**QUESTION 5**

You administer a Microsoft SQL Server database. Service accounts for SQL Agent are configured to use a local user. A Microsoft SQL Server Integration Services (SSIS) job step has been created within a SQL Server Agent job. The SSIS package accesses a network share when exporting data from a SQL Server database. When you execute the SQL Server Agent job, it fails due to a permissions failure on a share on a remote server. You need to ensure that the SQL Server Agent job can execute the SSIS package. Which four actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

**Build List and Reorder:**

Ordered List Title	Answer Choices Title
<div><div>▲</div><div>▼</div></div>	<div>Add a proxy that references the local user.</div> <div>Add a proxy that references the credential.</div> <div>Create a local user account and grant local administrator on the SQL Server instance.</div> <div>Create a credential that references the local user.</div> <div>Create a credential that references the domain user.</div> <div>Assign the proxy to the Operating System subsystem.</div> <div>Assign the proxy to the SSIS package execution subsystem.</div> <div>Create a domain user account and grant permissions to the domain user account to access the network share.</div>
	<div>&lt;&lt; Move</div> <div>Remove &gt;&gt;</div>

**Correct Answer:**

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

Create a credential that references the domain user.

Add a proxy that references the credential.

Assign the proxy to the SSIS package execution subsystem.

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 6**

You administer a Microsoft SQL Server 2012 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. Which Transact-SQL statements should you use? (To answer, move the appropriate statements from the list of statements to the answer area and arrange them in the correct order.)

**Build List and Reorder:**

Ordered List Title	Answer Choices Title
<div data-bbox="232 247 267 321"> <input type="button" value="▲"/>  <input type="button" value="▼"/> </div>	<div data-bbox="917 247 1393 1818"> <pre> 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) USE Master CREATE SERVER AUDIT C_Audit TO FILE (FILEPATH = 'ApplicationLog')  ALTER SERVER AUDIT C_Audit 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 APPLICATION_LOG  ALTER SERVER AUDIT C_Audit WITH (STATE = ON) USE Contoso 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), </pre> </div>
	<div data-bbox="756 978 899 1014">&lt;&lt; Move</div> <div data-bbox="756 1031 899 1066">Remove &gt;&gt;</div>

**Correct Answer:**

```

USE Master
CREATE SERVER AUDIT C_Audit
TO APPLICATION_LOG

ALTER SERVER AUDIT C_Audit
WITH (STATE = ON)

USE Contoso
CREATE DATABASE AUDIT SPECIFICATION
C_AuditSpec
FOR SERVER AUDIT C_Audit
ADD (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)

```

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - YES (but with different's blocks of commands)

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

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

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

### **QUESTION 7**

You administer a Microsoft SQL Server 2012 environment that contains a production SQL Server 2005 instance named SQL2005 and a development SQL Server 2012 instance named SQL2012. The development team develops a new application that uses the SQL Server 2012 functionality. You are planning to migrate a database from SQL2005 to SQL2012 so that the development team can test their new application. You need to migrate the database without affecting the production environment. Which three actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

**Build List and Reorder:**

Ordered List Title	Answer Choices Title
<div> <div>▲</div> <div>▼</div> </div> <div></div>	<div>Perform a transaction log backup on SQL2005.</div> <div>Perform a full database backup on SQL2005.</div> <div>Perform a VSS backup on the database on SQL2005.</div> <div>Restore the VSS backup on SQL2012.</div> <div>Restore the full database backup on SQL 2012.</div> <div>Restore the database backup and transaction log backup on SQL 2012.</div> <div>Change the compatibility level for the database to 120 on SQL2012.</div> <div>Change the compatibility level for the database to 110 on SQL2012.</div>
	<div>&lt;&lt; Move</div> <div>Remove &gt;&gt;</div>

**Correct Answer:**

Perform a full database backup on SQL2005.

Restore the full database backup on SQL 2012.

Change the compatibility level for the database to 110 on SQL2012.

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - YES

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

### QUESTION 8

You administer a Microsoft SQL Server 2012 database. Your database is experiencing deadlock issues. You need to be able to monitor deadlocks. Which three actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

**Build List and Reorder:**

Ordered List Title	Answer Choices Title
<div> <div> <div></div> <div></div> </div> <div></div> </div>	<div>Start Microsoft SQL Server Management Studio.</div> <div>Start SQL Server Configuration Manager and locate the SQL Server service.</div> <div>Restart the SQL Server service for that particular instance.</div> <div>Run the DBCC TRACEON (1221, -1) Transact-SQL query.</div> <div>From the SQL Server Properties page, click the Startup parameters tab and add Trace Flag -T1222 to the start-up parameters list.</div>
<div> <div>&lt;&lt; Move</div> <div>Remove &gt;&gt;</div> </div>	

**Correct Answer:**

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

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

Restart the SQL Server service for that particular instance.

**Section: (none)**

**Explanation**

**Explanation/Reference:**

### QUESTION 9

You administer a Microsoft SQL Server 2012 instance that contains a database of confidential data. You need to encrypt the database files at the page level. You also need to encrypt the transaction log files. Which four actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

**Build List and Reorder:**

Ordered List Title	Answer Choices Title
<div> <div>▲</div> <div>▼</div> <div></div> </div>	<div> <div>Create a master key.</div> <div>Create a certificate in the user database protected by the master key.</div> <div>Create a certificate in the master database protected by the master key.</div> <div>Create a database encryption key in the user database and protect it by a password.</div> <div>Create a database encryption key in the master database and protect it by a password.</div> <div>Create a database encryption key in the user database and protect it by the certificate.</div> <div>Create a database encryption key in the master database and protect it by the certificate.</div> <div>Set the database option to enable encryption.</div> </div>
	<div>&lt;&lt; Move</div> <div>Remove &gt;&gt;</div>

**Correct Answer:**

Create a master key.

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

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

Set the database option to enable encryption.

**Section: (none)**

**Explanation**

**Explanation/Reference:**

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

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

### QUESTION 10

You administer a Microsoft SQL Server 2012 database. The database is backed up according to the following schedule:

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

The database uses the Full recovery model. A developer accidentally drops a number of tables and stored procedures from the database between 22:40 hours and 23:10 hours. You perform a database restore at 23:30 hours to recover the dropped table. You need to restore the database by using the minimum amount of administrative effort. You also need to ensure minimal data loss. Which three actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)



**Build List and Reorder:**

Ordered List Title	Answer Choices Title
<div><div>▲▼</div><div></div></div>	<div>Restore the most recent full backup.</div> <div>Restore the full backup taken the previous night.</div> <div>Restore the differential backup taken at 22:00 hours.</div> <div>Restore the transaction log backup taken at 22:40 hours.</div> <div>Restore each transaction log backup taken from 22:00 till 22:40 hours.</div> <div>Restore each transaction log backup taken from the most recent full backup.</div> <div>Restore each differential database backup taken from the previous night's full backup.</div> <div>Restore each transaction log backup taken from the previous night's full backup till 22:40 hours.</div>
	<div>&lt;&lt; Move</div> <div>Remove &gt;&gt;</div>

**Correct Answer:**

Restore the full backup taken the previous night.

Restore the differential backup taken at 22:00 hours.

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

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - NO

**QUESTION 11**

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

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

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

**Build List and Reorder:**

Ordered List Title	Answer Choices Title
<div> <div>▲</div> <div>▼</div> <div></div> </div>	<div> <div>Execute the BCP tool.</div> <div>Perform a FULL database backup.</div> <div>Perform a database LOG backup.</div> <div>Configure the database to use the FULL recovery model.</div> <div>Configure the database to use the BULK-LOGGED recovery model.</div> </div>
	<div>&lt;&lt; Move</div> <div>Remove &gt;&gt;</div>

**Correct Answer:**

Perform a database LOG backup.

Configure the database to use the BULK-LOGGED recovery model.

Execute the BCP tool.

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - NO

#### QUESTION 12

You administer a Microsoft SQL Server 2012 server that has multiple databases. You need to ensure that users are unable to create stored procedures that begin with sp\_. Which three actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

**Build List and Reorder:**

Ordered List Title	Answer Choices Title
<div> <div> <div></div> <div></div> </div> <div></div> </div>	<div>Enable StoredProcNamingPolicy.</div> <div>Evaluate StoredProcNamingPolicy.</div> <div>Create a Database Audit named StoredProcNamingConvention. Set the Filter to '@Name LIKE 'sp[_]%'.</div> <div>Create a Policy named StoredProcNamingPolicy. Set the Check condition to StoredProcNamingConvention and Evaluation Mode to On Demand.</div> <div>Create a Policy named StoredProcNamingPolicy. Set the Check condition to StoredProcNamingConvention and Evaluation Mode to On Change: Prevent.</div> <div>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[_]%'.</div> <div>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[_]%'.</div>
	<div>&lt;&lt; Move</div> <div>Remove &gt;&gt;</div>

**Correct Answer:**

Create a Condition named StoredProcNamingConvention by using the Stored Procedure facet that has a single expression.  
Set the Field to @Name, Operator to LIKE, and Value to 'sp[\_]%'.

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

Enable StoredProcNamingPolicy.

**Section: (none)**  
**Explanation**

**Explanation/Reference:**  
--Burgos - NO

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

### QUESTION 13

#### DRAG AND DROP

You administer a Microsoft SQL Server 2012 server. A variety of issues occur from time to time in the production environment. You need to identify the appropriate tool for each issue. Which tool or tools should you use? (To answer, drag the appropriate tool or tools to the correct issue or issues in the answer area. Each tool may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.)

#### Select and Place:

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.

#### Correct Answer:

Tool	Issue
	You want to verify network utilization.
	You suspect that a process is being blocked.
	You need to validate the integrity of the database.
	A SQL Agent job fails on a specific step, and you need the details of that step.
	SQL Server will not start.

Performance Monitor

sys.dm\_exec\_requests  
DMV

DBCC CHECKDB

Job History

SQL Server error log

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO

#### QUESTION 14

You administer a single Microsoft SQL Server instance on a two-node failover cluster that has nodes named Node A and Node B. The instance is currently running on Node A. You want to patch both Node A and Node B by using the most recent SQL Server Service Pack. You need to ensure that the following requirements are met:

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

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

#### Build List and Reorder:

Ordered List Title	Answer Choices Title
<div><div>▲▼</div><div></div></div>	<div>Pause Node A.</div> <div>Pause Node B.</div> <div>Failover from Node A to Node B.</div> <div>Start the SQL Server service on both nodes.</div> <div>Install the service pack on Node A.</div> <div>Install the service pack on Node B.</div> <div>Stop the SQL Server service on both nodes.</div>
	<div>&lt;&lt; Move</div> <div>Remove &gt;&gt;</div>

#### Correct Answer:

Install the service pack on Node B.

Failover from Node A to Node B.

Install the service pack on Node A.

#### Section: (none)

#### Explanation

#### Explanation/Reference:

--Burgos - YES (I dont remember if was with NodeA or NodeB active)

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

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

#### QUESTION 15

You develop a database application for a university. You need to create a view that will be indexed that meets the following requirements:

- Displays the details of only students from Canada.
- Allows insertion of details of only students from Canada.

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.)

#### Build List and Reorder:

Ordered List Title	Answer Choices Title
<div> <div>▲</div> <div>▼</div> <div></div> </div>	<div> WITH ENCRYPTION  WITH CHECK OPTION  WITH SCHEMABINDING  WITH VIEW_METADATA  CREATE VIEW  dbo.CanadianStudents  CREATE INDEXED VIEW  dbo.CanadianStudents  AS  SELECT s.LastName, s.FirstName,  s.JobTitle, a.Country,  e.LastQualification  FROM Student s  INNER JOIN NativeAddress a ON  a.AddressID = s.AddressID  INNER JOIN EducationHistory e ON  s.StudentID = e.StudentID  WHERE a.Country = 'Canada' </div>
	<div>&lt;&lt; Move</div> <div>Remove &gt;&gt;</div>

**Correct Answer:**

```
CREATE VIEW dbo.CanadianStudents
WITH SCHEMABINDING
AS
SELECT s.LastName, s.FirstName, s.JobTitle,
a.Country, e.LastQualification
FROM Student s
INNER JOIN NativeAddress a ON a.AddressID =
s.AddressID
INNER JOIN EducationHistory e ON
s.StudentID = e.StudentID
WHERE a.Country = 'Canada'
WITH CHECK OPTION
```

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Verified answer as correct.

Reference: <http://msdn.microsoft.com/en-us/library/ms187956.aspx>

#### QUESTION 16

You create the following stored procedure. (Line numbers are included for reference only.)

```

01 CREATE PROCEDURE dbo.InsertCountryRegion
02 @CountryRegionCode nvarchar(3),
03 @Name nvarchar(50)
04 AS
05 BEGIN
06 SET NOCOUNT ON;
07 ...
08 END;

```

You need to ensure that the stored procedure performs the following tasks:

- If a record exists, update the record.
- If no record exists, insert a new record.

Which four Transact-SQL statements should you insert at line 07? (To answer, move the appropriate statements from the list of statements to the answer area and arrange them in the correct order.)

#### Build List and Reorder:

Ordered List Title	Answer Choices Title
<div style="border: 1px solid black; height: 200px; width: 100%;"></div>	<div style="border: 1px solid black; padding: 5px;"> <p>UPDATE CountryRegion SET Name = @Name WHERE CountryRegionCode = @CountryRegionCode WHEN NOT MATCHED BY SOURCE THEN WHEN NOT MATCHED BY TARGET THEN WHEN MATCHED THEN UPDATE SET Name = source.Name MERGE CountryRegion AS target USING (Select @CountryRegionCode, @Name) AS source (CountryRegionCode, Name) ON (target.CountryRegionCode = source.CountryRegionCode) IF (@@ROWCOUNT &gt; 0) INSERT INTO CountryRegion (CountryRegionCode, Name) VALUES (@CountryRegionCode, @Name); INSERT (CountryRegionCode, Name) VALUES (source.CountryRegionCode, source.Name);</p> </div>

<< Move
Remove >>

**Correct Answer:**

```
MERGE CountryRegion AS target
USING (Select @CountryRegionCode, @Name)
 AS source (CountryRegionCode, Name)
ON (target.CountryRegionCode =
source.CountryRegionCode)

WHEN MATCHED THEN UPDATE SET Name
= source.Name

WHEN NOT MATCHED BY TARGET THEN
INSERT (CountryRegionCode, Name)
VALUES (source.CountryRegionCode,
source.Name);
```

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - NO

Reference: <http://technet.microsoft.com/en-us/library/bb510625.aspx>

#### **QUESTION 17**

You use Microsoft SQL Server 2012 to develop a database application. You create a table by using the following definition:

```
CREATE TABLE Prices (
 PriceId int IDENTITY(1,1) PRIMARY KEY,
 ActualPrice NUMERIC(16,9),
 PredictedPrice NUMERIC(16,9)
)
```

You need to create a computed column based on a user-defined function named `udf_price_index`. You also need to ensure that the column supports an index. Which three 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.)

**Build List and Reorder:**



Ordered List Title	Answer Choices Title
<div data-bbox="232 247 267 321"> <input type="button" value="▲"/>  <input type="button" value="▼"/> </div>	<div data-bbox="915 247 1386 1701"> <pre> CREATE FUNCTION udf_price_index (@actualprice FLOAT, @predictedprice FLOAT) RETURNS FLOAT ALTER TABLE Prices ADD [PriceIndex] AS dbo.udf_price_index([ActualPrice], [PredictedPrice]) PERSISTED ALTER TABLE Prices ADD [PriceIndex] AS dbo.udf_price_index([ActualPrice], [PredictedPrice]) AS BEGIN     SELECT @priceindex = CASE         WHEN @predictedprice = 0 THEN 0         ELSE @acualprice/@predictedprice     END END GO CREATE FUNCTION udf_price_index (@actualprice NUMERIC(16,9), @predictedprice NUMERIC(16,9)) RETURNS NUMERIC(16,9) WITH SCHEMABINDING AS BEGIN     DECLARE @priceindex NUMERIC(16,9)     SELECT @priceindex = CASE         WHEN @predictedprice = 0 THEN 0         ELSE @acualprice/@predictedprice     END     RETURN @priceindex END GO </pre> </div> <div data-bbox="756 915 899 1008"> <input type="button" value=" &lt;&lt; Move"/>  <input type="button" value=" Remove &gt;&gt;"/> </div>

**Correct Answer:**

```

CREATE FUNCTION udf_price_index
(@actualprice NUMERIC(16,9),
@predictedprice NUMERIC(16,9))
RETURNS NUMERIC(16,9)
WITH SCHEMABINDING
AS
BEGIN
 DECLARE @priceindex NUMERIC(16,9)
 SELECT @priceindex = CASE
 WHEN @predictedprice = 0 THEN 0
 ELSE @actualprice/@predictedprice
 END
 RETURN @priceindex
END
GO

ALTER TABLE Prices ADD [PriceIndex]
AS dbo.udf_price_index([ActualPrice],
[PredictedPrice]) PERSISTED

```

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### **QUESTION 18**

You use Microsoft SQL Server 2012 to develop a database that has two tables named Div1Cust and Div2Cust. Each table has columns named DivisionID and CustomerId. None of the rows in Div1Cust exist in Div2Cust. You need to write a query that meets the following requirements:

- The rows in Div1Cust must be combined with the rows in Div2Cust.
- The result set must have columns named Division and Customer.
- Duplicates must be retained.

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.)

**Build List and Reorder:**

Ordered List Title	Answer Choices Title
<div> <div>▲</div> <div>▼</div> </div> <div></div>	<div>EXCEPT</div> <div>SELECT DivisionID, CustomerID</div> <div>FROM Div2Cust</div> <div>SELECT DISTINCT DivisionID,</div> <div>CustomerID</div> <div>FROM Div1Cust, Div2Cust</div> <div>INTERSECT</div> <div>SELECT DivisionID AS Division,</div> <div>CustomerID AS Customer</div> <div>FROM Div1Cust</div> <div>UNION ALL</div> <div>INNER JOIN</div> <div>UNION</div> <div>SELECT DivisionID, CustomerID</div> <div>FROM Div1Cust, Div2Cust</div> <div>ON Div1Cust.CustID =</div> <div>Div2Cust.CustID</div> <div>SELECT DivisionID, CustomerID</div> <div>FROM Div1Cust</div>
	<div>&lt;&lt; Move</div> <div>Remove &gt;&gt;</div>

**Correct Answer:**

```
SELECT DivisionID AS Division, CustomerID AS
Customer
FROM Div1Cust
UNION ALL
SELECT DivisionID, CustomerID
FROM Div2Cust
```

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - NO

Reference: <http://msdn.microsoft.com/en-us/library/ms180026.aspx>

Reference: <http://msdn.microsoft.com/en-us/library/ms188055.aspx>

## QUESTION 19

### HOTSPOT

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

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

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

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

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

**Hot Area:**

The screenshot shows the 'SQL Server Import and Export Wizard' window, specifically the 'Choose a Destination' step. The title bar reads 'SQL Server Import and Export Wizard'. Below the title bar, the text 'Choose a Destination' is displayed, followed by the instruction 'Specify where to copy data to.'.

The 'Destination:' dropdown menu is set to 'Flat File Destination'. Below this, the instruction 'Select a file and specify the file properties and the file format.' is shown.

The 'File name:' field contains 'C:\Employee.csv', with a 'Browse...' button to its right. The 'Locale:' dropdown menu is set to 'English (United States)', and there is an unchecked checkbox for 'Unicode'. The 'Code page:' dropdown menu is set to '1252 (ANSI - Latin I)'. The 'Format:' dropdown menu is currently empty. The 'Text qualifier:' field contains '<none>'. There is an unchecked checkbox for 'Column names in the first data row'.

At the bottom of the window, there are five buttons: 'Help', '< Back', 'Next >', 'Finish >>', and 'Cancel'.

**Correct Answer:**

**SQL Server Import and Export Wizard**

**Choose a Destination**  
Specify where to copy data to.

Destination: Flat File Destination

Select a file and specify the file properties and the file format.

File name: C:\Employee.csv Browse...

Locale: English (United States) Unicode

Code page: 1252 (ANSI - Latin I)

Format:

Text qualifier: <none>

☐ Column names in the first data row

Help < Back Next > Finish >> Cancel

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - NO

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

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

## QUESTION 20

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.)

**Build List and Reorder:**

Ordered List Title	Answer Choices Title
<div> <div>▲</div> <div>▼</div> </div> <div></div>	<div>newid()</div> <div>newguid()</div> <div>WITH VALUES</div> <div>WITH EXISTING</div> <div>CONSTRAINT CK_BookGuid</div> <div>CHECK</div> <div>CONSTRAINT DF_BookGuid</div> <div>DEFAULT</div> <div>ALTER TABLE dbo.Book</div> <div>ADD BookGuid VARCHAR(10) NOT</div> <div>NULL</div> <div>ALTER TABLE dbo.Book</div> <div>ADD BookGuid Uniqueidentifier NOT</div> <div>NULL</div>
	<div>&lt;&lt; Move</div> <div>Remove &gt;&gt;</div>

**Correct Answer:**

```
ALTER TABLE dbo.Book
ADD BookGuid Uniqueidentifier NOT NULL
CONSTRAINT DF_BookGuid DEFAULT
newid()
WITH VALUES
```

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - NO

Verified answer as correct. Actually, in the real world, you don't have to use WITH VALUES at the end of the statement and it works just as well. But because the question specifically states which FOUR TSQL statements to use, we have to include it.

Reference: <http://msdn.microsoft.com/en-us/library/ms190273.aspx>

### QUESTION 21

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.)

**Build List and Reorder:**

Ordered List Title	Answer Choices Title
<div> <div> <div></div> <div></div> </div> <div></div> </div>	<div>Backup AdventureWorks on ServerA by using a full backup.</div> <div>Backup AdventureWorks on ServerA by using a full backup followed by a transaction log backup by using the NORECOVERY option.</div> <div>Backup AdventureWorks on ServerA by using a transaction log backup. Restore the transaction log backup by using the RECOVERY option on ServerB.</div> <div>Backup AdventureWorks on ServerA by using a transaction log backup. Restore the transaction log backup by using the NORECOVERY option on ServerB.</div> <div>Restore the full database backup of AdventureWorks by using the NORECOVERY option on ServerB as AdventureWorks.</div> <div>Restore the full database backup of AdventureWorks by using the NORECOVERY option on ServerB as AdventureWorks_Mirror.</div>
	<div>&lt;&lt; Move</div> <div>Remove &gt;&gt;</div>

**Correct Answer:**

Backup AdventureWorks on ServerA by using a full backup.

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

Backup AdventureWorks on ServerA by using a transaction log backup. Restore the transaction log backup by using the NORECOVERY option on ServerB.

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - YES

I don't think this question will ever come up. The MSDN link says it is being deprecated and to use Availability Groups instead:

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

However, the answer is correct.

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

**QUESTION 22**

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.)

**Build List and Reorder:**

Ordered List Title	Answer Choices Title
<div><div>▲▼</div><div></div></div>	<div>Configure log shipping between SQL1 and SQL2.</div> <div>Upgrade SQL1 to SQL Server 2012.</div> <div>Upgrade SQL2 to SQL Server 2012.</div> <div>Disable log shipping between SQL1 and SQL2.</div> <div>Manually failover the database from SQL1 to SQL2.</div> <div>Manually failover the database from SQL2 to SQL1.</div> <div>Add SQL3 back to the database mirroring solution.</div> <div>Remove SQL3 from the database mirroring solution.</div>

**Correct Answer:**

Remove SQL3 from the database mirroring solution.

Upgrade SQL2 to SQL Server 2012.

Manually failover the database from SQL1 to SQL2.

Upgrade SQL1 to SQL Server 2012.

Manually failover the database from SQL2 to SQL1.

Add SQL3 back to the database mirroring solution.

**Section: (none)**

**Explanation**

**Explanation/Reference:**

--Burgos - NO

Verified answer as correct.

Reference: <http://msdn.microsoft.com/en-us/library/bb677181.aspx>

**QUESTION 23**

You administer three Microsoft SQL Server 2012 servers named ServerA, ServerB, and ServerC. ServerA is the acting principal and ServerB is the mirror. You need to add ServerC as a witness to the existing mirroring



session between ServerA and ServerB. You need to achieve this goal without delaying synchronization. Which three actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)

**Build List and Reorder:**

Ordered List Title	Answer Choices Title
<div><div>▲▼</div><div></div></div>	<div>On ServerC, create an endpoint for use by the witness.</div> <div>Ensure that the same Windows Login exists on each server and grant Connect permissions to each server's endpoint.</div> <div>On ServerA, alter the principal database to use the endpoint on ServerC as the witness.</div> <div>On ServerA, pause the mirroring session between ServerA and ServerB.</div> <div>On ServerB, alter the principal database to use the endpoint on ServerC as the witness.</div> <div>Ensure that the same Proxy exists on each server and grant Connect permissions to each server's endpoint.</div> <div>On ServerA, resume the mirroring session between ServerA and ServerB.</div>
	<div>&lt;&lt; Move</div> <div>Remove &gt;&gt;</div>

**Correct Answer:**

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.

**Section: (none)**  
**Explanation**

**Explanation/Reference:**  
--Burgos - NO

Verified answer as correct.

Reference: <http://msdn.microsoft.com/en-us/library/ms190430.aspx>

**QUESTION 24**

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

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

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

#### Build List and Reorder:

Ordered List Title	Answer Choices Title
<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> <input type="button" value="▲"/>  <input type="button" value="▼"/> </div> <div style="flex-grow: 1; border: 1px solid black;"></div> </div>	<div style="border: 1px solid black; padding: 5px;"> WHERE  FILTER ON  SpecialOfferID IS NOT NULL;  ON dbo.OrderDetail(SalesOrderID)  ON dbo.OrderDetail(SalesOrderID)  AS FILTERED_INDEX  CREATE NONCLUSTERED INDEX  FIdx_SpecialOfferID  CREATE NONCLUSTERED  FILTERED INDEX  FIdx_SpecialOfferID </div>
<div style="display: flex; justify-content: center; gap: 20px;"> <div style="border: 1px solid black; padding: 2px 10px;">&lt;&lt; Move</div> <div style="border: 1px solid black; padding: 2px 10px;">Remove &gt;&gt;</div> </div>	

#### Correct Answer:

```
CREATE NONCLUSTERED INDEX
FIdx_SpecialOfferID
ON dbo.OrderDetail(SalesOrderID)
WHERE
SpecialOfferID IS NOT NULL;
```

Section: (none)

Explanation

Explanation/Reference:

--Burgos - NO