# MICROSOFT 70-457 EXAM QUESTIONS & ANSWERS

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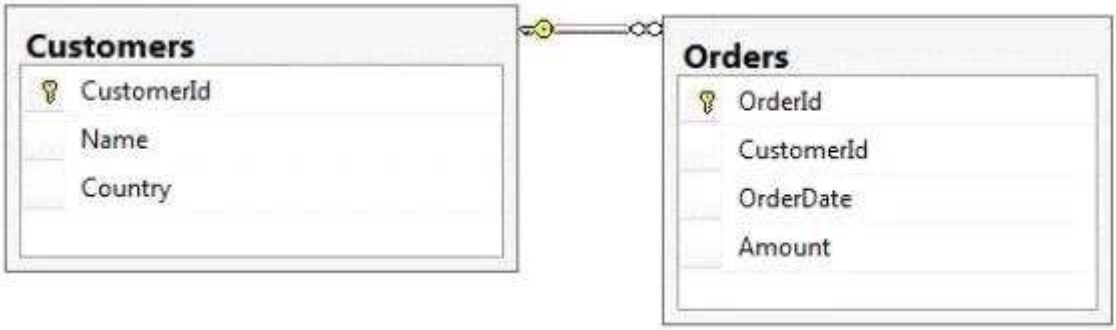
**MICROSOFT 70-457 EXAM QUESTIONS & ANSWERS**

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

**Exam A**

**QUESTION 1**
You administer a Microsoft SQL Server 2012 database named ContosoDb. Tables are defined as shown in the exhibit. (Click the Exhibit button.)



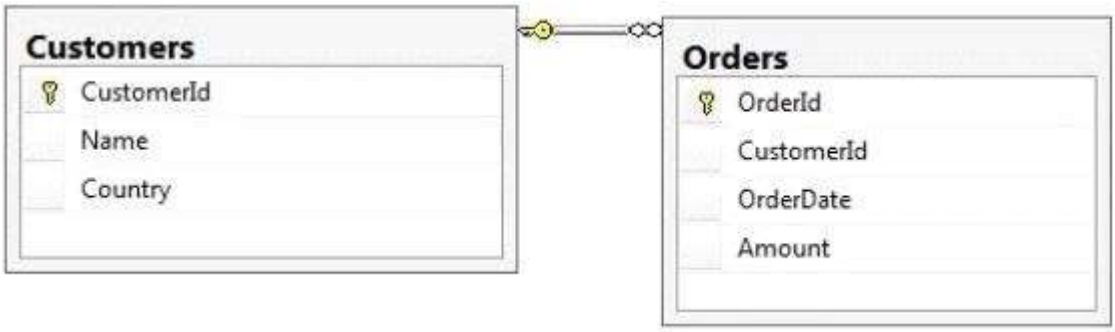

You need to display rows from the Orders table for the Customers row having the CustomerId value set to 1 in the following XML format.
<row OrderId= "1" orderDate="2000-01-01T00:00:00", Amount="3400.00" Name="Customer A" Country="Australia" />
<row OrderId="2" OrderDate="2001-01-01T00:00:00" Amount="4300.00" Name="Customer A" Country-"Australia" />
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, CrderId, OrderDate, Amount FROM Orders INNER JOIN Customers ON Orders.CustomerId= Customers.CustomerId WHERE Customers.CustomerId= 1 FOR XML AUTO, ELEMENTS
G. SELECT Name AS '@Name', Country AS '@Country', OrderId, OrderDate, Amount FROM Orders INNER JOIN Customers ON Orders.CustomerId= Customers.CustomerId WHERE Customers.CustomerId= 1 FOR XML PATH ('Customers')
H. SELECT Name AS 'Customers/Name', Country AS 'Customers/Country', OrderId, OrderDate, Amount FROM Orders INNER JOIN Customers ON Orders.CustomerId= Customers.CustomerId WHERE Customers.CustomerId= 1 FOR XML PATH ('Customers')

**Correct Answer:** A
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 2**
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 CustomerIdvalue 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?

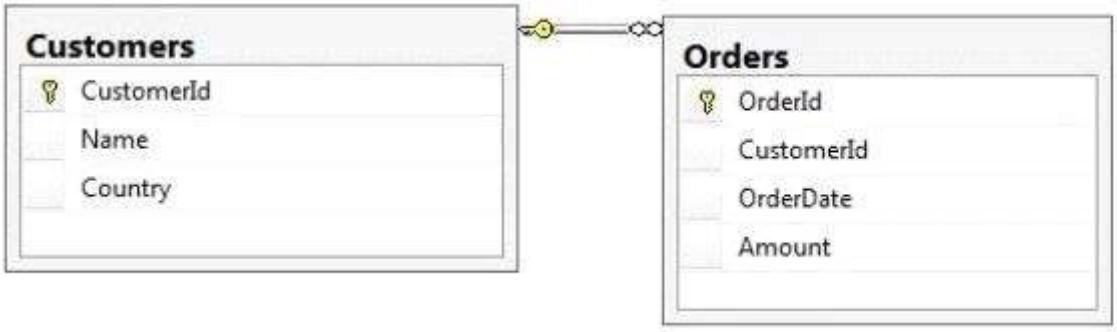
A. SELECT OrderId, OrderDate, Amount, Name, Country FROM Orders INNER JOIN Customers ON Orders.CustomerId = Customers-CustomerId WHERE Customers.CustomerId = 1 FOR XML RAW
B. SELECT OrderId, OrderDate, Amount, Name, Country FROM Orders INNER JOIN Customers ON Orders.CustomerId = Customers.CustomerId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

FROM Orders
INNER JOIN Customers ON Orders.CustomerId= Customers.CustomerId WHERE Customers.CustomerId= 1
FOR XML PATH ('Customers')

**Correct Answer:** C
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 3**
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.

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

Customers.CustomerId= 1
FOR XML PATH ('Customers')

**Correct Answer:** E
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 4**
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 FRCM (
SELECT StudentCode, Marks AS Marks,
RANK() OVER (PARTITION BY SubjectCode ORDER 3Y Marks DESC) AS Rank FRCM 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:**

**QUESTION 5**
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:**

**QUESTION 6**
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
All TotalItems AS Item3lnStore + 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
All TotalItems AS SUM (ItemsInStore, ItemsInWarehouse)

**Correct Answer:** C
**Section: (none)**
**Explanation**

**Explanation/Reference:**
Reference: http://msdn.microsoft.com/en-us/library/ms174979.aspx

**QUESTION 7**
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:**

**QUESTION 8**
You have a database that contains the tables shown in the exhibit. (Click the Exhibit button.)

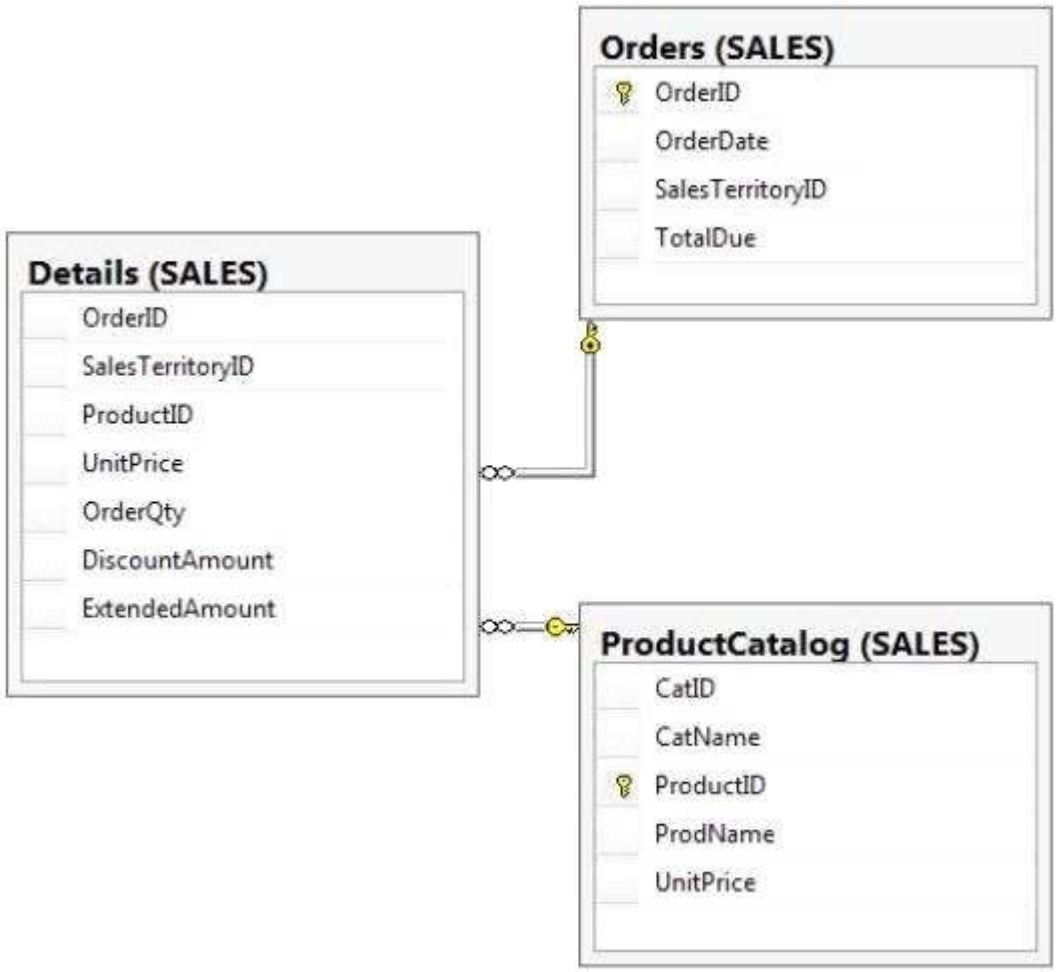

You need to create a view named uv_CustomerFullName to meet the following requirements:
*The code must NOT include object delimiters.
*The view must be created in the Sales schema.
*Columns must only be referenced by using one-part names. *The view must return the first name and the last name of all 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.

**Correct Answer:**
**Section: (none)**
**Explanation**

**Explanation/Reference:**
CREATE VIEW Sales.uv_CustomerFullName
AS
SELECT FirstName, LastName FROM Customers

**QUESTION 9**
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.

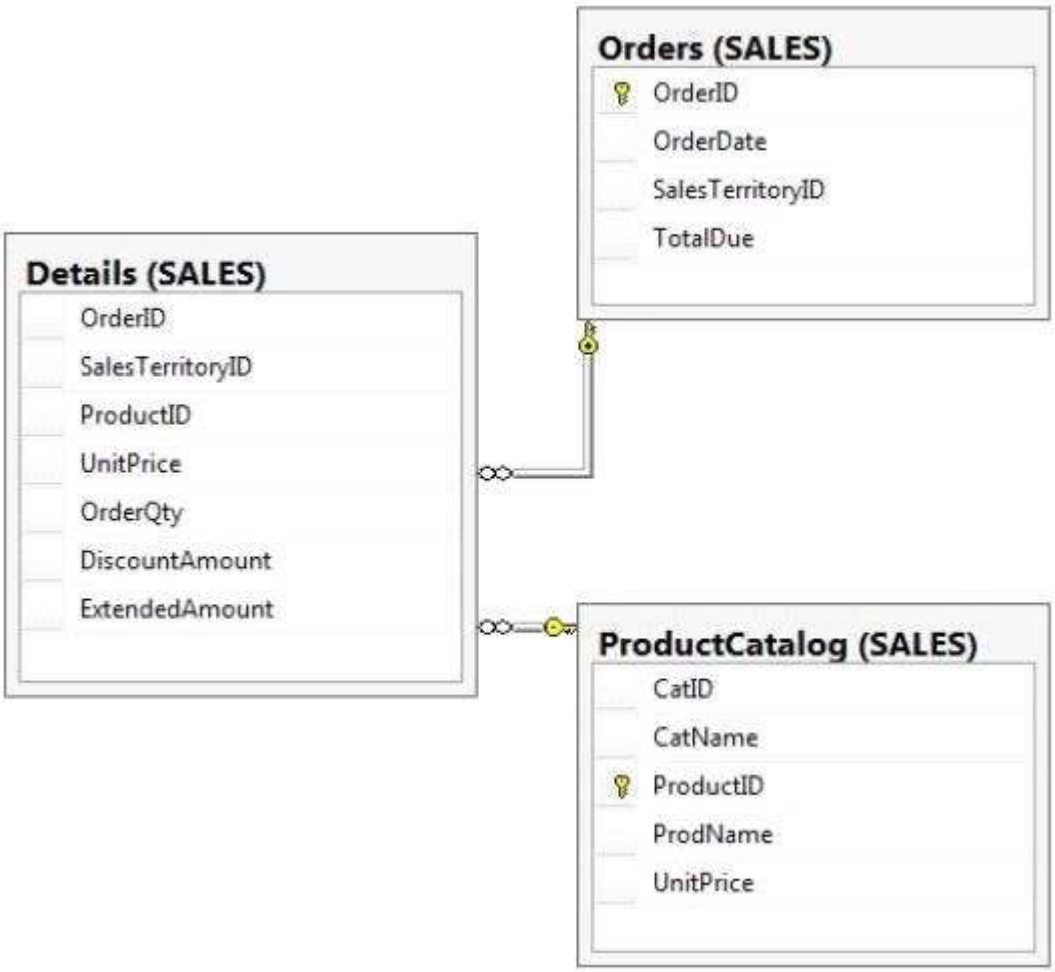
A.

**Correct Answer:**

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

**Explanation/Reference:**
SELECT SalesTerritoryID,
ProductID,
AVG(UnitPrice),
MAX(OrderQty),
MAX(DiscountAmount)
FROM Sales.Details
ORDER BY SalesTerritoryID DESC, ProductID DESC

**QUESTION 10**
You have a database that contains the tables as shown in the exhibit. (Click the Exhibit button.)



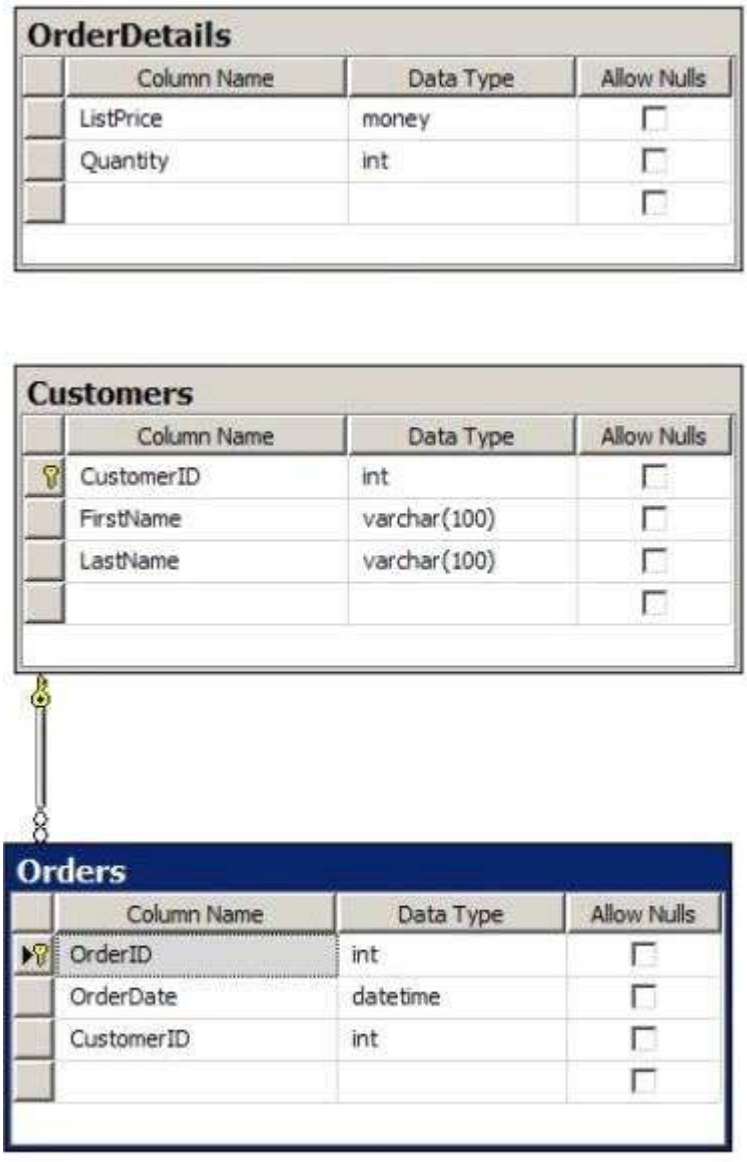

You need to create a query that returns a list of products from Sales.ProductCatalog. The solution must meet the following requirements:
*UnitPrice must be returned in descending order.
*The query must use two-part names to reference the table. *The query must use the RANK function to calculate the results. *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.

**Correct Answer:**
**Section: (none)**
**Explanation**

**Explanation/Reference:**
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 11**
You have a database that contains the tables shown in the exhibit. (Click the Exhibit button.)




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.

**Correct Answer:**
**Section: (none)**
**Explanation**

**Explanation/Reference:**
SELECT Orders.OrderID
FROM Orders
WHERE Orders.OrderDate>CONVERT(datetime,@Parameter1)

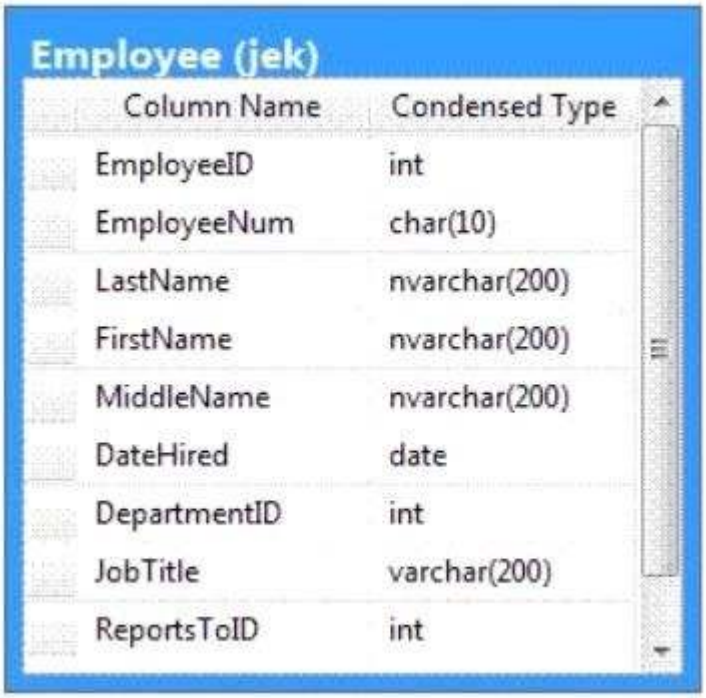
**QUESTION 12**
You administer a Microsoft SQL Server database that supports a banking transaction management application. You need to retrieve a list of account holders who live in cities that do not have a branch location. Which Transact-SQL query or queries should you use? (Each correct answer presents a complete solution. Choose all that apply.)

A. SELECT AccountHolderID
   FROM AccouritHolder
   WHERE CityID NOT IN (SELECT CityID FROM BranchMaster)
B. SELECT AccountHolderID
   FROM AccountHolder
   WHERE CityID <> ALL (SELECT CityID FROM BranchMaster)
C. SELECT AccountHolderID
   FROM AccouncHolder
   WHERE CityID <> SOME (SELECT CityID FROM BranchMaster]
D. SELECT AccountHolderID
   FROM AccountHolder
   WHERE CityID <> ANY (SELECT CityID FROM BranchMaster)

**Correct Answer:** CD
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 13**
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 | 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 f each department in the company |
| ReportsToID | Contains the EmployeeID of the manager to whom an employee reports |

Unless stated above, no columns in the Employee table reference other tables. Confidential information about

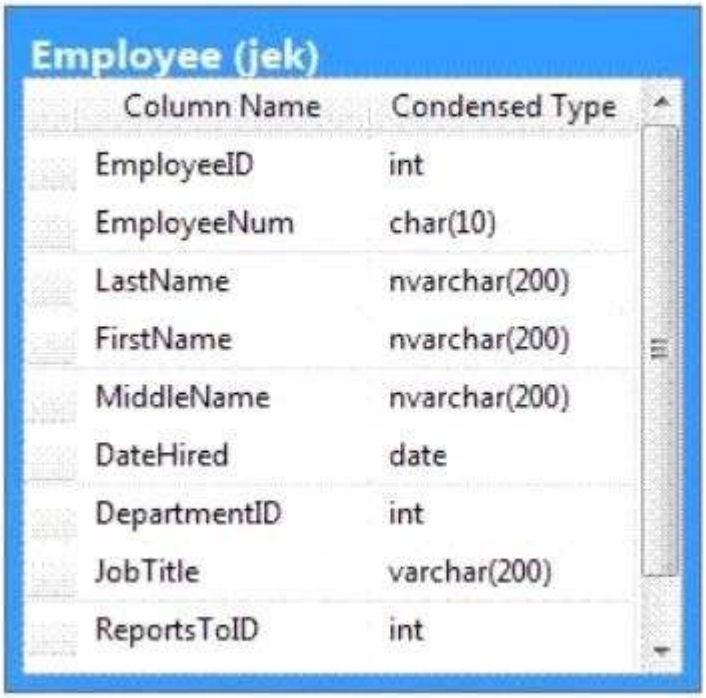
the employees is stored in a separate table named EmployeeData. One record exists within EmployeeData for each record in the Employee table.

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

**Correct Answer:** I
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 14**
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 | 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 each department in the company |
| ReportsToID | Contains the EmployeeID of the manager to whom an empl 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:**

**QUESTION 15**
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.CuscomerlD = 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:**

**QUESTION 16**
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:** A
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 17**
DRAG DROP
You use Microsoft SQL Server 2012 to develop a database application. You create two tables by using the following table definitions.

```
CREATE TABLE Employees
(
  empid int NOT NULL
   , mgrid int NULL
   , empname varchar(25) NOT NULL
   , salary money NOT NULL
   CONSTRAINT PK_Employees PRIMARY KEY(empid)
);
CREATE TABLE Departments
(
  deptid INT NOT NULL PRIMARY KEY
   , deptname VARCHAR(25) NOT NULL
   , deptmgrid INT NULL REFERENCES Employees(empid)
);
```

You need to write a Transact-SQL statement that will support the following query:

```
SELECT D.deptid, D.deptname, D.deptmgrid
 , ST.empid, ST.empname, ST.mgrid
FROM Departments AS D
 CROSS APPLY getsubtree(D.deptmgrid) AS ST;
```

Which five 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.)

```
CREATE FUNCTION dbo.getsubtree(@empid AS
INT)
RETURNS @TREE TABLE (
  empid INT NOT NULL
   ,empname VARCHAR(25) NOT NULL
   ,mgrid INT NULL
   ,lvl INT NOT NULL)
AS
BEGIN
```

```
WITH Employees_Subtree(empid, empname,
mgrid, lvl)
AS
(SELECT empid, empname, mgrid, 0
FROM Employees WHERE empid = @empid
UNION ALL
SELECT e.empid, e.empname, e.mgrid, es.lvl+1
FROM Employees AS e
JOIN Employees_Subtree AS es
ON e.mgrid = es.empid)
```

```
SELECT * FROM Employees_Subtree;
```

```
CREATE PROCEDURE dbo.getsubtree(@empid AS
INT)
AS
BEGIN
```

```
RETURN
END
```

```
INSERT INTO @TREE
```

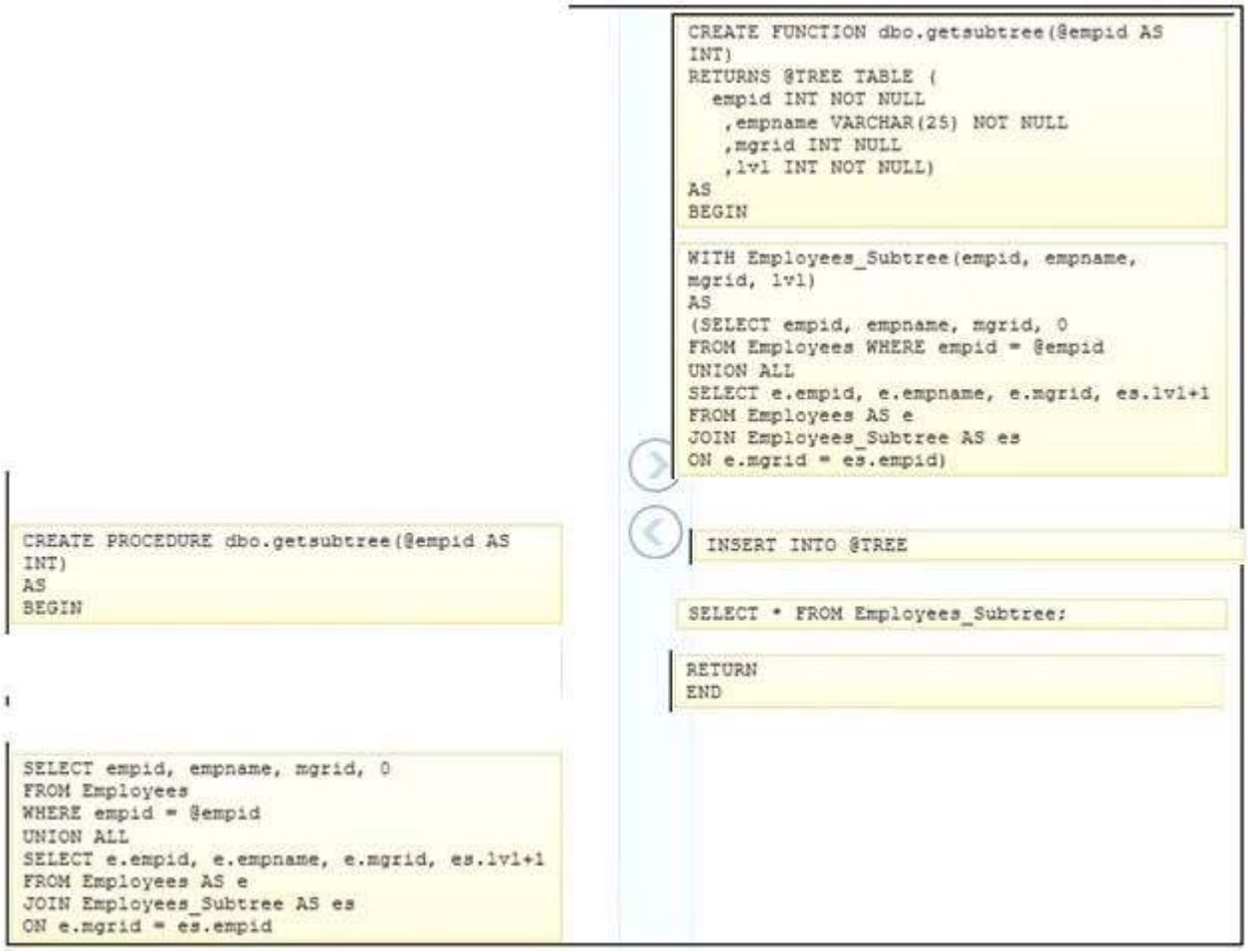
```
SELECT empid, empname, mgrid, 0
FROM Employees
WHERE empid = @empid
UNION ALL
SELECT e.empid, e.empname, e.mgrid, es.lvl+1
FROM Employees AS e
JOIN Employees_Subtree AS es
ON e.mgrid = es.empid
```

A.

**Correct Answer:**
**Section: (none)**

**Explanation**

**Explanation/Reference:**




**QUESTION 18**
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 VALOE 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
UPTATE Customers SET PartitionNumber = NEXT VALUE FOR CustomerSequence DROP SEQUENCE CustomerSequence

**Correct Answer:** B
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 19**
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 B1ogEntry 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. 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:** D
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 20**
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 Dele
(8));
GO
```

B.
```
DECLARE @ErrorVar INT;
DECLARE @RowCountVar INT;

EXEC DeleteJobCandidate

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

C.
```
EXEC DeleteJobCandidate
IF (ERROR_STATE() != 0)
  PRINT N'Error = ' + CAST(@@ERROR AS NVARCHAR(8))+ N', Rows Delet
GO
```

D.
```
EXEC DeleteJobCandidate
PRINT N'Error = ' + CAST(@@ERROR AS NVARCHAR(8))+ N', Rows Deleted
GO
```

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

**Correct Answer:** A

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

**Explanation/Reference:**

**QUESTION 21**
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 @@TRANCCUNT = I

**Correct Answer:** C
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**Exam B**

**QUESTION 1**
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?

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
```

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

**Correct Answer:** D
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 2**
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_A30RT ON
B. SET ARITHABORT ON
C. TRY
D. BEGIN
E. SET ARITHABORT OFF
F. SET XACT ABORT OFF

**Correct Answer:** E
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 3**
You develop a Microsoft SQL Server 2012 database that contains a heap named OrdersHistoncal.
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:**

**QUESTION 4**
You generate a daily report according to the following query:

```
SELECT c.CustomerName
FROM Sales.Customer c
WHERE Sales.ufnGetLastOrderDate(c.CustomerID) <
 DATEADD(DAY, -90, GETDATE())
```

The Sales.ufnGetLastOrderDate user-defined function (UDF) is defined as follows:

```
CREATE FUNCTION Sales.ufnGetLastOrderDate(@CustomerID int)
RETURNS datetime
AS
BEGIN
  DECLARE @lastOrderDate datetime
  SELECT @lastOrderDate = MAX(OrderDate)
  FROM Sales.SalesOrder
  WHERE CustomerID = @CustomerID
  RETURN @lastOrderDate
END
```

You need to improve the performance of the query. What should you do?

A. Drop the UDF and rewrite the report query as follows:

```
WITH cte (CustomerID, LastOrderDate) AS (
  SELECT CustomerID, MAX(OrderDate) AS [LastOrderDate]
  FROM Sales.SalesOrder
  GROUP BY CustomerID
)
SELECT c.CustomerName
FROM cte
INNER JOIN Sales.Customer c ON cte.CustomerID = c.CustomerID
WHERE cte.LastOrderDate < DATEADD(DAY, -90, GETDATE())
```

B. Drop the UDF and rewrite the report query as follows:

```
SELECT c.CustomerName
FROM Sales.Customer c
WHERE NOT EXISTS (
  SELECT s.OrderDate
  FROM Sales.SalesOrder
  WHERE s.OrderDate > DATEADD(DAY, -90, GETDATE())
  AND s.CustomerID = c.CustomerID)
```

C. Drop the UDF and rewrite the report query as follows:

```
SELECT DISTINCT c.CustomerName
FROM Sales.Customer c
INNER JOIN Sales.SalesOrder s on c.CustomerID = s.CustomerID
WHERE s.OrderDate < DATEADD(DAY, -90, GETDATE())
```

D. Rewrite the report query as follows:

```
SELECT c.CustomerName
FROM Sales.Customer c
WHERE NOT EXISTS (SELECT OrderDate FROM Sales.ufnGetRecentOrders(c
```

Rewrite the UDF as follows:

```
CREATE FUNCTION Sales.ufnGetRecentOrders(@CustomerID int, @MaxAge
RETURNS TABLE AS RETURN (
  SELECT OrderDate
  FROM Sales.SalesOrder
  WHERE s.CustomerID = @CustomerID
   AND s.OrderDate > DATEADD(DAY, -@MaxAge, GETDATE())
)
```

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

**Correct Answer:** A
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 5**
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 CODNT (*) 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 NumberOf Sales, SUM (SalesAmount) AS TotalSalesAmount FROM DomesticSalesOrders UNION ALL SELECT COUNT (*) AS NumberOfSales, SUM (SalesAmount) AS TotalSalesAmount FROM InternationalSalesOrders

**Correct Answer:** D
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 6**
You develop a database for a travel application. You need to design tables and other database objects. Each media file is less than 1 MB in size. The media files will require fast access and will be retrieved frequently. You need to store media files in several tables. 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:** F
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 7**
You are a database developer of a Microsoft SQL Server 2012 database. You are designing a table that will store Customer data from different sources. The table will include a column that contains the CustomerID from the source system and a column that contains the SourceID. A sample of this data is as shown in the following table.

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

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

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

**Correct Answer:** D
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 8**
You develop a Microsoft SQL Server 2012 database that contains a table named Products. The Products table has the following definition:

```
CREATE TABLE [dbo].[Products](
  [ProductId] [bigint] NOT NULL,
  [RetailPrice] [nvarchar](25) NOT NULL,
  [WholeSalePrice] [nvarchar](25) NULL,
  [Name] [nvarchar](50) NOT NULL,
  [Category] [nvarchar](25) NOT NULL,
   CONSTRAINT [PK_Products] PRIMARY KEY CLUSTERED
  (
    [ProductId] ASC
  ) ON [PRIMARY]
) ON [PRIMARY]
```

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

A. CREATE TRIGGER TrgPriceChange
   ON Products FOR UPDATE
   AS
   IF CCLUMNS_CHANGED(RetailPrice, WholesalePrice)
   - - Create Audit Records
B. CREATE TRIGGER TrgPriceChange
   ON Products FOR UPDATE
   AS
   IF EXISTS(SELECT RetailPrice from inserted) OR
   EXISTS (SELECT WholeSalePnce FROM inserted)
   - - Create Audit Records
C. CREATE TRIGGER TrgPriceChange ON Products FOR UPDATE AS
   IF COLUMNS_UPDATED(RetailPrice, WholesalePrice)
   - - Create Audit Records
D. CREATE TRIGGER TrgPriceChange
   ON Products FOR UPDATE
   AS
   IF UPDATE(RetailPrice) OR UPDATE(WholeSalePrice)
   - - Create Audit Records

**Correct Answer:** D
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 9**
DRAG DROP
You create a view based on the following statement:

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

You grant the Select permission to User1 for this view. You need to change the view so that it displays only the records that were processed in the month prior to the current month. You need to ensure that after the changes, the view functions correctly for User1. Which 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.)

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

```
ALTER VIEW dbo.vwItemList
AS
```

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

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

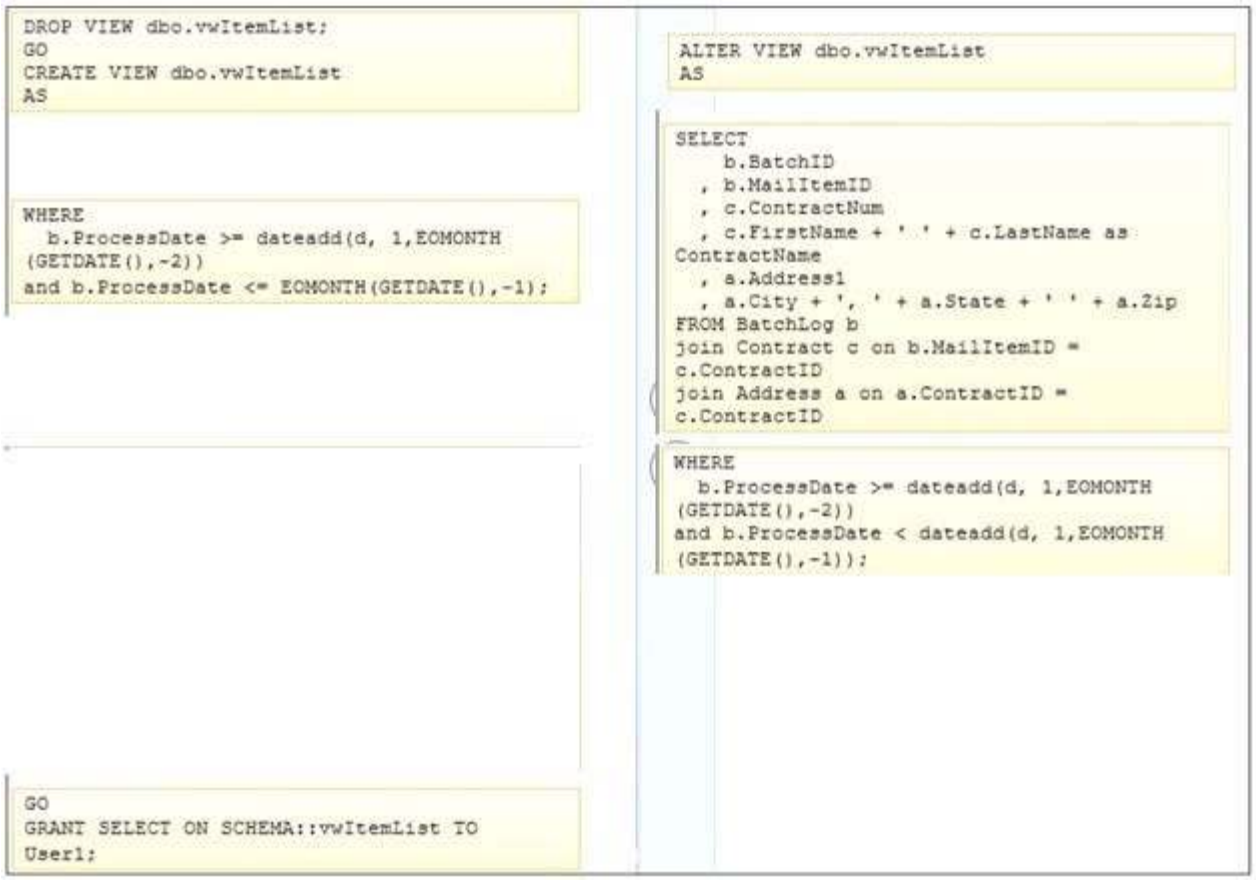
```
SELECT
    b.BatchID
  , b.MailItemID
  , c.ContractNum
  , c.FirstName + ' ' + c.LastName as
ContractName
  , a.Address1
  , a.City + ', ' + a.State + ' ' + a.Zip
FROM BatchLog b
join Contract c on b.MailItemID =
c.ContractID
join Address a on a.ContractID =
c.ContractID
```

```
GO
GRANT SELECT ON SCHEMA::vwItemList TO
User1;
```

A.
B.
C.
D.

**Correct Answer:**
**Section: (none)**
**Explanation**

**Explanation/Reference:**




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

**QUESTION 10**
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. Which Transact-SQL statement should you use?

A. ALTER TABLE Inventory
AIL TotalItems AS ItemsInStore + ItemsInWarehouse
B. ALTER TABLE Inventory
ALL ItemsInStore - ItemsInWarehouse = TotalsItems
C. ALTER TABLE Inventory
ADD TatalItems = ItemsInStore + ItemsInWarehouse
D. ALTER TA3LE Inventory
AIL TotalItems AS SUM(ItemsInStore, ItemsInWarehouse;

**Correct Answer:** A
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 11**
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 improve the performance of the view by persisting data to disk. What should you do?

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

**Correct Answer:** D
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 12**
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, CrderDate

```
FROM Customers
LEFT OUTER JOIN Orders
ON Customers.CustomerID = Orders.CustomerID
```

**Correct Answer:** D
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 13**
DRAG AND DROP
You use Microsoft SQL Server 2012 to develop a database application. You create a table by using the following definition:

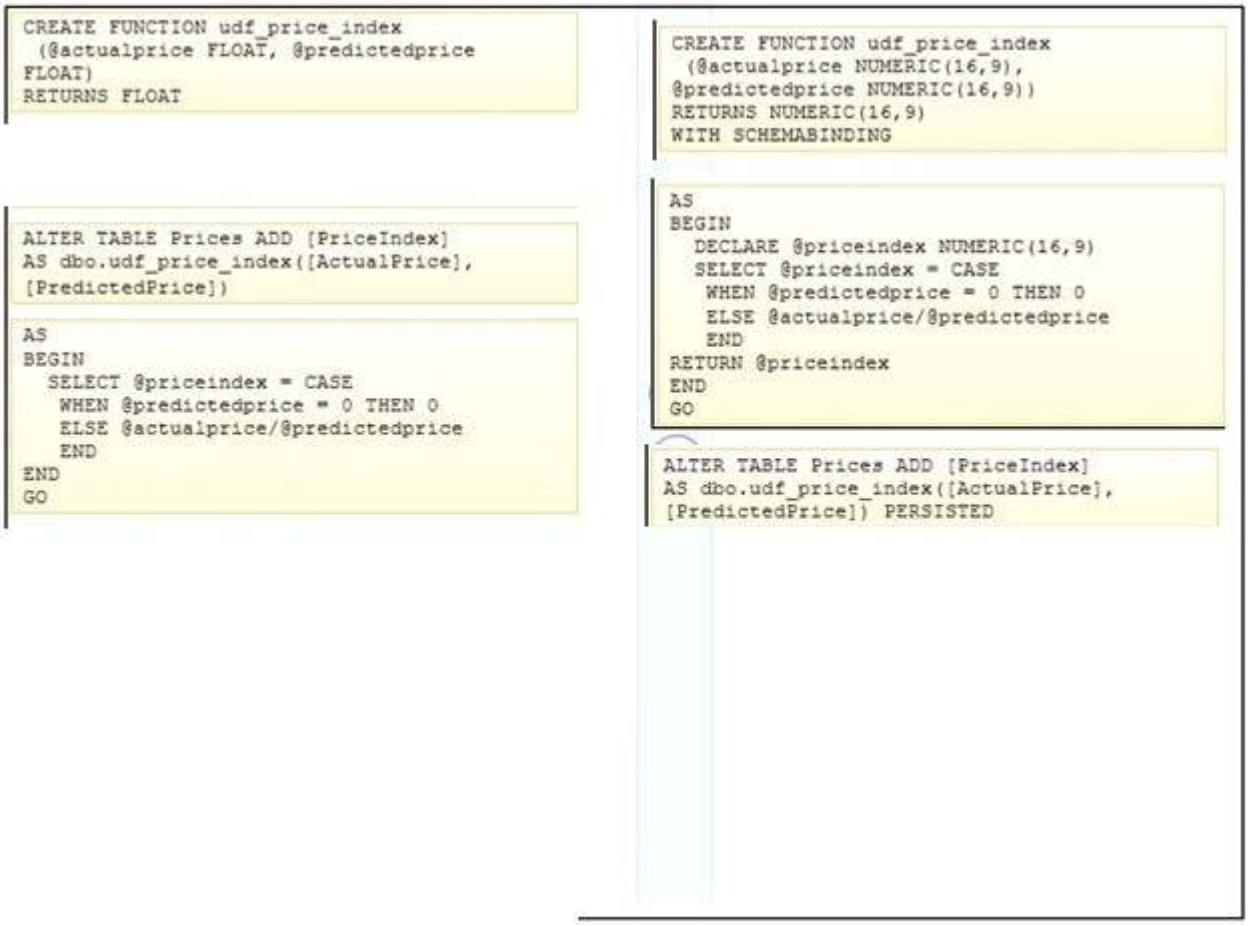
```
CREATE TABLE Prices (
PriceId int IDENTITY(1,1) PRIMARY KEY,
ActualPrice NUMERIC(16,9),
PredictedPrice NUMERIC(16,9)
)
```

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.)


A.

**Correct Answer:**
**Section: (none)**
**Explanation**

**Explanation/Reference:**




**QUESTION 14**
A table named Profits stores the total profit made each year within a territory. The Profits table has columns named Territory, Year, and Profit. You need to create a report that displays the profits made by each territory for each year and its previous year. Which Transact-SQL query should you use?

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

**Correct Answer:** C
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 15**
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:**

**QUESTION 16**
You administer a Microsoft SQL Server database that supports a shopping application. You need to retrieve a list of customers who live in territories that do not have a sales person. Which Transact- SQL query or queries should you use? (Each correct answer presents a complete solution. Choose all that apply.)

A. SELECT CustomerID FROM Customer
WHERE TerritoryID < > SOME (SELECT TerritoryID FROM Salesperson)
B. SELECT CustomerID FROM Customer
WHERE TerritoryID < > ALL (SELECT TerritoryID FROM Salesperson)
C. SELECT CustomerID FROM Customer
WHERE TerritoryID < > ANY (SELECT TerritoryID FROM Salesperson)
D. SELECT CustomerID FROM Customer
WHERE TerritoryID NOT IN (SELECT TerritoryID FROM Salesperson)

**Correct Answer:** CD
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 17**
Your database contains a table named SalesOrders. The table includes a DATETIME column named OrderTime that stores the date and time each order is placed. There is a non-clustered index on the OrderTime column. The business team wants a report that displays the total number of orders placed on the current day. You need to write a query that will return the correct results in the most efficient manner. Which Transact-SQL query should you use?

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

**Correct Answer:** D
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 18**
Your application contains a stored procedure for each country. Each stored procedure accepts an employee identification number through the @EmpID 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:**

**QUESTION 19**
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. Create a user-defined type on the master database.
B. Create a user-defined data type on the model database.
C. Create a user-defined type on the model database.
D. Create a user-defined data type on the master database.

**Correct Answer:** C
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 20**
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:**

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

**QUESTION 21**
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 22**
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:**

**QUESTION 23**
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:**
Reference: http://msdn.microsoft.com/en-us/library/cc645587.aspx

**QUESTION 24**
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?

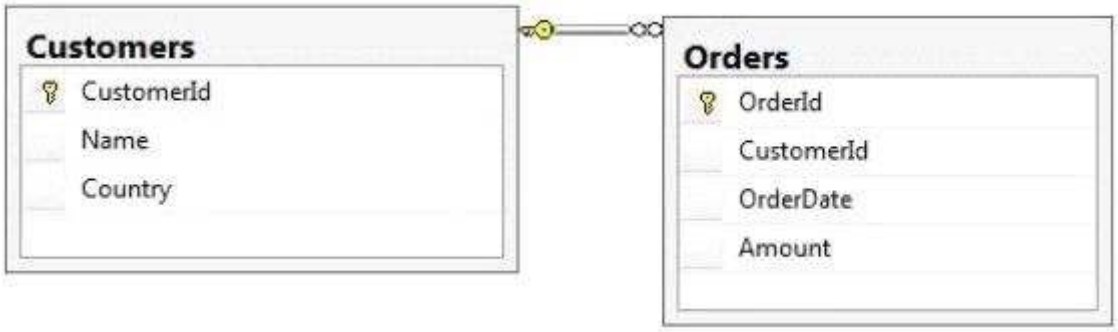
A. Add a HASH hint to the query.
B. Add a LOOP hint to the query.
C. Add a FORCESEEK hint to the query.
D. Add an INCLUDE clause to the index.
E. Add a FORCESCAN hint to the Attach query.
F. Add a columnstore index to cover the query.
G. Enable the optimize for ad hoc workloads option.
H. Cover the unique 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:**

**QUESTION 25**
You administer a Microsoft SQL Server 2012 database named ContosoDb. Tables are defined as shown in the exhibit. (Click the Exhibit button.)




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

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

<
Which Transact-SQL query should you use?

A. SELECT OrderId, OrderDate, Amount, Name, Country FROM Orders INNER JOIN Customers ON Orders.CustomerId = Customers-CustomerId WHERE Customers.CustomerId = 1

FOR XML RAW

B. SELECT OrderId, OrderDate, Amount, Name, Country FROM Orders INNER JOIN Customers ON Orders.CustomerId = Customers.CustomerId
WHERE Customers=CustomerId = 1
FOR XML RAW, ELEMENTS

C. SELECT OrderId, OrderDate, Amount, Name, Country FROM Orders INNER JOIN Customers ON Orders.CustomerId = Customers.CustomerId WHERE Customers.CustomerId = 1
FOR XML AUTO

D. SELECT OrderId, OrderDate, Amount, Name, Country FROM Orders INNER JOIN Customers ON Orders.CustomerId - Customers.CustomerId WHERE Customers.CustomerId= 1
FOR XML AUTO, ELEMENTS

E. SELECT Name, Country, OrderId, OrderDate, Amount FROM Orders INNER JOIN Customers ON Orders.CustomerId= Customers.CustomerId WHERE Customers.CustomerId- 1
FOR XML AUTO

F. SELECT Name, Country, CrderId, OrderDate, Amount FROM Orders INNER JOIN Customers ON Orders.CustomerId= Customers.CustomerId WHERE Customers.CustomerId= 1
FOR XML AUTO, ELEMENTS

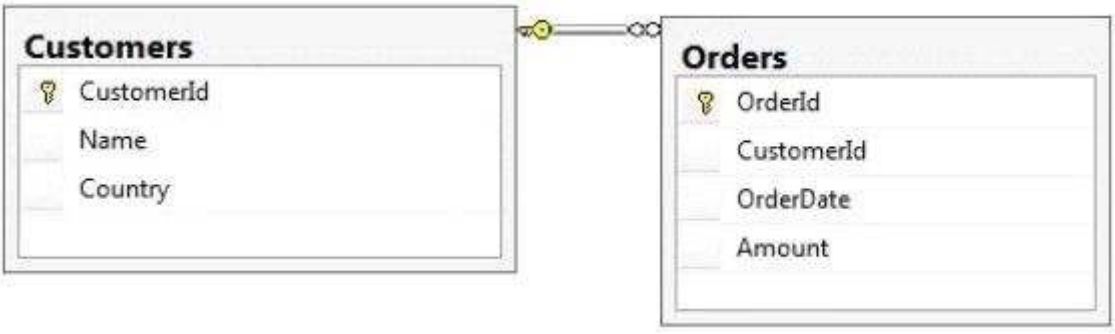
G. SELECT Name AS '@Name', Country AS '@Country', OrderId, OrderDate, Amount FROM Orders INNER JOIN Customers ON Orders.CustomerId= Customers.CustomerId WHERE Customers.CustomerId= 1
FOR XML PATH ('Customers')

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

**Correct Answer:** F
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 26**
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, CrderId, OrderDate, Amount FROM Orders INNER JOIN Customers ON Orders.CustomerId= Customers.CustomerId WHERE Customers.CustomerId= 1 FOR XML AUTO, ELEMENTS

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

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

**Correct Answer:** G
**Section: (none)**
**Explanation**

**Explanation/Reference:**

http://www.Test4Prep.com

**QUESTION 27**
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:**
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/ms151176.aspx

**QUESTION 28**
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:**

**QUESTION 29**
You administer all the deployments of Microsoft SQL Server 2012 in your company. A database contains a large product catalog that is updated periodically. You need to be able to send the entire product catalog to all branch offices on a monthly basis. Which configuration should you use?

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

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
D · Two servers configured in a Windows Failover Cluster in the same data center · SQL Server configured as a clustered instance

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

**Correct Answer:** E
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 30**
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:**

**Exam C**

**QUESTION 1**
You administer a Microsoft SQL Server 2012 server that hosts a transactional database and a reporting database. The transactional database is updated through a web application and is operational throughout the day. The reporting database is only updated from the transactional database. The recovery model and backup schedule are configured as shown in the following table:

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

**QUESTION 2**
You administer a Microsoft SQL Server 2012 server that hosts a transactional database and a reporting database. The transactional database is updated through a web application and is operational throughout the day. The reporting database is only updated from the transactional database. The recovery model and backup schedule are configured as shown in the following table:

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

**QUESTION 3**
You administer a Microsoft SQL Server 2012 server that hosts a transactional database and a reporting database. The transactional database is updated through a web application and is operational throughout the day. The reporting database is only updated from the transactional database. The recovery model and backup schedule are configured as shown in the following table:

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

**QUESTION 4**
You administer a Microsoft SQL Server 2012 server that hosts a transactional database and a reporting database. The transactional database is updated through a web application and is operational throughout the day. The reporting database is only updated from the transactional database. The recovery model and backup schedule are configured as shown in the following table:

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

One of the hard disk drives that stores the reporting database fails at 16:40 hours. You need to ensure that the reporting database is restored. You also need to ensure that data loss is minimal.

What should you do?

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

**Correct Answer:**
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 5**
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_COMMI
```

B.
```
ALTER AVAILABILITY GROUP haContosoDbs MODIFY REPLICA ON
'Server01\Contoso01' WITH (AVAILABILITY_MODE = SYNCHRONOUS_COMMIT
```

C.
```
ALTER AVAILABILITY GROUP haContosoDbs MODIFY REPLICA ON
'Server01\Contoso01' WITH (AVAILABILITY_MODE = SYNCHRONOUS_COMMIT
```

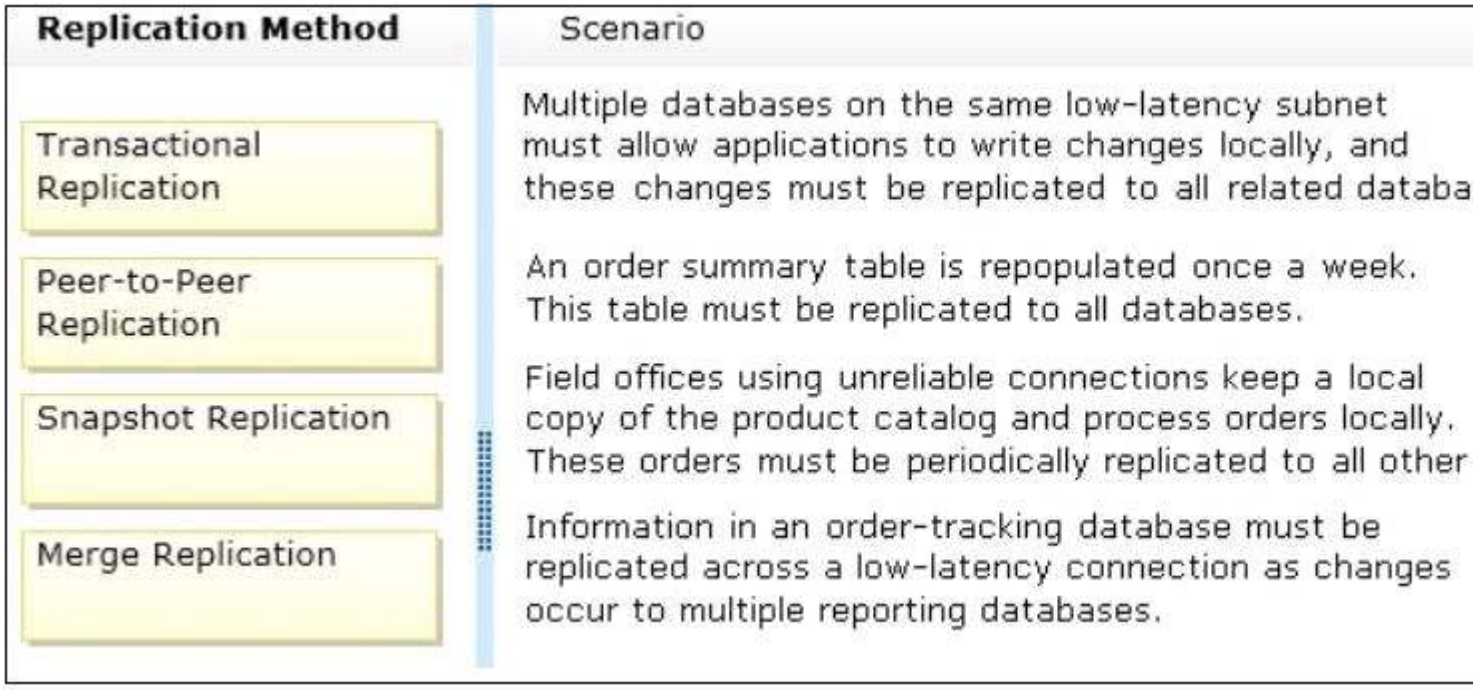
D.
```
ALTER AVAILABILITY GROUP haContosoDbs MODIFY REPLICA ON
'Server01\Contoso01' WITH (AVAILABILITY_MODE = ASYNCHRONOUS_COMMI
```

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

**Correct Answer:** C
**Section: (none)**
**Explanation**

**Explanation/Reference:**

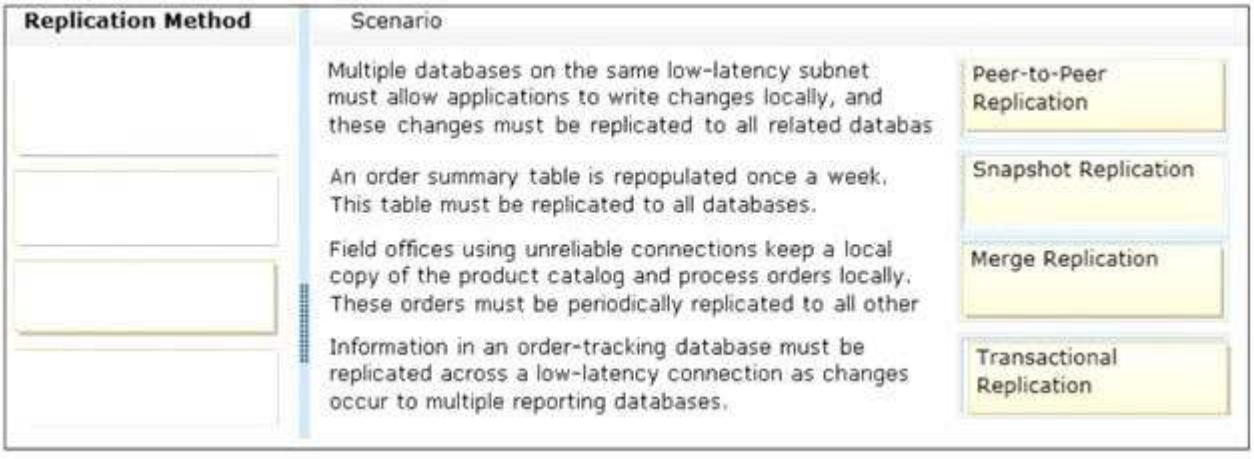
**QUESTION 6**
DRAG DROP
You administer several Microsoft SQL Server 2012 servers. Your company has a number of offices across the world connected by using a wide area network (WAN). Connections between offices vary significantly in both bandwidth and reliability. You need to identify the correct replication 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.)




A.

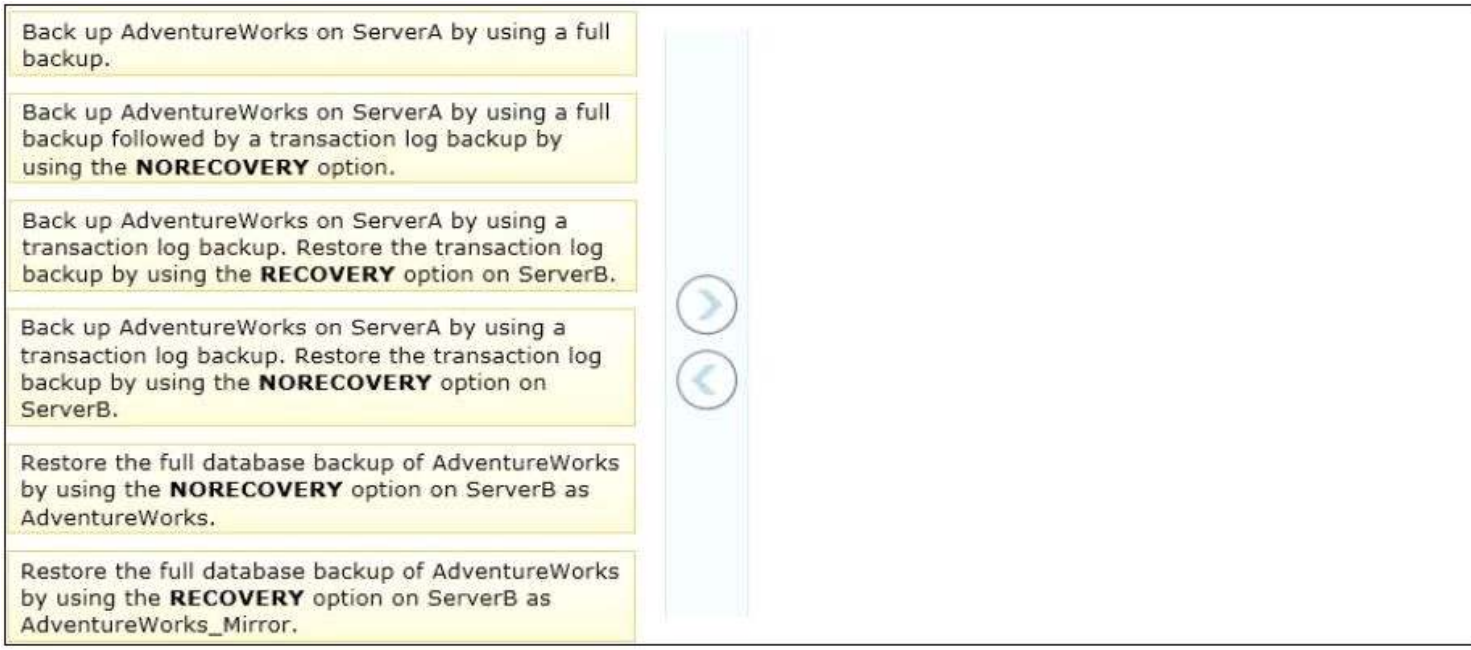
**Correct Answer:**
**Section: (none)**
**Explanation**

**Explanation/Reference:**




**QUESTION 7**

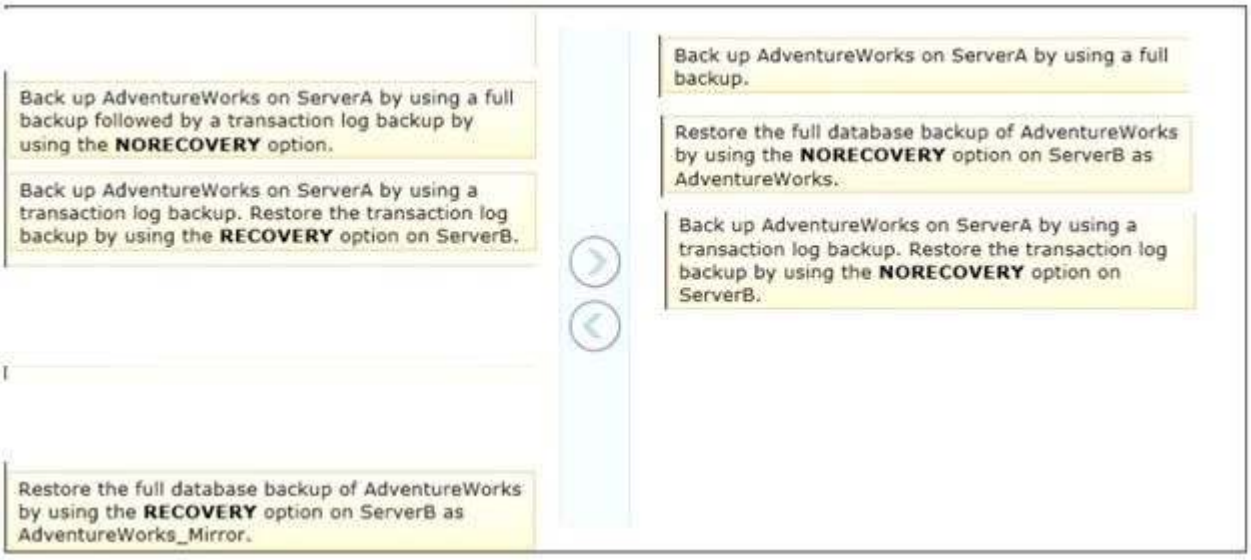
DRAG DROP
You administer two Microsoft SQL Server 2012 servers named ServerA and ServerB. You use a database named AdventureWorks. You need to prepare the AdventureWorks database for database mirroring. ServerB will act as the mirror in a mirroring partnership along with ServerA. Which three actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)




A.

**Correct Answer:**
**Section: (none)**
**Explanation**

**Explanation/Reference:**




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 8**
You create an availability group named HaContoso that has replicas named Server01/HA, Server02/HA, and Server03/HA. Currently, Server01l/HA is the primary replica. You need to ensure that the following requirements are met:
· Backup operations occur on Server02/HA.
· If Server02/HA is unavailable, backup operations occur on Server03/HA.
· Backup operations do not occur on Server01/HA.

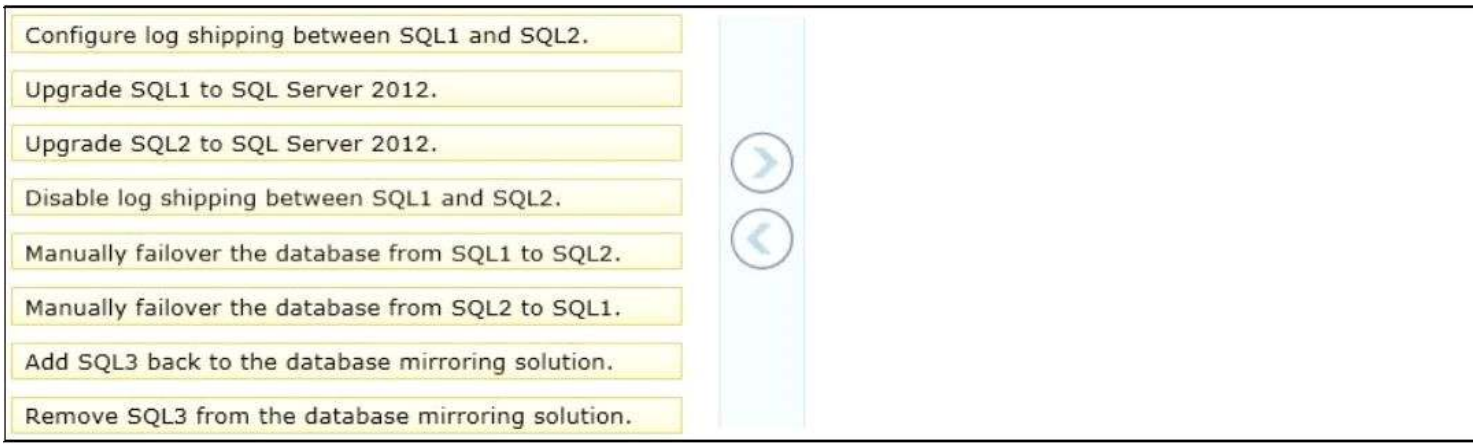
How should you configure HaContoso?

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

**Correct Answer:** C
**Section: (none)**
**Explanation**

**Explanation/Reference:**

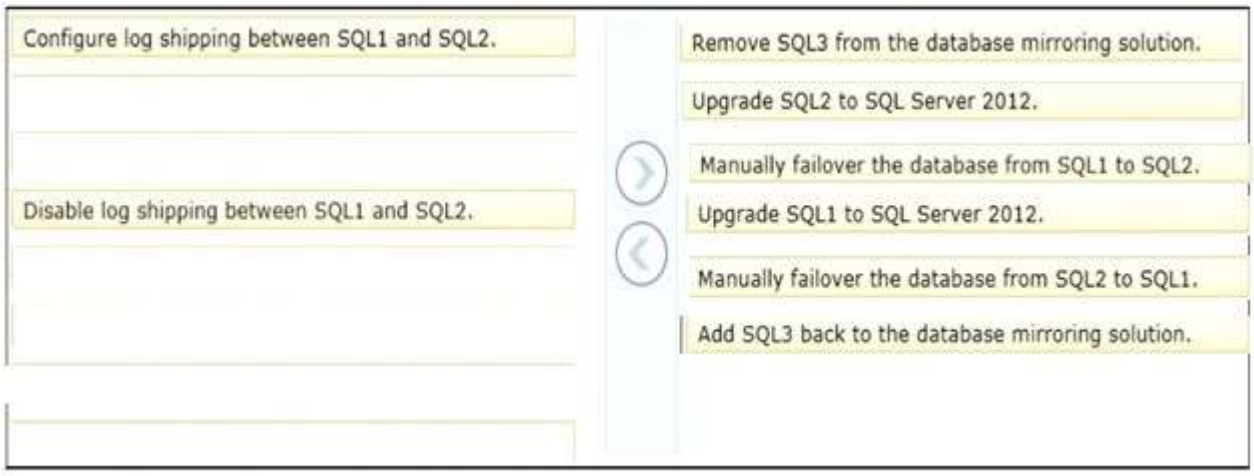
**QUESTION 9**
DRAG DROP
You administer three Microsoft SQL Server 2008 R2 instances. Database mirroring is configured in High-Safety mode with Automatic Failover between the following three servers:
· SQL1 is the Principal server.
· SQL2 is the mirror server.
· SQL3 is the witness server.
You need to upgrade SQL1 and SQL2 to SQL Server 2012. You need to ensure that downtime is minimized during the upgrade. Which six actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)




A.

**Correct Answer:**
**Section: (none)**
**Explanation**

**Explanation/Reference:**




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

**QUESTION 10**
You administer a Microsoft SQL Server 2012 server that has SQL Server Integration Services (SSIS) installed. You plan to deploy new SSIS packages to the server. The SSIS packages use the Project Deployment Model together with parameters and Integration Services environment variables. You need to configure the SQL Server environment to support these packages. What should you do?

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

**Correct Answer:** B
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 11**
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:**
The answer is either start the browser service or use the Master Data Services Configuration Manager to configure the application. I have left it the way I found it.

**QUESTION 12**
DRAG DROP
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.)


A.

**Correct Answer:**
**Section: (none)**
**Explanation**

**Explanation/Reference:**


Reference: http://msdn.microsoft.com/en-us/library/cc280372.aspx

**QUESTION 13**
HOTSPOT
You administer a Microsoft SQL Server 2012 database. The database contains a table that has the following definition:

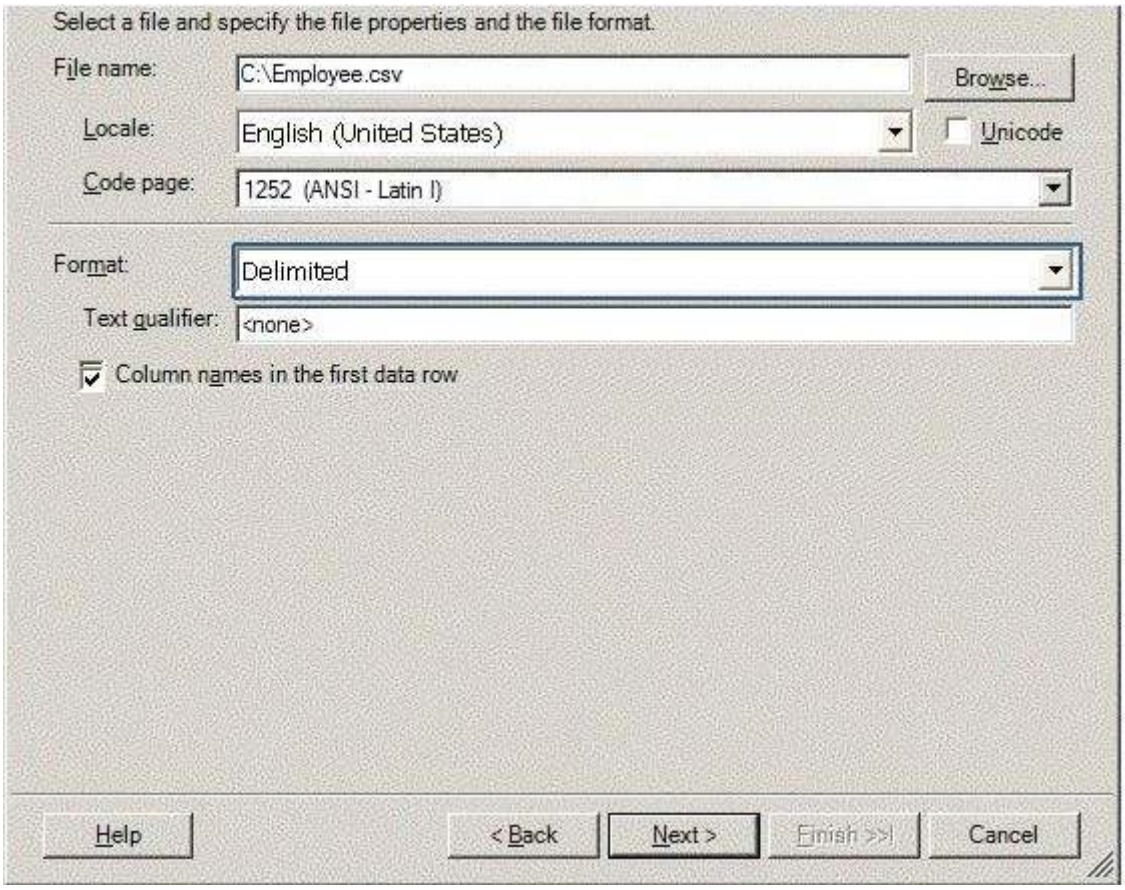
```
CREATE TABLE [Sales].[Customer](
  [CustomerID] int NOT NULL,
  [CustomerName] nvarchar(50) NOT NULL,
  [TerritoryID] int NULL,
  [LastContactDate] datetimeoffset NULL,
  [CustomerType] nchar(1) NOT NULL,
  [Notes] varchar(250) NULL
)
```

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, configure the appropriate option or options in the dialog box in the answer area.)


A.

**Correct Answer:**
**Section: (none)**
**Explanation**

**Explanation/Reference:**




**QUESTION 14**
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:** B
**Section: (none)**
**Explanation**

**Explanation/Reference:**
The question seems to be missing something. Or the original answer is incorrect. I've changed it to what I believe to be the correct answer. The original answer included "The Select permission on Orders.", but due to ownership chaining, you would only need to give Execute permissions to UserC; the stored procedure can already select data from both tables.

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 15**
You administer a Microsoft SQL Server 2012 database that has multiple tables in the Sales schema. Some users must be prevented from deleting records in any of the tables in the Sales schema. You need to manage users who are prevented from deleting records in the Sales schema. You need to achieve this goal by using the minimum amount of administrative effort. What should you do?

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

**Correct Answer:** A
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 16**
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:** DE
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 17**
You are migrating a database named Orders to a new server that runs Microsoft SQL Server 2012. You attempt to add the [Corpnet\User1] login to the database. However, you receive the following error message: "User already exists in current database."
You need to configure the [Corpnet\User1] login to be able to access the Orders database and retain the original permissions. You need to achieve this goal by using the minimum required permissions.
Which Transact-SQL statement should you use?

A. DROP USER [User1];
CREATE USER [Corpnet\User1] FOR LOGIN [Corpnet\User1]; ALTER ROLE [db_owner] ADD MEM3ER [Corpnet\User1];
B. ALTER SERVER RCLS Isysadmin] ADD MEMBER [Corpnet\User1];
C. ALTER USER [Corpnet\User1] WITH LOGIN [Corpnet\User1];
D. ALTER ROLE [db owner] ADD MEMBBR [Corpnet\User1];

**Correct Answer:** C
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 18**
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 PASSWOR

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_
```

C.
```
CREATE CERTIFICATE TDE_Certificate FROM FILE = 'd:\TDE_Certificate
WITH PRIVATE KEY (FILE = 'd:\TDE_Certificate.key', DECRYPTION BY P
```

D.
```
DECLARE @startdate date
SET @startdate = GETDATE()
CREATE CERTIFICATE TDE_Certificate FROM FILE = 'd:\TDE_Certificate
WITH START_DATE = @startdate;
```

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

**Correct Answer:** C
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 19**
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:**

**QUESTION 20**
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:**

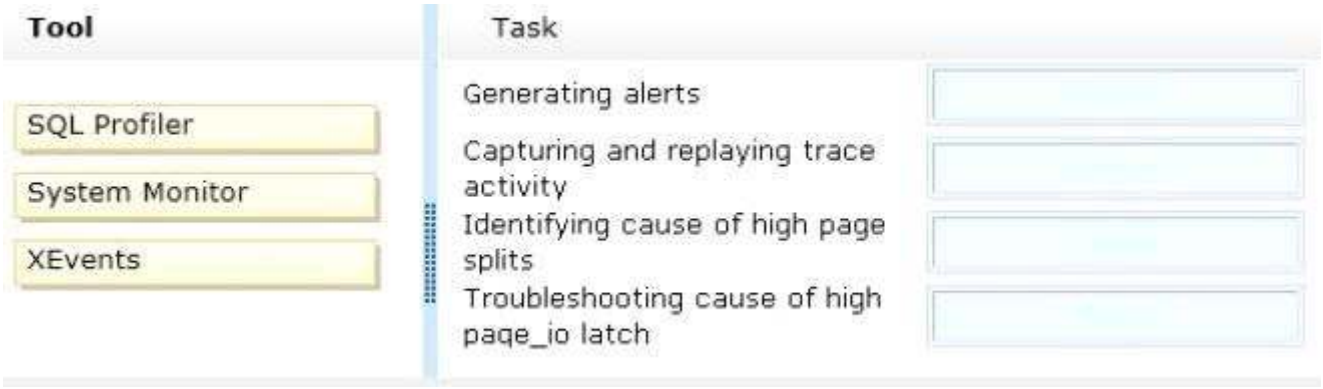
**QUESTION 21**
You administer a Microsoft SQL Server 2012 server. One of the databases on the server supports a highly active OLTP application. Users report abnormally long wait times when they submit data into the application. You need to identify which queries are taking longer than 1 second to run 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 Use the Job Activity monitor to review all processes that are actively running. Review the Job History to find out the duration of each step.
C. 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.

**Correct Answer:** D
**Section: (none)**
**Explanation**

**Explanation/Reference:**

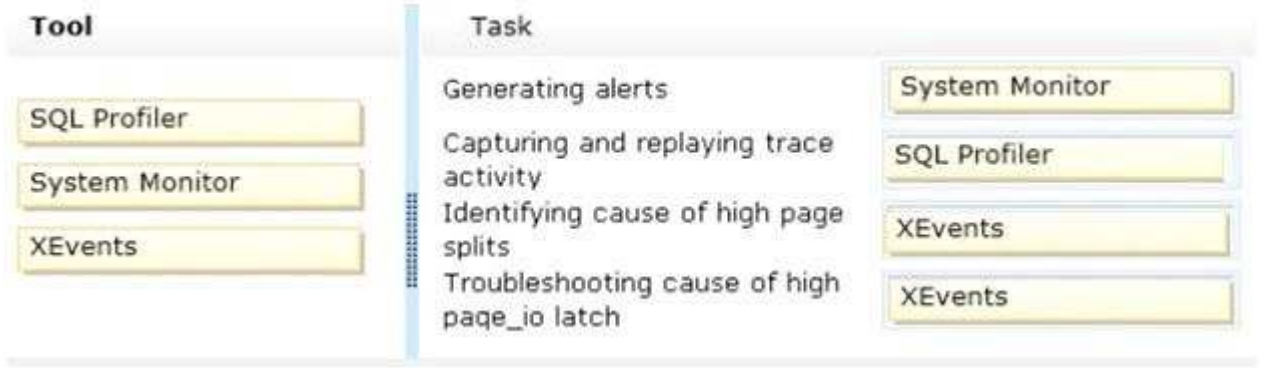
**QUESTION 22**
DRAG DROP
You administer a Microsoft SQL Server database that is used by an application. Users of the application report performance issues. You need to choose the appropriate tool for performance- tuning of SQL Server databases. Which tool or tools should you use? (To answer, drag the appropriate tool or tools to their corresponding task or tasks in the answer area. 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.)




A.
B.
C.
D.

**Correct Answer:**
**Section: (none)**
**Explanation**

**Explanation/Reference:**




**QUESTION 23**
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?

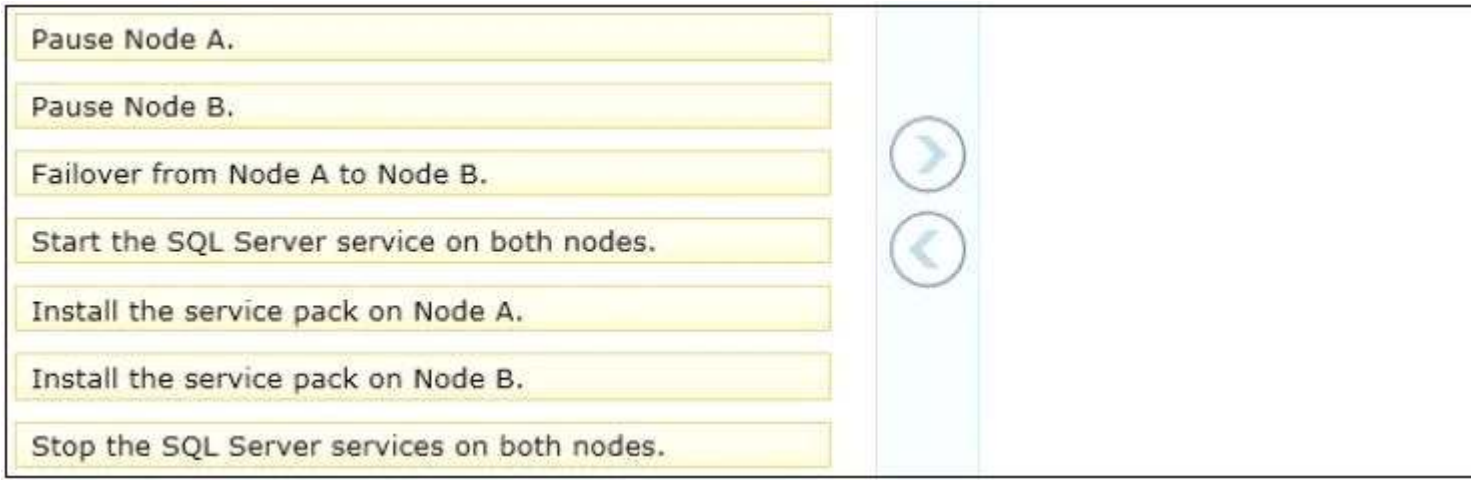
A. Execute sp_configure 'max log size', 2G.
B. use the ALTER DATABASE...SET LOGFILE command along with the maxsize parameter.
C. In SQL Server Management Studio, right-click the instance and select Database Settings. Set the maximum size of the file for the transaction log.
D. in SQL Server Management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

**QUESTION 24**

DRAG DROP
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.)




A.

**Correct Answer:**
**Section: (none)**
**Explanation**

**Explanation/Reference:**


**QUESTION 25**
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:**

**QUESTION 26**
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:**

**QUESTION 27**
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:**
I would have gone with Contained Databases, but the application requires sysadmin permissions.

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

**QUESTION 28**
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:**

**QUESTION 29**
You administer a Microsoft SQL Server 2012 instance that contains a financial database hosted on a storage area network (SAN). The financial database has the following characteristics:
· A data file of 2 terabytes is located on a dedicated LUN (drive D). · A transaction log of 10 GB is located on a dedicated LUN (drive E).
· Drive D has 1 terabyte of free disk space.
· Drive E has 5 GB of free disk space.
The database is continually modified by users during business hours from Monday through Friday between 09:00 hours and 17:00 hours. Five percent of the existing data is modified each day. The Finance department loads large CSV files into a number of tables each business day at 11:15 hours and 15:15 hours by using the BCP or BULK INSERT commands. Each data load adds 3 GB of data to the database. These data load operations must occur in the minimum amount of time. A full database backup is performed every Sunday at

10:00 hours. Backup operations will be performed every two hours (11:00, 13:00, 15:00, and 17:00) during business hours. On Wednesday at 10:00 hours, the development team requests you to refresh the database on a development server by using the most recent version. You need to perform a full database backup that will be restored on the development server. Which backup option should you use?

A. NORECOVERY
B. FULL
C. NO_CHECKSUM
D. CHECKSUM
E. Differential
F. 8ULK_LOGGED
G. STANDBY
H. RESTART
I. SKIP
J. Transaction log
K. DBO ONLY
L. COPY_ONLY
M. SIMPLE
N. CONTINUE AFTER ERROR

**Correct Answer:** K
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 30**
You administer a Microsoft SQL Server 2012 instance that contains a financial database hosted on a storage area network (SAN). The financial database has the following characteristics:
· A data file of 2 terabytes is located on a dedicated LUN (drive D). · A transaction log of 10 GB is located on a dedicated LUN (drive E).
· Drive D has 1 terabyte of free disk space.
· Drive E has 5 GB of free disk space.
The database is continually modified by users during business hours from Monday through Friday between 09:00 hours and 17:00 hours. Five percent of the existing data is modified each day. The Finance department loads large CSV files into a number of tables each business day at 11:15 hours and 15:15 hours by using the BCP or BULK INSERT commands. Each data load adds 3 GB of data to the database. These data load operations must occur in the minimum amount of time. A full database backup is performed every Sunday at 10:00 hours. Backup operations will be performed every two hours (11:00, 13:00, 15:00, and 17:00) during business hours. You need to ensure that the minimum amount of data is lost. Which recovery model should the database use?

A. FULL
B. DBO_ONLY
C. CONTINUE_AFTER_ERROR
D. CHECKSUM
E. NO_CHECKSUM
F. SIMPLE
G. Transaction log
H. SKIP
I. RESTART
J. COPY_ONLY

K. NORECOVERY
L. BULK_LOGGED
M. Differential
N. STANDBY

**Correct Answer:** C
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 31**
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- SKIP
J. Transaction tog
L COPY_ONLY
K. Differential
L. CONTINUE_AFTER_ERROR

**Correct Answer:** B
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**Exam D**

**QUESTION 1**
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:**

**QUESTION 2**
You administer a Microsoft SQL Server 2012 instance. The instance contains a database that supports a retail sales application. The application generates hundreds of transactions per second and is online 24 hours per day and 7 days per week. You plan to define a backup strategy for the database. You need to ensure that the following requirements are met:
· No more than 5 minutes worth of transactions are lost. · Data can be recovered by using the minimum amount of administrative effort.
What should you do? Choose all that apply.

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

**Correct Answer:** ABCE
**Section: (none)**
**Explanation**

**Explanation/Reference:**

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

| Filegroup | File |
|---|---|
| PRIMARY | • Sales.mdf |
| XACTIONS | • Sales_1.ndf<br>• Sales_2.ndf<br>• Sales_3.ndf |
| ARCHIVES | • SalesArch_1.ndf<br>• 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**

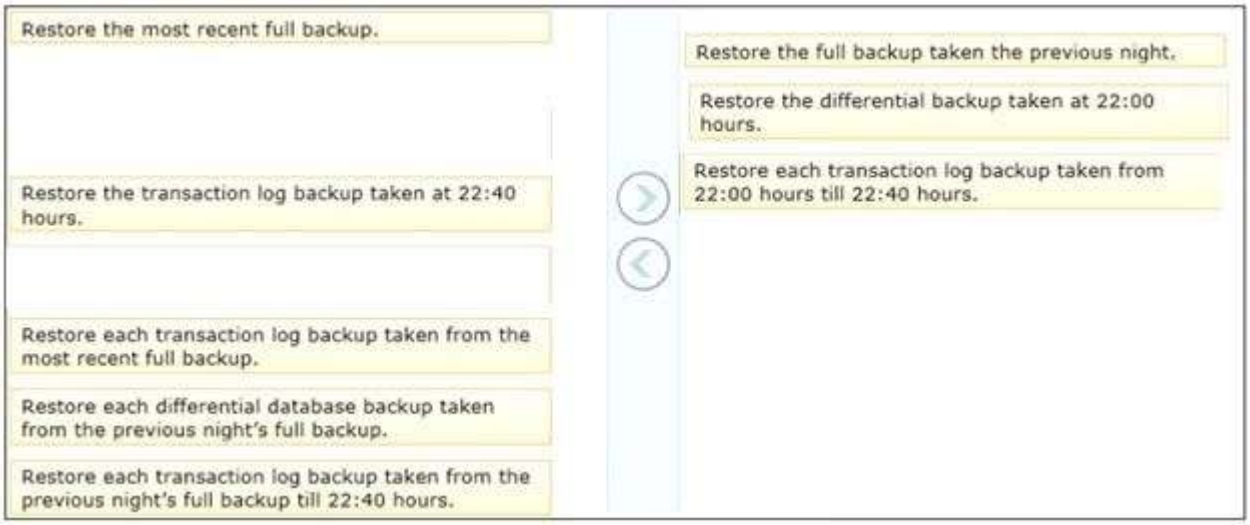
**Explanation/Reference:**

**QUESTION 4**
DRAG DROP
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.)


A.

**Correct Answer:**
**Section: (none)**
**Explanation**

**Explanation/Reference:**

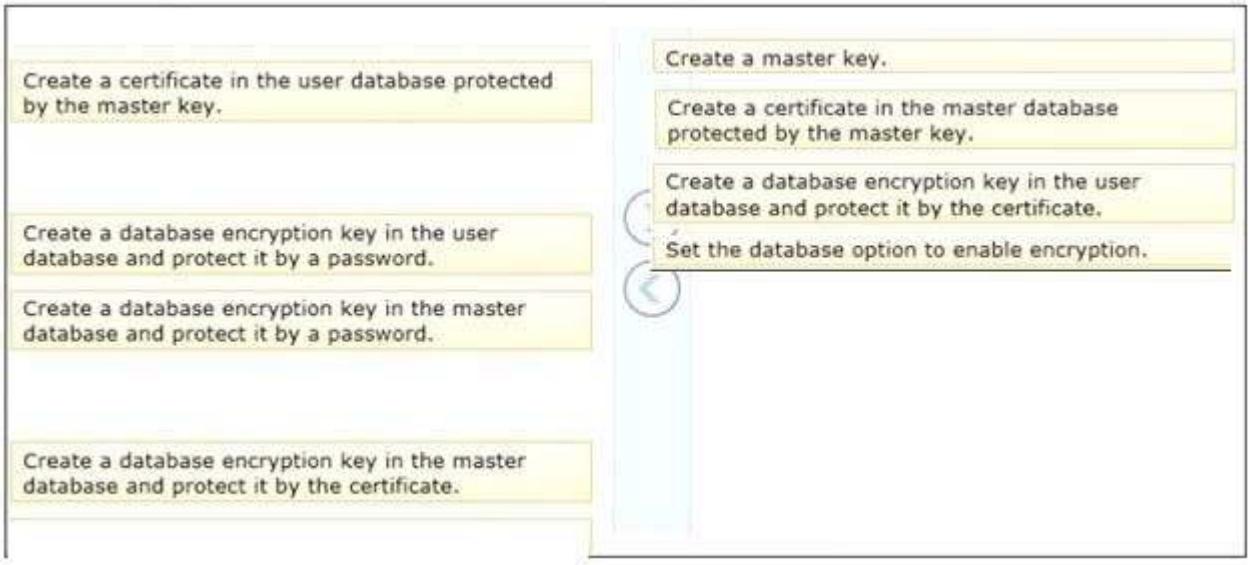



**QUESTION 5**
DRAG DROP
You administer a Microsoft SQL Server 2012 instance that contains a database of confidential data. You need to encrypt the database files at the page level. You also need to encrypt the transaction log files. Which four actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)


A.

**Correct Answer:**
**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 6**
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:**

**QUESTION 7**
You administer a Microsoft SQL Server 2012 database named Contoso on a server named Server01. You need to prevent users from disabling server audits in Server01. What should you create?

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

**Correct Answer:** D
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 8**
DRAG DROP
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.)

A.

**Correct Answer:**
**Section: (none)**
**Explanation**

**Explanation/Reference:**

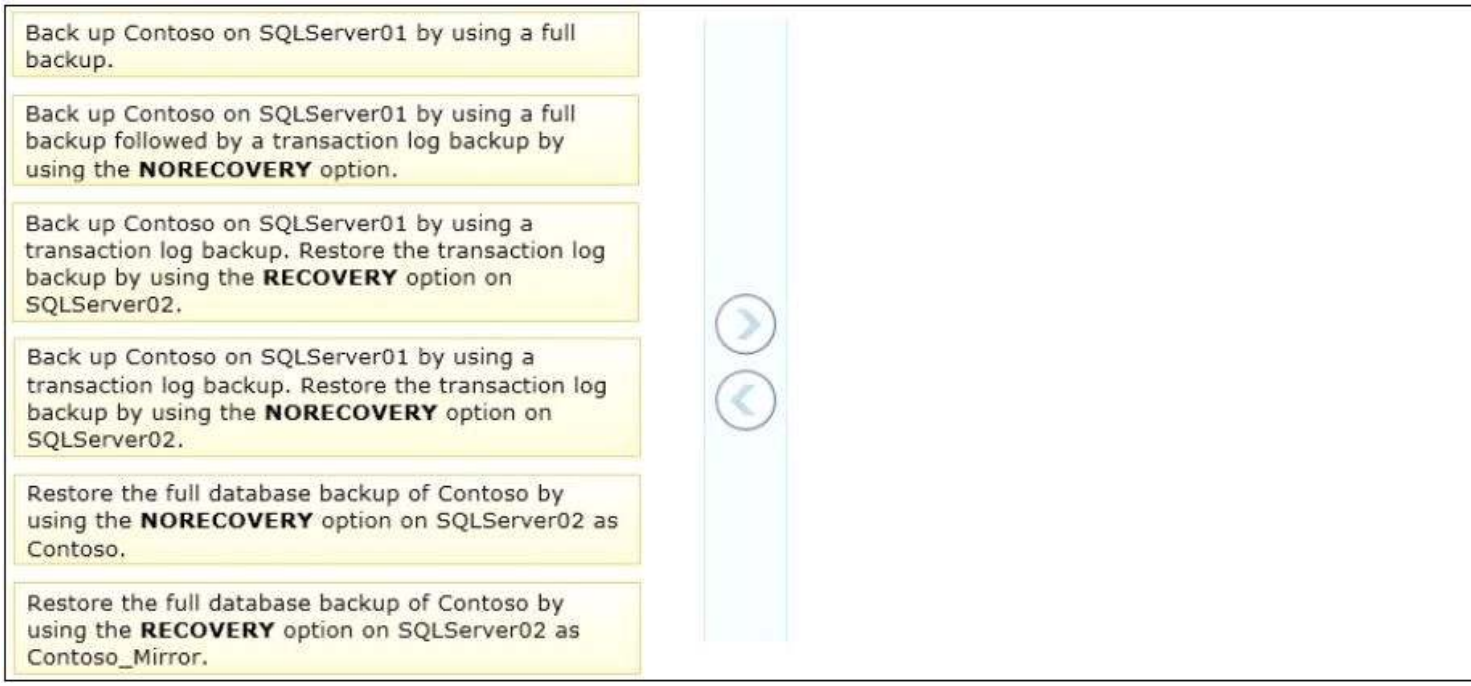

**QUESTION 9**
You administer a Microsoft SQL Server 2012. A process that normally runs in less than 10 seconds has been running for more than an hour. You examine the application log and discover that the process is using session ID 60. You need to find out whether the process is being blocked. Which Transact-SQL statement should you use?

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

**Correct Answer:** C
**Section: (none)**
**Explanation**

**Explanation/Reference:**

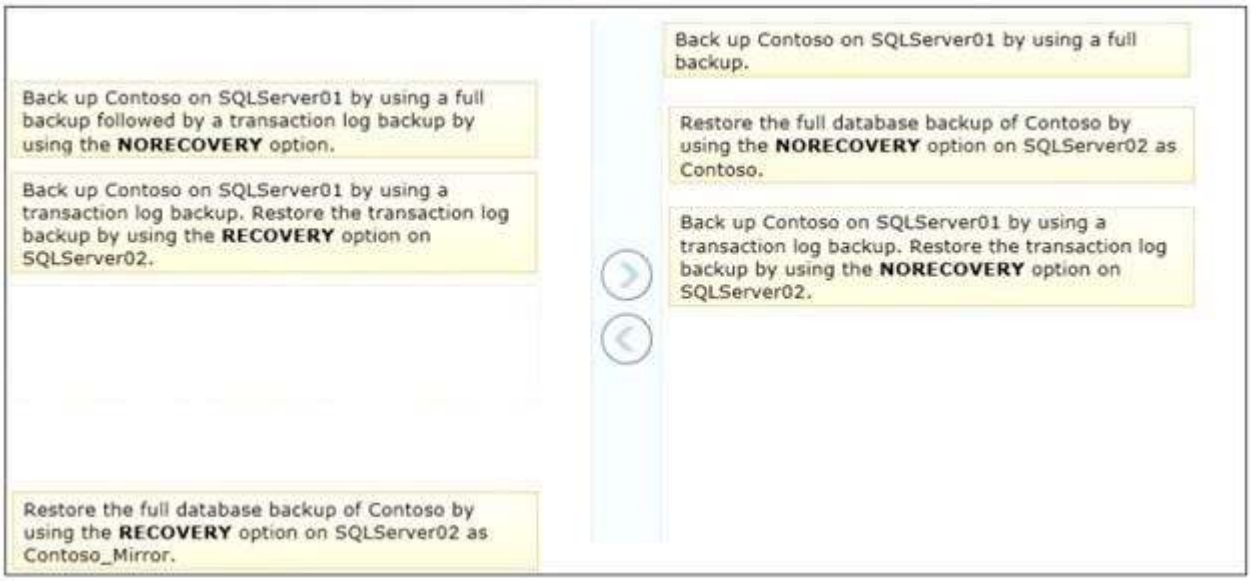
**QUESTION 10**
DRAG DROP
You are a database administrator of a Microsoft SQL Server 2012 environment. The environment contains two servers named SQLServer01 and SQLServer02. The database Contoso exists on SQLServer01. You plan to mirror the Contoso database between SQLServer01 and SQLServer02 by using database mirroring. You need to prepare the Contoso database for database mirroring. Which three actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)




A.
B.
C.
D.

**Correct Answer:**
**Section: (none)**
**Explanation**

**Explanation/Reference:**




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

**QUESTION 11**
You administer two Microsoft SQL Server 2012 servers. Each server resides in a different, untrusted domain.

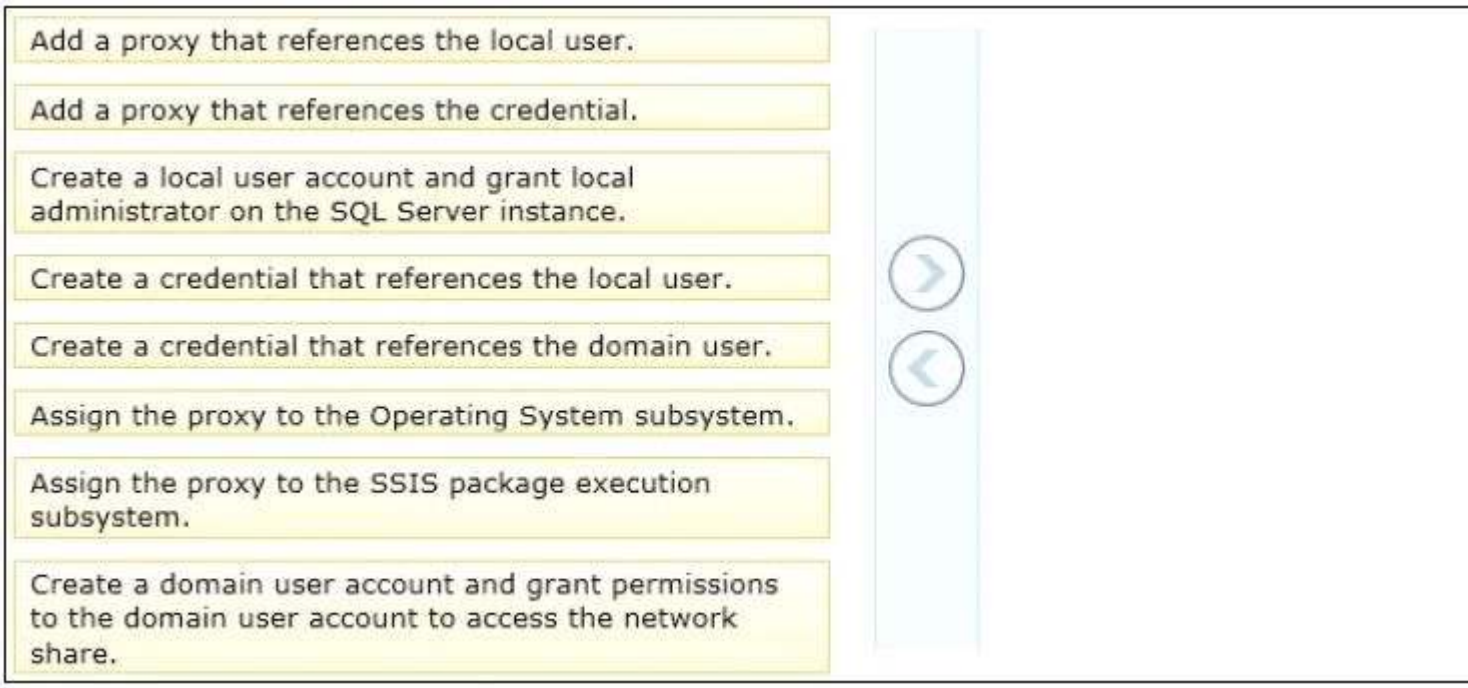
You plan to configure database mirroring. You need to be able to create database mirroring endpoints on both servers. What should you do?

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

**Correct Answer:** B
**Section: (none)**
**Explanation**

**Explanation/Reference:**

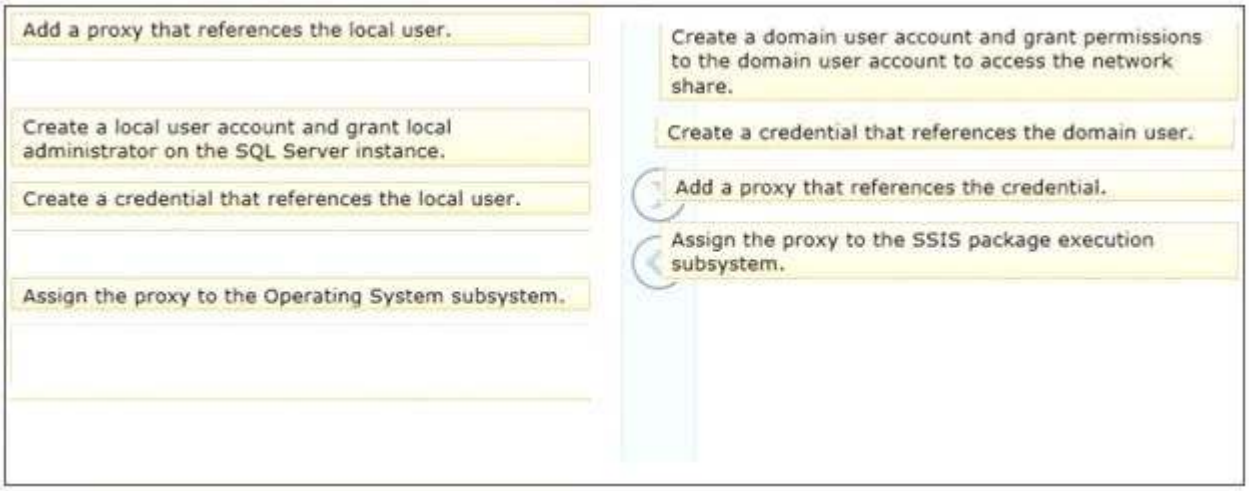
**QUESTION 12**
DRAG DROP
You administer a Microsoft SQL Server database. Service accounts for SQL Agent are configured to use a local user. A Microsoft SQL Server Integration Services (SSIS) job step has been created within a SQL Server Agent job. The SSIS package accesses a network share when exporting data from a SQL Server database. When you execute the SQL Server Agent job, it fails due to a permissions failure on a share on a remote server. You need to ensure that the SQL Server Agent job can execute the SSIS package. Which four actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)




A.
B.
C.
D.

**Correct Answer:**
**Section: (none)**
**Explanation**

**Explanation/Reference:**




**QUESTION 13**
You administer a Microsoft SQL Server 2012 instance. You need to configure a new database to support FILETABLES. What should you do? Choose all that apply.

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

**Correct Answer:** BDF
**Section: (none)**
**Explanation**

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

**QUESTION 14**
You administer two instances of Microsoft SQL Server 2012. You deploy an application that uses a database on the named instance. The application is unable to connect to the database on the named instance. You need to ensure that the application can connect to the named instance. What should you do?

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

**Correct Answer:** D
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 15**

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

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

**Correct Answer:** F
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 16**
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 17**
You administer a SQL 2012 server that contains a database named SalesDb. SalesDb contains a schema named Customers that has a table named Regions. A user named UserA is a member of a role named Sales. UserA is granted the Select permission on the Regions table. The Sales role is granted the Select permission on the Customers schema. You need to remove the Select permission for UserA on the Regions table. You

also need to ensure that UserA can still access all the tables in the Customers schema, including the Regions table, through the Sales role permissions. Which Transact-SQL statement should you use?

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

**Correct Answer:** D
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 18**
You administer a SQL Server 2012 server that contains a database named SalesDb. SalesDb contains a schema named Customers that has a table named Regions. A user named UserA is a member of a role named Sales. UserA is granted the Select permission on the Regions table and the Sales role is granted the Select permission on the Customers schema. You need to ensure that the Sales role, including UserA, is disallowed to select from the Regions table. Which Transact-SQL statement should you use?

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

**Correct Answer:** J
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 19**
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:**

**QUESTION 20**
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:** C
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 21**
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?

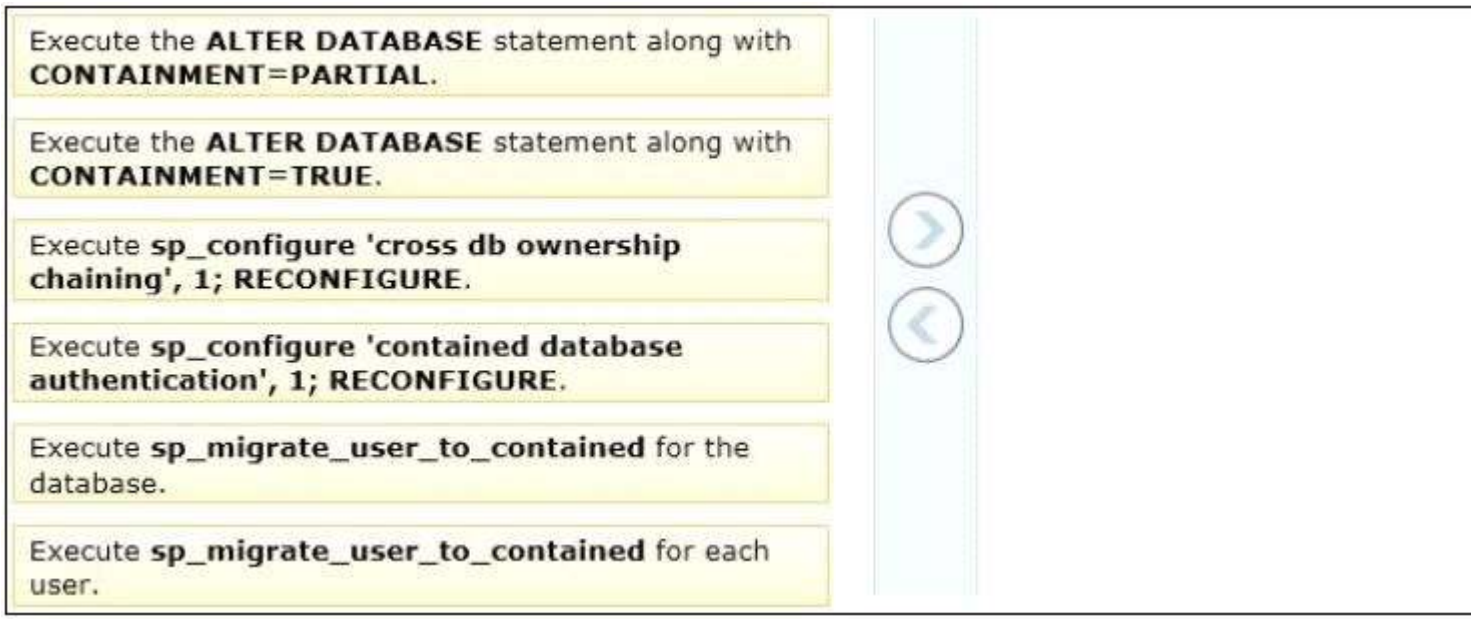
A. In the Database Mail Configuration Wizard, configure the Database Mail profile as a private profile for the AgentPortalUser account.
B. Disable the guest user in the msdb database.
C. Use the sysmail_help_profileaccount_sp stored procedure to add accounts to the Database Mail profile.
D. In the Database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

**Correct Answer:** D
**Section: (none)**

**Explanation**

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

**QUESTION 22**
DRAG DROP
You administer a Microsoft SQL Server 2012 database. You need to convert the database to a contained database. You also need to ensure that all users are converted to contained users. Which three actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)




A.

**Correct Answer:**
**Section: (none)**
**Explanation**

**Explanation/Reference:**

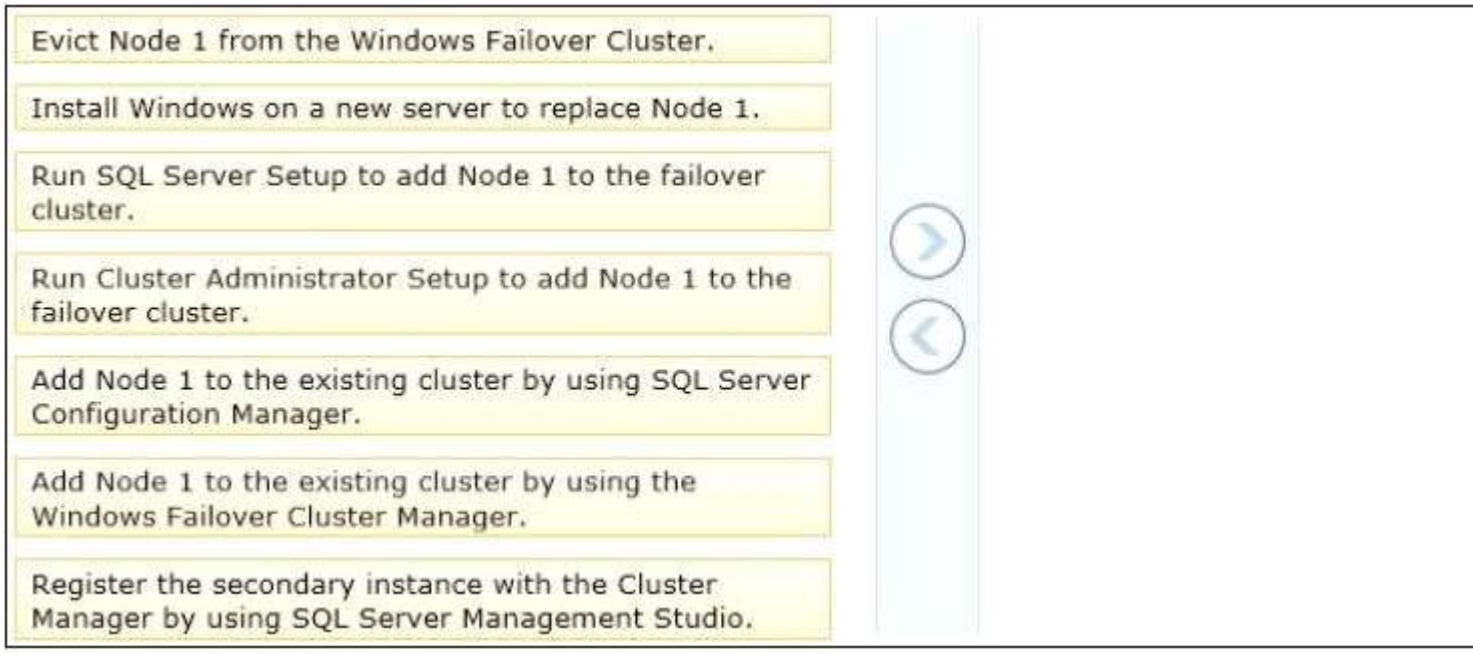
**QUESTION 23**
You administer a Microsoft SQL Server 2012 default instance. The instance is hosted by a server that has a local firewall configured. The firewall only allows inbound connections on port 1433. The server only hosts a single instance of SQL Server. You need to ensure that the instance 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:** ADE
**Section: (none)**
**Explanation**

**Explanation/Reference:**

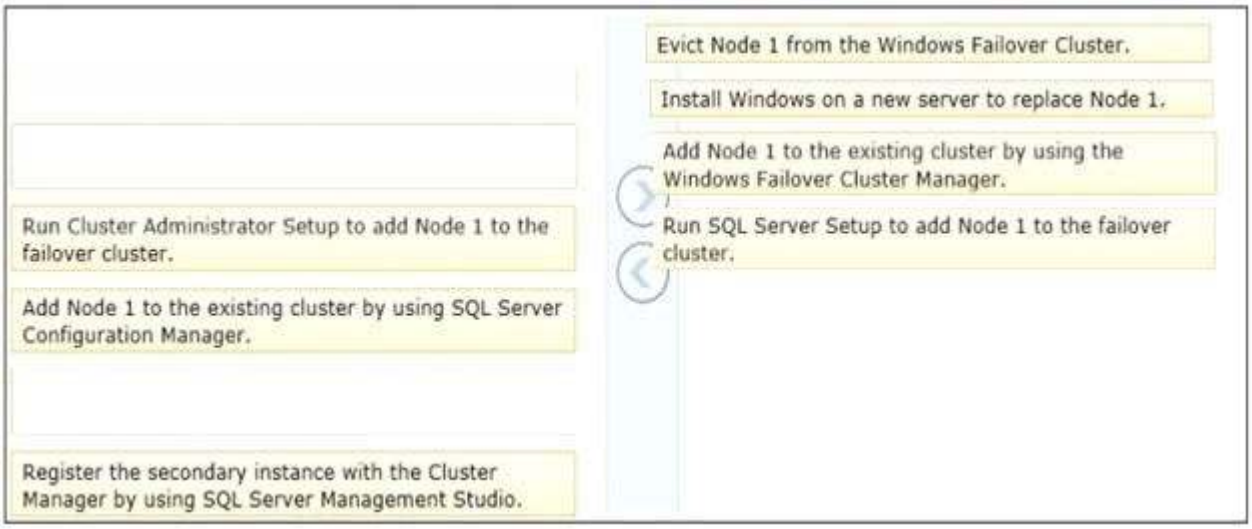
**QUESTION 24**
DRAG DROP
You administer a Microsoft SQL Server 2012 clustered instance that has two nodes named Node 1 and Node 2. Node 1 fails and the cluster fails over to Node 2. You need to replace Node 1 and add it to the cluster. Which four actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)




A.

**Correct Answer:**
**Section: (none)**
**Explanation**

**Explanation/Reference:**



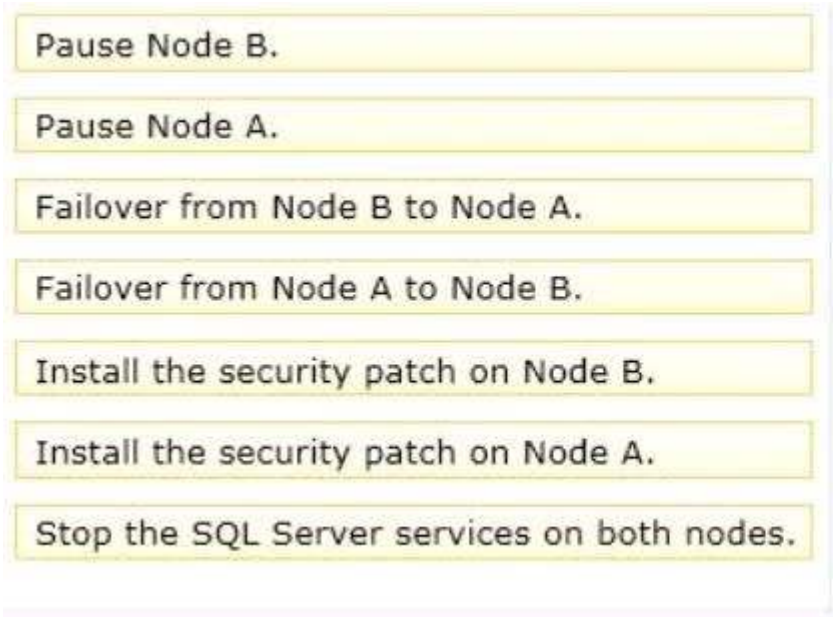

**QUESTION 25**
You administer a Microsoft SQL Server 2012 database. You need to ensure that the size of the transaction log file does not exceed 2 GB. What should you do?

A. In SQL Server Management Studio, right-click the instance and select Database Settings. Set the maximum size of the file for the transaction log.
B. 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.
C. Use the ALTER DATABASE...SET LOGFILE command along with the midsize parameter.
D. In SQL Server Management Studio, expand the Storage leaf under the database. Select the transaction log file and set the maximum size of the file.

**Correct Answer:** D
**Section: (none)**
**Explanation**

**Explanation/Reference:**

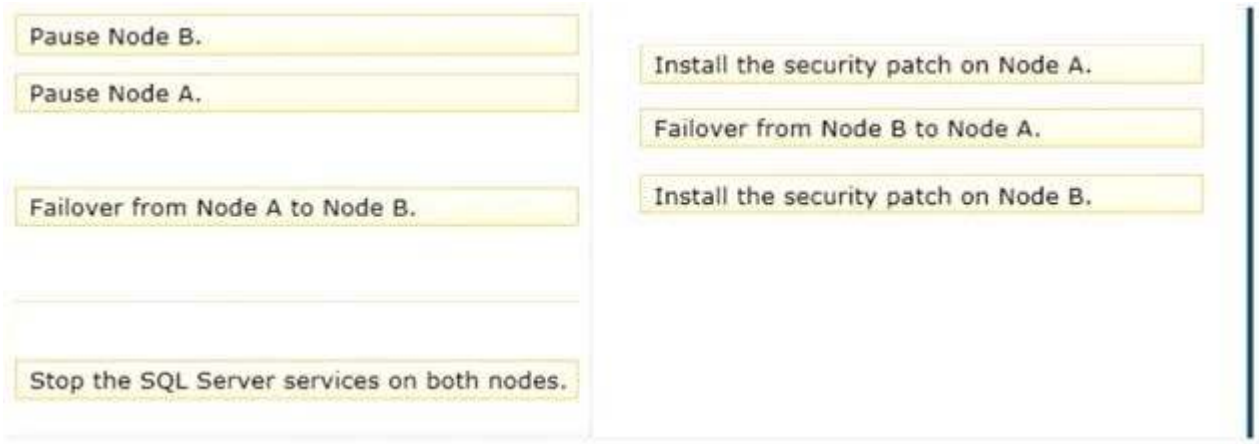
**QUESTION 26**
DRAG DROP
You administer a Microsoft SQL Server instance. You use a two-node SQL Server failover cluster. Node B is primary, and Node A is secondary. You need to install a security patch on both nodes. You need to ensure that the following requirements are met:
· Both nodes receive the update.
· Downtime is minimized.
· No data is lost.
Which three actions should you perform in sequence? (To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.)




A.
B.
C.
D.

**Correct Answer:**
**Section: (none)**
**Explanation**

**Explanation/Reference:**




**QUESTION 27**
DRAG DROP

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

```
CREATE 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
```

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

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

A.

**Correct Answer:**
**Section: (none)**
**Explanation**

**Explanation/Reference:**

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

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

```
CREATE SERVER AUDIT C_Audit
TO APPLICATION_LOG

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

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

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

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

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

```
CREATE SERVER AUDIT SPECIFICATION
C_AuditSpec
FOR SERVER AUDIT C_Audit
ADD (SCHEMA_OBJECT_ACCESS_GROUP)

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

```
Use Master
```

```
Use Contoso
```

OK. According to the reference, you need to create the audit, then the specification, then enable the specification, then enable the audit. The possible answers don't seem to be correct.

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

**QUESTION 28**
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:** C
**Section: (none)**
**Explanation**

**Explanation/Reference:**

**QUESTION 29**
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:**

**QUESTION 30**
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:**

**QUESTION 31**
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:**

**QUESTION 32**
A table named Profits stores the total profit made each year within a territory. The Profits table has columns named Territory, Year, and Profit. You need to create a report that displays the profits made by each territory for each year and its preceding year. Which Transact-SQL query should you use?

A.
```
SELECT Territory, Year, Profit, LAG(Profit, 1, 0) OVER (PARTITION
 AS NextProfit FROM Profits
```

B.
```
SELECT Territory, Year, Profit, LAG(Profit, 1, 0) OVER (PARTITION
 AS NextProfit FROM Profits
```

C.
```
SELECT Territory, Year, Profit, LEAD(Profit, 1, 0) OVER (PARTITION
 AS NextProfit FROM Profits
```

D.
```
SELECT Territory, Year, Profit, LEAD(Profit, 1, 0) OVER (PARTITION
 AS NextProfit FROM Profits
```

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

**Correct Answer:** B
**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 33**
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:**
Reference: http://msdn.microsoft.com/en-us/library/ms173763.aspx