Vendor: Microsoft

Exam Code: 70-461

Exam Name: Querying Microsoft SQL Server 2012

Version: Demo
QUESTION 1
You administer a Microsoft SQL Server 2012 database named ContosoDB. Tables are defined as shown in the exhibit.

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:

```xml
<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, OrderId, OrderDate, Amount
   FROM Orders INNER JOIN Customers ON Orders.CustomerId = Customers.CustomerId
   WHERE Customers.CustomerId = 1
   FOR XML AUTO, ELEMENTS

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

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

Correct Answer: A

**QUESTION 2**

You administer a Microsoft SQL Server 2012 database named ContosoDb. Tables are defined as shown in the exhibit.

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

Correct Answer: C

QUESTION 3
You administer a Microsoft SQL Server 2012 database named ContosoDB. Tables are defined as shown in the exhibit.
You need to display rows from the Orders table for the Customers row having the CustomerId value set to 1 in the following XML format.

```
<CUSTOMERS Name="Customer A" Country="Australia">
  <ORDERS OrderID="1" OrderDate="2001-01-01" Amount="3400.00" />
  <ORDERS OrderID="2" OrderDate="2002-01-01" Amount="4300.00" />
</CUSTOMERS>
```

Which Transact-SQL query should you use?

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

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

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

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

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

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

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

Correct Answer: E

QUESTION 4
You administer a Microsoft SQL Server 2012 database named ContosoDb. Tables are defined as shown in the exhibit.

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.CustomerId = Customers.CustomerId 
    WHERE Customers.CustomerId = 1  
    FOR XML AUTO, ELEMENTS  

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

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

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

Correct Answer: D

QUESTION 5
You develop a Microsoft SQL Server 2012 server database that supports an application. The application contains a table that has the following definition:

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

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

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

Correct Answer: B

QUESTION 6
You develop a Microsoft SQL Server 2012 database that contains a table named Customers. The Customers table has the following definition:
You need to create an audit record only when either the MobileNumber or HomeNumber column is updated. Which Transact-SQL query should you use?

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

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

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

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

Correct Answer: D

QUESTION 7
You develop a Microsoft SQL Server 2012 database that has two tables named SavingAccounts and LoanAccounts. Both tables have a column named AccountNumber of the nvarchar data type. You use a third table named Transactions that has columns named TransactionId AccountNumber,
Amount, and TransactionDate. You need to ensure that when multiple records are inserted in the Transactions table, only the records that have a valid AccountNumber in the SavingAccounts or LoanAccounts are inserted. Which Transact-SQL statement should you use?

A.  CREATE TRIGGER TrgValidateAccountNumber  
    ON Transactions  
    INSTEAD OF INSERT  
    AS  
    BEGIN  
    INSERT INTO Transactions  
    SELECT TransactionID,AccountNumber,Amount,TransactionDate FROM inserted  
    WHERE AccountNumber IN  
    (SELECT AccountNumber FROM LoanAccounts  
    UNION SELECT AccountNumber FROM SavingAccounts)  
    END  

B.  CREATE TRIGGER TrgValidateAccountNumber  
    ON Transactions  
    FOR INSERT  
    AS  
    BEGIN  
    INSERT INTO Transactions  
    SELECT TransactionID,AccountNumber,Amount,TransactionDate FROM inserted  
    WHERE AccountNumber IN  
    (SELECT AccountNumber FROM LoanAccounts  
    UNION SELECT AccountNumber FROM SavingAccounts)  
    END  

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

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

Correct Answer: A

QUESTION 8
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

QUESTION 9
You are a database developer of a Microsoft SQL Server 2012 database. The database contains a table named Customers that has the following definition:

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

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

```sql
CREATE TABLE Orders  
(OrderID INT NOT NULL PRIMARY KEY,  
    CustomerID INT NOT NULL,  
    OrderDescription VARCHAR(2000))
```
You need to ensure that the CustomerId column in the Orders table contains only values that exist in the CustomerId column of the Customer table. Which Transact-SQL statement should you use?

A. ALTER TABLE Orders
   ADD CONSTRAINT FX_Orders_CustomerID FOREIGN KEY (CustomerId) REFERENCES Customer (CustomerId)

B. ALTER TABLE Customer
   ADD CONSTRAINT FK_Customer_CustomerID FOREIGN KEY (CustomerId) REFERENCES Orders (CustomerId)

C. ALTER TABLE Orders
   ADD CONSTRAINT CK_Cordrs_CustomerID
   CHECK (CustomerId IN (SELECT CustomerId FROM Customer))

D. ALTER TABLE Customer
   ADD OrderId INT NOT NULL;
   ALTER TABLE Customer
   ADD CONSTRAINT FK_Customer_OrderID FOREIGN KEY (OrderID) REFERENCES Orders (OrderID);

E. ALTER TABLE Orders
   ADD CONSTRAINT PK_Orders_CustomerId PRIMARY KEY (CustomerId)

Correct Answer: A

QUESTION 10
You have three tables that contain data for dentists, psychiatrists, and physicians. You create a view that is used to look up their email addresses and phone numbers. The view has the following definition:
Create view apt.vwProviderList
(Specialty, CompanyID, CompanyNumber, LastName,
FirstName, BusinessName, Email, Phone)
as

SELECT 'Dentist' as Specialty,
   , DentistID
   , DentistNumber
   , DentistLastName
   , DentistFirstName
   , DentistBusinessName
   , Email
   , Phone
FROM apt.Dentist
UNION ALL
SELECT 'Psychiatrist' as Specialty,
   , PsychiatristID
   , PsychiatristNumber
   , PsychiatristLastName
   , PsychiatristFirstName
   , PsychiatristBusinessName
   , Email
   , Phone
SELECT 'Physician' as Specialty,
   , PhysicianID
   , PhysicianNumber
   , PhysicianLastName
   , PhysicianFirstName
   , PhysicianBusinessName
   , Email
   , Phone
FROM apt.Physician
GO

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

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

Correct Answer: B