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Question: 1

You have a .NET Remoting object named EXScheduler. The EXScheduler class is in an assembly file named TaskScheduler.dll. The EXScheduler class is hosted by an application named SchedulerServer.exe. This application is configured by using a file named SchedulerServer.exe.config.

This file configures the EXScheduler class to be a client-activated object by using a TcpChannel and a BinaryFormatter.

You want to deploy the EXScheduler object to a computer named XYZ1 so that client applications can begin to use it.

You copy EXTaskScheduler.dll, SchedulerServer.exe, and SchedulerServer.exe.config to a directory on XYZ1.

What should you do next?

- A. Install EXTaskScheduler.dll in the global assembly cache.
- B. Use the Assembly Registration tool (Regasm.exe) on XYZ1 to register SchedulerServer.exe.
- C. Use the Assembly Registration tool (Regasm.exe) on XYZ1 to register EXTaskScheduler.dll.
- D. Configure XYZ1 to execute SchedulerServer.exe each time XYZ1 is restarted. Then manually execute SchedulerServer.exe on XYZ1.

Answer: D

Question: 2

You are creating an XML Web service named WeatherService that provides the current weather conditions for cities around the world. Your development cycle includes three stages: development, testing, and production. In each stage, WeatherService will be deployed on a different server. For testing, you create an ASP.NET application named WeatherTest. To WeatherTest, you add a Web reference to WeatherService. You then build a user interface and add the necessary code to test the service. The WeatherService interface will not change between testing and deployment. You want to ensure that you do not have to recompile WeatherTest every time WeatherService is moved from one server to another. What should you do?

- A. Each time WeatherService is moved, set the URL property of the generated proxy class to the new location.
- B. Each time WeatherService is moved, set the Web Reference URL property of the generated proxy class to the new location.
- C. Set the URLBehavior property of the generated proxy class to dynamic. Each time WeatherService is moved, update the appropriate key in the Web.config file to indicate the new location.
- D. Take the location of WeatherService as input to WeatherTest, and set the Proxy property of all proxy class instances to that location.

Answer: C

Question: 3

You create an XML Web service named WeatherService. This service contains a Web method named RetrieveWeather. RetrieveWeather takes as input a city named and returns the current weather conditions for that city. You need to provide callers of this service with the URL they need to issue an HTTP-GET against WeatherService.

Which URL should you use?

- A. <http://XYZSrv/AppPath/WeatherService.asmx/cityname=somecity>
- B. <http://XYZSrv/AppPath/WeatherService.asmx/RetrieveWeather?cityname=somecity>
- C. <http://XYZSrv/AppPath/WeatherService/RetrieveWeather.asmx?cityname=somecity>
- D. <http://XYZSrv/AppPath/WeatherService/RetrieveWeather?cityname=somecity>

Answer: B

Question: 4

You work as a Software developer at XYZ Inc. You are creating a Visual Studio .NET assembly, which will run as a shared assembly with other applications. The assembly will be installed in the global assembly cache. You will distribute the assembly to many customers outside XYZ.

You must ensure that each customer receives your assembly without alteration, in a way that reliably specifies the origin of the code. What should you do?

- A. Sign the assembly by using a string name. Do nothing further.
- B. Sign the assembly by using File Signing tool (Signcode.exe). Do nothing further.
- C. First sign the assembly by using a strong name. Then sign the assembly by using File Signing tool (Signcoe.exe).
- D. First sigh the assembly by using File Signing tool (Signcode.exe). Then sign the assembly by using a strong name.

Answer: C

Question: 5

You are creating a data access component for an XML Web service. You need to populate and process a DataSet object with data from a table named Customers in a Microsoft SQL Server database named XYZA.

You write the following code segment:

```
Dim myConnection As New SqlConnection(myConnectionString)
Dim myDataAdapter As New SqlDataAdapter_
    ("SELECT * FROM Customers", myConnection)
Dim myDataSet As New
DataSet()
Dim CustomerName as String
```

You want to capture all SQL Server errors and general exceptions that occur. You want to process SQL Server errors separate from general exceptions.

Which code segment should you use?.

- A. Try myDataAdapter.Fill(myDataSet, "Customers") customerName = myDataSet.Tables(0)._Rows(0).Item("CustomerName")
Catch mySqlException As SqlException Throw New SqlException("Sql exception occurred") Catch myException As Exception
' Code to process general exceptions goes here.
End Try
- B. Try myDataAdapter.Fill(myDataSet, "Customers") customerName =myDataSet.Tables(0)._Rows(0).Item("CustomerName")
Catch mySqlException As SqlException For Each mySqlException In mySqlException.Errors ' Code to process SQL Server
errors goes here. Next Catch myException As Exception ' Code to process general exceptions goes here. End Try
- C. Try myDataAdapter.Fill(myDataSet, "Customers") customerName = myDataSet.Tables(0)._Rows(0).Item("CustomerName")
Catch mySqlException As SqlException Dim mySqlError As SqlError For Each mySqlError In mySqlException.Errors 'Code to
process SQL Server errors goes here. Next Catch myException As Exception ' Code to process general exceptions goes here.
End Try
- D. Try myDataAdapter.Fill(myDataSet, "Customers") customerName = myDataSet.Tables(0)._Rows(0).Item("CustomerName")
Catch myException As Exception Throw New Exception("General exception occurred") Catch mySqlException As SqlException
Dim mySqlError As SqlError For Each mySqlError In mySqlExaption.Errors 'Code to process SQL Server errors goes here.
Next End Try

Answer: C.

Explanation:

First we must catch the most specific errors, the SQL Errors. We then use a general catching of exceptions.

An SQLException is an exception that is thrown when SQL Server returns a warning or error.

Option A:

The scenario requires that each SQLServer error must be processed, not just that an SQLException occurred.

Option B:

The following statement is incorrect: For Each mySQLException In mySQLException.Errors The mySQLException variable should be of SQLServerError type, not SQLException type. We are processing SQLErrors, not SQLExceptions.

Option D:

We must catch the SQL errors first.

Question: 6

You have a DataSet object named myDataSet. This object contains two DataTable objects named Customers and Orders.

Customers has a column named CustomerID, which is unique to each customer.

Orders also has a column named CustomerID. You want to use the GetChildRows method of the DataRow object to get all orders for the current customers.

What should you do?

- A. Add a foreign key constraint on CustomerID of Orders between Customers and Orders.
- B. Add a data relation to myDataSet on OrderID between Customers and Orders.
- C. Create a unique constraint on CustomerID of Customers..
- D. Create a primary key on CustomerID of Customers.

Answer: B

Explanation:

The GetChildRows Method use a DataRelation to retrieve the child rows of this DataRow using the specified DataRelation. In this scenario we would be required to add a data relation between the two tables.

Note:

A Datarelation represents a parent/child relationship between two DataTable objects.

XYZ Illustrative Diagram



Reference:

.NET Framework Class Library, DataRow.GetChildRows Method (DataRelation) [Visual Basic] .NET Framework Class Library, DataRelation Class [Visual Basic] Visual Database Tools, Foreign Key Constraints

Incorrect Answers

- A:** A foreign key constraint works in conjunction with primary key or unique constraints to enforce referential integrity among specified tables. However, the GetChildRows method uses a DataRelation, not a foreign key constraint.
- C:** A unique constraint on CustomerID of Customers would only make sure that the CustomerID column will have unique values.
- D:** A primary key constraint would ensure that CustomerID column will have unique values.

Question: 7

You are developing an application that queries a table named Products in a Microsoft SQL Server database. The query will be stored in a string variable named EXQuery. The query includes the following SQL code.

```
SELECT * FROM Products FOR XML AUTO
```

You must iterate the query results and populate an HTML table with product information. You must ensure that your application processes the results as quickly as possible.

What should you do?

- A. Use a SqlDataAdapter object and set its SelectCommand property to **EXQuery**. Use the Fill method of the SqlDataAdapter object to read the data into a DataSet object..
Loop through the associated rows to read the data.
- B. Use a SqlDataAdapter object and set its SelectCommand property to **EXQuery**. Use the Fill method of the SqlDataAdapter object to read the data into a DataSet object. Use the ReadXml method of the DataSet object to read the data.
- C. Set the SqlCommand object's Command Text to **EXQuery**. Use the ExecuteReader method of the SqlCommand object to create a SqlDataReader object. Use the Read method of the SqlDataReader object to read the data.
- D. Set the SqlCommand object's Command Text to **EXQuery**. Use the ExecuteXmlReader method of the SqlCommand object to create a XmlReader object. Use the XmlReader object to read the data.

Answer: D

Explanation:

You can execute SQL queries against existing relational databases to return results as XML documents rather than as standard rowsets. To retrieve results directly, use the FOR XML clause of the SELECT statement like in this scenario.

XmlReader provides non-cached, forward-only, read-only access to an XML data source, such as the XML produces by the T-SQL statement of this scenario.

Reference:

SQL Server 2000 Books Online, Retrieving XML Documents Using FOR XML .NET Framework Developer's Guide, Reading XML with the XmlReader

Incorrect Answers

- A:** We must take since the data is in XML format. Furthermore, a Dataset is not required.
- B:** DataSet.ReadXml method reads XML data into the DataSet. However, it is not necessary to use a dataset. Reading the data into a Datasets brings an unnecessary overhead.
- C:** The SqlDataReader provides a means of reading a forward-only stream of rows from a SQL Server database. However, it operates on relational data not on XML data.

Question: 8

You use a function to maintain a table named Categories in a Microsoft SQL Server database.

The function creates a DataTable object named Categories in a DataSet object named categoriesDataSet.

These two objects capture all insertions, updates and deletions to the Categories table.

The function instantiates a SqlDataAdapter object named EXDataAdapter. This object is configured to select, insert, update and delete rows in the Categories DataTable object..

You need to update the database to include the changes in the Categories DataTable object and capture all data errors in a batch after all rows have been processed.

Which code segment should you use?

- A. Try EXDataAdapter.Update (CategoriesDataSet, "Categories") Catch mySqlException as SqlException
 Dim myDataRow () As DataRow = _ CategoriesDataSet.Tables (0).GetErrors ()
 End Try ' Code to process errors goes here.
- B. EXDataAdapter.ContinueUpdateOnError = True Try
 EXDataAdapter.Update (CategoriesDataSet, "Categories") Catch
 mySqlException as SqlException Dim myDataRow () As DataRow
 = _ CategoriesDataSet.Tables (0) .GetErrors ()
 End Try ' Code to process errors goes here.
- C. EXDataAdapter.Update (CategoriesDataSet, "Categories") If
 categoriesDataSet.Tables(0).HasErrors Then Dim myDataRow ()
 As DataRow = _ CategoriesDataSet.Tables(0).GetErrors ()
 ' Code to process errors goes here. End If
- D. EXDataAdapter.ContinueUpdateOnError = True EXDataAdapter.Update (CategoriesDataSet,
 "Categories") If categoriesDataSet.Tables (0).HasErrors Then
 Dim myDataRow () As DataRow = _ CategoriesDataSet.Tables(0).GetErrors () '
 Code to process errors goes here.
 End If

Answer: D

Explanation: Line 1: EXDataAdapter.ContinueUpdateOnError = True The DataAdapter.ContinueUpdateOnError property gets or sets a value that specifies whether to generate an exception, or the row in error when an error is encountered during a row update. The value **true** is used to continue the update without generating an exception.. The default is false. In this scenario the value of this property must be true. We don't want exceptions.

Line 2:

EXDataAdapter.Update (CategoriesDataSet, "Categories") We update the database. All updated rows in the Dataset are updated in the database as well.

Line 3:

If categoriesDataSet.Tables (0).HasErrors Then We check if there exist any errors in the dataset with the HasErrors method.

Line 4, 5, 6:

We collect the rows with errors with the GetErrors method.

Reference:

.NET Framework Class Library, DataAdapter.ContinueUpdateOnError Property [Visual Basic]

Incorrect Answers A, B: We don't want the errors that occur while processing rows to not generate exceptions. Instead we want to collect the rows where errors occurred. The **Try....Catch** construct is useless here.

C: By default an error to update, insert or delete a row causes an exception. We must set the DataAdapter property ContinueUpdateOnError to **True**.

Question: 9

Your company frequently receives product information from external vendors in the form of XML data.

You receive XML document files, an .xdr schema file, and an .xsd schema file. You need to write code that will create a typed DataSet object on the basis of product information. Your code will be used in several Visual studio .NET applications to speed up data processing. You need to create this code as quickly as possible. What should you do?

- A. Create the code manually.
- B. Use XmlSerializer.Serialize to generate the code.
- C. Use the XmlSerializer.Deserialize to generate the code.
- D. Use the Xml Schema Definition tool (Xsd.exe) to generate the code.

Answer: D

Explanation:

The XML Schema Definition tool generates XML schema or common language runtime classes from XDR, XML, and XSD files, or from classes in a runtime assembly. The code would be produced quickly.

Reference:

.NET Framework Tools, XML Schema Definition Tool (Xsd.exe) .NET Framework Class Library, XmlSerializer Class [Visual Basic]

Incorrect Answers

A: Manually creating code would be tedious.

B: The XmlSerializer.Serialize is used to produce XML documents from objects. It is the wrong way around.

C: At run time XML documents can be deserialized into run time objects with the XmlSerializer.Deserialize method. However, we would have to manually produce this code.

Question: 10

You create a DataSet object named XYZProductsDataset that contains product information from a Microsoft SQL Server database. This object has a primary key on a column named ProductID. You want to create a new DataSet object that has the same structure as XYZProductsDataset, including the primary key. You want the new DataSet object to be empty of data. Which code segment should you use?

- A. Dim NewDataSet As DataSet = XYZProductsDataset.Clone
- B. Dim NewDataSet As DataSet = XYZProductsDataset.Copy
- C. Dim NewDataSet as New DataSet () newDataSet.Tables.Add

("XYZProductsDataset")

- D. Dim newDataSet as New DataSet () newDataSet.Tables.Add (XYZProductsDataset.Tables(0))

Answer: A

Explanation:

DataSet.Clone method copies the structure of the DataSet, including all DataTable schemas, relations, and constraints. It does not copy any data.

Reference:

.NET Framework Class Library, DataSet.Clone Method [Visual Basic]

Incorrect Answers

B: DataSet.Copy method Copies both the structure and data for this DataSet.

C: A Dataset it cannot be added as a table.

D: We want the new dataset be same as the old. Here we just copy a single table.

Question: 11

Your Microsoft SQL Server database contains a table named XYZOrders. Due to recent increase in product sale. XYZOrders now contains more than 500,000 rows. You need to develop an application to produce a report of all orders in the table. You need to ensure that the application processes the data as quickly as possible. Which code segment should you use?.

- A. Dim myOleDbConnection As New OleDbConnection _ ("Data Source=(local);" _ & "Initial Catalog=XYZ;" _ & "Integrated Security=true")
Dim myOleDbCommand As New OleDbCommand_
("SELECT * FROM XYZOrders" , myOleDbConnection) Dim ordersData Reader As OleDbDataReader
MyOleDbconnection.Open()OrdersDataReader = myOleDbcommand.ExecuteReader
- B. Dim myOleDbConnection As New OleDbConnection _
("provider=sqloledb;Data Source=(local);" _ & "Initial Catalog=XYZ;" _ & "Integrated Security=true")
Dim myOleDbCommand As New OleDbCommand_
("SELECT * FROM XYZOrders" , myOleDbConnection) Dim ordersData Reader As OleDbDataReader
myOleDbconnection.Open()ordersDataReader = myOleDbCommand.ExecuteReader
- C. Dim myConnection As New SqlConnection _ ("Data Source=(local);Initial
Catalog=XYZ;" _ & "Integrated Security=true")
Dim myCommand as new SqlCommand_
("SELECT * FROM XYZOrders" , myConnection) Dim ordersData Reader As SqlDataReader Myconnection.Open()
OrdersDataReader = mycommand.ExecuteReader
- D. Dim myConnection As New SqlConnection _ ("Data Source=(local); "Initial
Catalog=XYZ;" _ & "Integrated Security=true")
Dim myCommand as new SqlCommand("SELECT * FROM XYZOrders") Dim ordersData Reader As SqlDataReader
Myconnection.Open() ordersDataReader = myCommand.ExecuteReader

Answer: C

Explanation:

A SqlConnection gives better performance than an OleDbConnection when working with a SQL Server data source. Furthermore, the SqlCommand object should contain both a text query and a SqlConnection. The critical command: Dim myCommand as new SqlCommand ("SELECT * FROM XYZOrders" , MyConnection)

Reference:

.NET Framework Class Library, SqlCommand Constructor [Visual Basic]

Incorrect Answers A, B: If we assume that the SQL Server is Version 7.0 or later, a SqlConnection would be more effective than an OleDbConnection.

D: The SqlCommand should include the SqlConnection as well.

Question: 12

You are debugging a visual studio .Net application named XYZApp. The application produces an Xml documents object and then consumes the same object. This object moves data in the application. The object has no schema, but it contains a declaration line that you must inspect. You decide to transform the XML code and its declaration into a string for easy inspection. What should you do?

- A. Assign the ToString method of the Xml Document object to a string variable.
- B. Assign the OuterXml property of the Xml document object to a string variable
- C. Assign the OuterXml property of the Xml document element property of the Xml document object to a string variable.
- D. Use the WriteContentTo method of the XmlDocument object to write the document into a MemoryStream object. Use the GetXml method of the DataSet object to get a string version of the document.

Answer: B

Explanation:

The XmlNode.OuterXml property gets the markup representing this node and all its children.

Reference:

.NET Framework Class Library, XmlNode.OuterXml Property [Visual Basic]

Incorrect Answers

A: The ToString method returns a String that represents only the current Object.

C: There is no XmlDocument element property.

D: This proposed solution is complicated. Furthermore the GetXml method of the DataSet object cannot be used on a stream.

Question: 13

You are developing a order-processing application that retrieves data from a Microsoft SQL Server database contains a table named XYZCustomers and a table named Orders. Customer has a primary key of customerID. Each row in orders has a CustomerID that indicates which customer placed the order.

Your application uses a DataSet object named ordersDataSet to capture customer and order information before it applied to the database. The ordersDataSet object has two Data Table objects named Customers and Orders.

You want to ensure that a row cannot exist in the Orders Data Table object without a matching row existing in the customers Data Table object.

Which two actions should you take? (Each correct answer presents part of the solution. Choose two.)

- A. Create a foreign key constraint named ConstraintOrders that has Orders.CustomerID as the parent column and Customers.CustomerID as the child column.
- B. Create a foreign key constraint named ConstraintCustomers that has Customers.CustomerID as the parent column and

Orders.CustomerID as the child column.

- C. Create a unique constraint named UniqueCustomers by using the Customers.CustomerID
- D. Add ConstraintOrders to the Orders Data Table.
- E. Add ConstraintOrders to the Customer Data Table.
- F. Add ConstraintCustomers to the Orders Data Table.
- G. Add ConstraintCustomers to the Customers Data Table.
- H. Add UniqueCustomers to the Customers Data Table.

Answer: B & F

Explanation:

B: The parent column is located in the table on the “one-side”, while the child column is located on the “many-side”. Here the Customers table is the parent domain and Orders is the child domain: each Customer can have several orders, but for each specific order there must exist exactly one corresponding row in the Customers table. We should use the ConstraintsCustomers constraints.

F: The constraint must be added to the Orders table.

XYZ Illustrative Diagram



Incorrect Answers

A: This is incorrect. The parent column must be CustomerID in the Customers table. **B, D:** The ConstraintCustomers constraint must be used, not ConstraintOrders. **C, F:** A unique constraint only applies to one single table.

E: The constraint must be added to the Orders table.

Question: 14

You have DataSet object named LoanCustomersDataSet that contains customers serviced by the loan department of XYZ. You receive a second DataSet that contains customers serviced by the asset management department of XYZ. Both objects have the same structure.

You want to merge assetCustomersDataSet into LoanCustomersDataSet and preserve the original values in loanCustomersDataSet.

Which code segment should you use?

- A. loanCustomersDataSet.Merge (assetCustomersDataSet)
- B. loanCustomersDataSet.Merge (assetCustomersDataSet, True)
- C. assetCustomersDataSet.Merge (loanCustomersDataSet)
- D. assetCustomersDataSet.Merge (loanCustomersDataSet, True)

Answer: B

Explanation:

The DataSet.Merge method merges this DataSet with a specified DataSet. The data will be merged into the dataset on which

the Merge method is applied. We want to merge into our DataSet, namely the loanCustomerDataSet. Furthermore, we want to preserve the original values in loanCustomerDataSet.

The Boolean parameter is the preserveChanges. PreserveChanges indicates a value indicating whether changes made to the current DataSet should be maintained. It should be true, if changes should be maintained, like in this scenario. .

Reference:

.NET Framework Class Library, DataSet.Merge Method (DataSet, Boolean) [Visual Basic]

Incorrect Answers

A: The PreserveChanges parameter must be set to true. **C, D:** We must merge into loanCustomerDataSet, not into the DataSet that we have received.

Question: 15

You are creating an XML Web service that generates a SOAP message. Parameter information in the SOAP message must be encrypted. You write the appropriate code to modify the SOAP message. You also write a method named Encrypt.

This method takes a string an argument, encrypts the string, and returns a new string that contains the encrypted string.

Before encryption , the Body element of the SOAP message will be written in the following format.

```
<soap:Body> <returnToSender xmlns = http://XYZ.com/>
    <aString>some date</aString> </returnToSender>
</soap:Body>
```

After encryption, the Body element must be written in the following format.

```
<soap:Body> <returnToSender xmlns = "http://XYZ.com/"> 154 37 146 194 17 92 32 139 28 42 184 202 164 18
</returnToSender>
</soap:Body>
```

You write code to isolate the <returnToSender> XML node in an XmlNode object named theNode. You now need to write code to encrypt the parameter information. Which code segment should you use?

- A. Dim encrypted as String = Encrypt(theNode.InnerText) theNode.OuterXml = encrypted
- B. Dim encrypted as String = Encrypt(theNode.InnerXml) theNode.OuterXml = encrypted
- C. Dim encrypted as String = Encrypt(theNode.InnerXml) theNode.InnerXml = encrypted
- D. Dim encrypted as String = Encrypt(theNode.OuterXml) theNode.OuterXml = encrypted
- E. Dim encrypted as String = Encrypt(theNode.InnerText) theNode.InnerText = encrypted

Answer: C

Explanation:

First we retrieve the markup representing the child of the node with the InnerXml property. Then we encrypt this string. Finally we set the InnerXml property to this encrypted string..

Note: The **XmlAttribute.InnerText** property gets or sets the concatenated values of the node and all its children. For attribute nodes, this property has the same functionality as the Value property: it gets or sets the value of the node.

The **XmlDocument.InnerXml** property gets or sets the markup representing the children of the current node.

Setting this property replaces the children of the node with the parsed contents of the given string.

The **XmlNode.OuterXml** property gets the markup representing this node and all its children.

Reference:

.NET Framework Class Library, XmlDocument.InnerXml Property [Visual Basic] .NET Framework Class Library, XmlAttribute.InnerText Property [Visual Basic] .NET Framework Class Library, XmlNode.OuterXml Property [Visual Basic]

Incorrect Answers Option A, B:

The XmlNode.OuterXml property is read only and cannot be used in the statement: theNode.OuterXml = encrypted

Option D:theNode.OuterXml would produce the whole node, however we only want to encrypt the string "some date".,

Option E:

Just encrypting the InnerText property would result in a body element where the <astring> markup still would be present:

```
<soap:Body> <returnToSender xmlns="http://XYZ.org/"> <aString>154 37 146 194 17 92 32 139 28 42 184 202 164 18</aString>
</returnToSender> </soap:Body>
```

Question: 16

You create an XML Web Service project that consists of three services, named BronzeService, SilverService, and GoldService. All three services are located in the same virtual directory on a production computer. When customers subscribed to your service, they select only one of the three available services.

A new customer subscribes to SilverService. You need to create a discovery document that enables this customer to use only SilverService.

Which discovery document should you create?

- A.

```
<disco:discovery xmlns:disco=http://schemas.XYZ.org/disco/
  xmlns:sc1=http://schemas.XYZ.org/disco/sc1/> <sc1:contractRef ref="SilverService.asmx?wsdl"/> </disco:discovery>
```
- B.

```
<disco:discovery. xmlns:disco=http://schemas.XYZ.org/disco/
  xmlns:sc1=http://schemas.XYZ.org/disco/sc1/"> <sc1:contractRef
  ref="SilverService.asmx"/> </disco:discovery>
```
- C.

```
<dynamicDiscovery xmlns="urn:schemas-dynamicdiscovery:disco.2000- 03-17"> <exclude path="_vti_cnf"/> <exclude
  path="_vti_pvt"/> <exclude path="_vti_log"/> <exclude path="_vti_script"/> <exclude path="_vti_txt"/> <exclude path="Web
  References"/> </dynamicDiscovery>
```
- D.

```
<dynamicdiscovery xmlns="urn:schemas-dynamicdiscovery:disco.2000- 03-17"> <exclude path="_vti_cnf"/> <exclude
  path="_vti_pvt"/> <exclude path="_vti_log"/>
  <exclude path="_vti_script"/> <exclude path="_vti_txt"/> <exclude path="Web References"/> <exclude
  path="BronzeService.asmx"/> <exclude path="GoldService.asmx"/> </dynamicDiscovery>
```

Answer: A

Explanation: We should create a static discovery file. We use a **<discovery>** element. Service description references are specified

in a discovery document by adding a **<contractRef>** element. We should use the SilverService.asmx?wsdl query string, since the web page may and the web service may not be located in the same directory.

Note:

XML Web service discovery is the process of locating and interrogating XML Web service descriptions, which is a preliminary step for accessing an XML Web service. Programmatic discovery can be enabled when an XML Web service publishes a .disco file, which is an XML document that can contains links to other discovery documents.

Note Dynamic Discovery

Dynamic discovery is a process by which ASP.NET can perform an iterative search through a hierarchy of folders on a development Web server to locate available XML Web services. A dynamic discovery (.vsdisco) file is an XML-based file with a root node called <dynamicDiscovery>. To maintain positive control over which XML Web services clients can discover, you should only use dynamic discovery on development Web servers. When deploying an XML Web service to a production Web server, you should instead create a static discovery file (.disco) for those XML Web services you want to enable clients to discover.

Reference:

.NET Framework Developer's Guide, Enabling Discovery for an XML Web Service Visual Basic and Visual C# Concepts, Deploying XML Web Services in Managed Code

Incorrect Answers:

B: A file path to a Web Service must include the ?WSDL query string. The short form of the URL (SilverService.asmx) is sufficient, provided that the Web service is located in the same folder as the Web page using the WebService behavior. **C, D:** We should create a static discovery file, not a dynamic discovery file.

Question: 17

You create version 1.0.0.0 of an assembly named XYZAssembly. You register the assembly cache.

MyAssembly consist of two .NET Remoting objects named EX1 and EX2. These objects are configured in the App.config file of MyAssembly as shown in the following code segment:

```
<system.runtime.remoting> <application>
  <service>
    <activated type="XYZAssembly.EX1, MyAssembly, Version=1.0.0.0, Culture=neutral,
      PublicKeyToken=28dckd8349lduj"/>
    <wellknown mode="SingleCall" objectUri="EX2.rem" type="XYZAssembly.EX2.rem" Version=1.0.0.0,
      Culture=neutral,
      PublicKeyToken=28dckd8349lduj"/>
  <channels> <channel ref="http"/> </channels>
</service> </application> </system.runtime.remoting>
```

You create an application named MyApp that resides on a different computer than XYZAssembly. MyApp references version 1.0.0.0 of XYZAssembly. MyApp contains code that activates instances of EX1 and EX2 to use their services.

Due to change in business needs, you must update XYZAssembly. You create version 2.0.0.0 of My Assembly. Which is backward compatible, but you do not update any information in the App.config file of XYZAssembly. You register version 2.0.0.0 of XYZAssembly in the global assembly cache. You then rebuild MyApp.

Which version of the remote objects will MyApp activate?

A. version 1.0.0.0 of EX1; version 1.0.0.0 of EX2

- B. version 1.0.0.0 of EX1; version 2.0.0.0 of EX2
- C. version 2.0.0.0 of EX1; version 1.0.0.0 of EX2
- D. version 2.0.0.0 of EX1; version 2.0.0.0 of EX2

Answer: A

Explanation:

When a client activates a client-activated (that is, an) object, a network call is immediately sent to the server where the requested object is activated and an object reference to the object is returned to the client. Because it directs the activation of the object, the client also chooses the version of the object to be activated. For example, version 1 of HelloService will be activated on the server if the client was built against version 1 of the object, and version 2 of HelloService will be activated on the server if the client was built against version 2.

It is important to note that you cannot specify the version number for client-activated types when configuring the service. Also, any versioning information provided for server-activated types has no effect on client-activated objects, even if both types are in the same assembly. For example, suppose you have a client-activated type and a server-activated type in the same assembly, and you build client1 against version 1 and client2 against version 2. If no version information is specified for the server-activated object, client1 will receive version 2 of the server-activated object and version 1 of the client-activated object. Client2 will receive version 2 objects for both well-known and activated types. If you configure the service to use version 1 of the assembly for the well-known object, both clients will receive version 1 of the well-known object while client 1 receives version 1 of the activated type and client 2 receives version 2 of the activated type. The version activated for a client cannot be configured; the version the client was built against is always used.

Incorrect Answers:

B: The version of the server-activated object is specified as 1.0.0.0 in the app config file on the server. The server will use this version because it will use the latest version (2.0.0.0) only if nothing is specified on the server app config file. I verified this against MSDN. **C, D:** Client-Side activation is used (see note 1). The version specified (1.0.0.0) is used.

Question: 18

You are creating a Windows-based application named XYZWinApp. To the application, you add a Windows Form named MyForm and a reference to a SingleCall .Net Remoting object named TheirObject. You need to ensure that MyForm creates an instance of TheirObject to make the necessary remote object calls. Which code segment should you use?

- A. `RemotingConfiguration.RegisterActivatedClientType(_ GetType(TheirObject) ,
http://XYZServer/TheirAppPath/TheirObject.rem)
Dim theirObject As New TheirObject()`
- B. `RemotingConfiguration.RegisterWellKnownClientType(_ GetType(TheirObject) ,
http://XYZServer/TheirAppPath/TheirObject.rem")
Dim theirObject As New TheirObject()`
- C. `RemotingConfiguration.RegisterActivatedServiceType( _ GetType(TheirObject) , Dim theirObject As New TheirObject())`
- D. `RemotingConfiguration.RegisterWellKnownServiceType(_ GetType(TheirObject) ,
http://XYZServer/TheirAppPath/TheirObject.rem", _ WellKnownObjectMode.Singleton)
Dim theirObject As New TheirObject()`

Answer: B

Explanation:

The RemotingConfiguration Class provides various static methods for configuring the remoting infrastructure. The **RegisterWellKnownClientType** method registers an object type on the client end as a well-known type (single call or singleton).

Reference:

.NET Framework Class Library, RemotingConfiguration Members

Incorrect Answers:

A: The **RegisterActivatedClientType** method registers an object Type on the client end as a type that can be activated on the server.

C: The **RegisterActivatedServiceType** method registers an object Type on the service end as one that can be activated on request from a client.

D: The **RegisterWellKnownServiceType** method registers an object type on the service end as a well-known type (single call or singleton).

Question: 19

You are preparing to deploy an XML Web service named XYZInventoryService. This service queries a Microsoft SQL Server database and return information to the caller. You are Visual Studio .Net to create a setup project. You need to install XYZInventorySystem. You also need to run a script to create the necessary SQL Server database and tables to store the data. To accomplish this, you need to configure the project to have administrator rights to the SQL Server database. You add a custom dialog box to the project that prompts the user for the administrator user name and password that are used to connect to the SQL Server database. You need to make the user name and password available to a custom Installer class that will execute the script. What should you do?

- A. Add a launch condition that passes the user name and password to the Install subroutine.
- B. Add a merge module to the project that captures the user name and password. Use the merge module to access these values in the Install subroutine.
- C. Retrieve the user name and password from the savedState object in the install subroutine.
- D. Create a custom install action. Set the CustomActionData property to the entered user name and password. Then access these values in the Install subroutine.

Answer: D

Explanation:

The CustomActionData Property specifies additional data that can be evaluated by a custom action during installation. Custom actions are run at the end of an installation and cannot access information about the installation; the CustomActionData property allows you to store information about the installation that can be read by the custom action.

Reference:

Visual Studio, CustomActionData Property

Incorrect Answers

A: It is not possible to achieve the goal with a launch condition.

B: Merge modules would be of no use here. A merge module is like a snapshot of a particular version of a component. A new merge module should be created for each successive version of a component in order to avoid version conflicts.

C: The savedStateGets property gets an IDictionary that represents the current state of the installation.

Question: 20

You have an ASP.NET application named XYZWebApp. This application uses a private assembly named Employee to store and retrieve employee data. Employee is located in the bin directory of XYZWebApp.

You develop a new ASP .NET application named XYZWebApp2 that also needs to use employee. You assign Employee a

strong name, set its version to 1.0.0.0, and install it in the global assembly cache. You then create a publisher policy assembly for version 1.0.0.0 and install it in the global assembly cache. You complete XYZWebApp2 against version 1.0.0.0. You do not recompile XYZWebApp. You then run MyWebApp.

What is the most likely result?

- A. A VersionNotFoundException is Thrown.
- B. Employee is loaded from the bin directory.
- C. Version 1.0.0.0 of Employee is loaded from the global assembly cache.
- D. Version 1.0.0.0 of Employee is loaded by the publisher policy assembly.

Answer: D

Explanation:

Vendors of assemblies can state that applications should use a newer version of an assembly by including a publisher policy file with the upgraded assembly.

Reference:

.NET Framework Developer's Guide. Creating a Publisher Policy File .NET Framework Developer's Guide, Versioning

Incorrect Answers

A: A VersionNotFoundException represents the exception that is thrown when attempting to return a version of a DataRow that has been deleted. **B, C:** The Publisher Policy Assembly will be used.

Question: 21

You create an XML Web service named XYZService. You must ensure that this service meets the following URL authorization requirements.

- Anonymous access must be disabled for XYZService.
- An authenticated user named User1 cannot access XYZService.
- All other authenticated users can access XYZService.

You configure Internet Information Services (IIS) to meet these requirements. You now need to configure the authorization section in the Web.config file to properly authorize the users.

Which code segment should you use?

- A. `<allow users="*" />. <deny users="User1" />`
- B. `<allow users="?" /> <deny users="User1" />`
- C. `<deny users="*" /> <deny users="User1" /> <allow users="?" />`
- D. `<deny users="?" /> <deny users="User1" /> <allow users="*" />`

Answer: D

Explanation:

The elements are applied in order one by one. The first matching element decides whether the user should be granted access or

not.

Step 1: We deny access permissions to anonymous users with <deny users="?" /> **Step 2:** We deny access to User1 with <deny users="User1" /> **Step 3:** We allow access for all other users with <allow users="*" />

Note: Identity Description

* Refers to all identities

? Refers to the anonymous identity

Reference:

.NET Framework Developer's Guide, ASP.NET Authorization

Incorrect Answers

A: All users are allowed access. We must deny before we allow.

B: All anonymous users are allowed access.

C: All users are denied access.

Question: 22

You are creating a serviced component named UserManager. UserManager adds user accounts to multiple transactional data sources.

The UserManager class includes the following code segment.

```
<Transaction (TransactionOption.Required) , _ SecurityRole ("Admin") >
    _ Public Class UserManager

        Inherits ServicedComponent
        Public Sub AddUser (ByVal name As String, _
            ByVal password As String) ' Code to add the user to data
            sources goes here. End Sub End Class
```

You must ensure that the AddUser method reliably saves the new user to either all data sources or no data sources. What should you do?

- A. To AddUser, add the following attribute: <AutoComplete () >
- B. To UserManager, add the following attribute: <JustInTimeActivation (False) >
- C. To the end of AddUser, add the following line of code: ContextUtil.EnableCommit ()
- D. To the end of AddUser, add the following line of code: ContextUtil.MyTransactionVote = True

Answer: A

Explanation:

The TransactionOption.Required shares a transaction, if one exists, and creates a new transaction, if necessary. <AutoComplete()> automatically commits the transaction.

Note:

The System.EnterpriseServices.AutoCompleteAttribute causes an object participating in a transaction to vote in favor of completing the transaction if the method returns normally. If the method call throws an exception, the transaction is aborted.

Reference:

.NET Framework Developer's Guide, Voting in an Automatic Transaction [Visual Basic] .NET Framework Class Library, ContextUtil Methods

Incorrect Answers

B: Just-in-time (JIT) activation is a COM+ service that enables you to create an object as a nonactive, context-only object. JIT does not apply here.

C: The **ContextUtil.EnableCommit** method sets the consistent bit to true and the done bit to false in the COM+ context. It is not useful in this scenario.

D: The **ContextUtil.MyTransactionVote** property gets or sets the consistent bit in the COM+ context. It is not useful here..

Question: 23

You develop a Windows-based application named MyWinApp that contain a Windows Form named XYZ1. To MyWinApp, you add a Web reference to an XML Web Service named Service1.

Service1 exposes two Web methods named Authentication and RetrieveData. Both methods have sessions enabled. Authenticate authenticates a caller. If the caller is authenticated, Authenticate creates a unique key, stores that key by using the Session object, and returns that key.

RetrieveData expects a valid key that has been generated by Authenticate as input before it will return data. If the key matches the key in the current session, retrieveData will return data to the customer.

You write the following code segment in the Page_load event of XYZ1. (Line numbers are included for reference only)

```
01 Dim service1 As New localhost.Service1 ( ) 02 Dim key As String 03 Dim userData As DataSet 04 ' Insert new code. 05 key = service1.Authenticate (myUser, myPassword) 06 userData = service1.RetrieveData (key) 07 DataGrid1.DataSource = userData
```

You run the application. When line 06 executes, the Web service returns an exception, which indicates that the key is invalid. To ensure that the application runs without exceptions, you must insert additional code on line 04. Which code segment should you use?

- A. service1.PreAuthenticate = True
- B. service1.InitializeLifetimeService()
- C. service1.CookieContainer = New _ System.Net.CookieContainer()
- D. Dim cookie As New System.Net.Cookie("Key" , key)

Answer: C**Explanation:**

ASP.NET uses 2 mechanisms to implement sessions: cookies and URL variables. Since it is impossible to use URL variables in web services, it must be using cookies. In the question, the reason for the session not functioning properly is that a new cookie is created each time. We need to add a cookie container to hold the cookie across 2 web service calls. This is verified against MSDN.

Question: 24

You are creating an XML Web service named ShoppingCartService. All requests made to web methods of ShoopingCartservice require that callers present a valid key input. This key indicates that the user has been authenticated to make ShoppingCartService requests. To obtain a valid key, the callers must first call GeESey. You write the following code segment. (Line numbers are include for reference only)

```
01 <WebMethod ( ) > _ 02 Public Function GeESey (ByVal caller As String) As String 03 Dim Key As String 04 If Not Context.Session ("key") Is Nothing 05 key = Context.Session ("key") 06 Return key 07 Else 08 Dim isAuthenticated As Boolean 09 ' Code to validate the caller goes here.
```

```
10 If isAuthenticated Then
11 ' Code to generate "key" goes here.
12 Context.Session ("Key") = key
13 Return key
14 Else
15 Throw New Exception ("User not authenticated")
16 End If
17 End
18 End Function
```

You run the code and an exception is thrown on line 04. You want this code to run without exceptions.

What should you do?

- A. Delete lines 04 through 07 and delete line 17.
- B. Delete "Context." From lines 04, 05, and 12.
- C. On line 01, set the EnableSession property of the WebMethod Attribute to **true**.
- D. On line 01, set the CacheDuration property of the WebMethod attribute to a value greater than zero.

Answer: C

Explanation:

The EnableSession property of the WebMethod attribute enables session state for an XML Web service method. Once enabled, the XML Web service can access the session state collection directly from HttpContext.Current.Session or with the WebService.Session property if it inherits from the WebService base class. The default value is false.

Reference:

Visual Basic and Visual C# Concepts, Using the WebMethod Attribute

Incorrect Answers

- A:** We should keep the key for the session. Furthermore, the Context.Session ("Key") = key statement on line 12 would fail.
- B:** We should keep the key for the session. Furthermore, there would be an **End If** statement with no matching **If** statement.
- D:** Changing caching configuration would not help with the session data.

Question: 25

You are creating an XML Web service that tracks employee information. The service contains a Web method named RetrieveXYZEmployees. The service also contains a base class named Employee and two classes named Manager and Engineer, which are derived from Employee. RetrieveXYZEmployees takes a roleID as input that specifies the type of employee to retrieve, either Manager or Engineer. RetrieveXYZEmployees returns an array type Employee that contains all employees that are in the specified role.

You want to ensure that Manager and Engineer object types can be returned from RetrieveXYZEmployees. What should you do?

- A. Set the TypeName property of the XmlType attribute to **Employee** for both Manager and Engineer.
- B. Apply two XmlInclude attributes to RetrieveXYZEmployees, one of type Manager and one of type Engineer.
- C. Apply an XmlRoot attribute to the Employee class Apply an XmlAttribute attribute to the Manager and Engineer classes.
- D. Apply an XmlRoot attribute to the Employee class Apply an XmlElement attribute to the Manager and Engineer classes.

Answer: B.

Explanation:

The XmlInclude attribute allows the XmlSerializer to recognize a type when it serializes or deserializes an object. We specify the two types as XmlInclude attributes to our serializer RetrieveXYZEmployees.

Reference:

.NET Framework Class Library, XmlIncludeAttribute Class .NET Framework Class Library,

XmlRootAttribute Class

Incorrect Answers

A: The XmlAttributes.XmlType property gets or sets an object that specifies how the XmlSerializer serializes a class to which the XmlTypeAttribute has been applied.

C: The XMLRoot attribute is not useful here. The XmlRootAttribute identifies a class, structure, enumeration, or interface as the root (or top-level) element of an XML-document instance.* The XmlAttributes.XmlAttribute property gets or sets an object that specifies how the XmlSerializer serializes a public field or public read/write property as an XML attribute.

D: The XMLRoot attribute is not useful here. The XmlAttribute Indicates that a public field or property represents an XML element when the XmlSerializer serializes or deserializes the containing object.

Question: 26

Your Microsoft SQL Server database contains a table named XYZOrders. XYZOrders is used to store new purchase orders as they are entered into an order-entry application. To keep up with customer demand, the order fulfillment department wants to know at 15-minute intervals when new orders are entered.

You need to develop an application that reads XYZOrders every 15 minutes and sends all new orders to the order fulfillment department. The application will run on computer that is used by several users who continuously log on and log off from the network to perform miscellaneous tasks.

Which type of .NET application should you use?

- A. Windows Form
- B. Windows service
- C. XML Web service
- D. .NET Remoting object

Answer: B

Explanation:

A Windows service would still be running even though users logs on and off..

Incorrect Answers

A: A Windows Form would be closed when a user logs off.

C: An XML Web service is not guaranteed to keep running if a user logs off.

D: You can use .NET Remoting to enable different applications to communicate with one another. However, a remoting object would be destroyed when a user logs off the system.

Question: 27

You are creating an XML Web service named AccountInformation for a community bank. AccountInformation exposes a Web method named GetAccountBalance that returns the account balance as a string. You must limit access to GetAccountBalance to users who have credentials stored in your Microsoft SQL Server database.

You need to design GetAccountBalance to receive encrypted user credentials by using two custom fields named Username and password in the SOAP header. To accomplish this goal, you must write the code for GetAccountBalance.

Which code segment should you use?

- A.

```
Public Class AuthenticateUser Inherits SoapHeader
    Public username As String
    Public Password As String
End Class ' In the accountInformation class add this code:
Public authenticateUserHeader As AuthenticateUser
<WebMethod(), SoapHeader("authenticateUserHeader")> _
Public Function GetAccountBalance() As String
    If (authenticateUserHeader Is "") Then Return "Please supply Credentials." Else
```

‘ Code to authenticate the user and return ‘ the account balance goes here. End If End Function

B. Public Class AuthenticateUser Public username As String
Public Password As String
End Class ‘ In the accountInformation class add this code:

```
Public authenticateUserHeader As AuthenticateUser <WebMethod(),  
SoapHeader("authenticateUserHeader")> _ Public Function GetAccountBalance() As String  
If (authenticateUserHeader Is "") Then Return "Please supply Credentials."  
Else ‘ Code to authenticate the user and return ‘ the account balance goes here.  
End If  
End Function
```

C. Public Class AuthenticateUser Inherits SoapHeader Public Username As String Public Password As String
End Class ‘ In the accountInformation class add this code:

```
Public authenticateUserHeader As AuthenticateUser <WebMethod()>  
Public Function GetAccountBalance() As String  
If (authenticateUserHeader Is "") Then Return "Please supply credentials." Else ‘ Code to authenticate the user and return ‘ the  
account balance goes here. End If End Function
```

D. Public Class AuthenticateUser Public username As String Public Password As String
End Class ‘ In the accountInformation class add this code:

```
Public authenticateUserHeader As AuthenticateUser <WebMethod() > _ Public Function GetAccountBalance() As String  
If (authenticateUserHeader Is "") Then Return "Please supply  
Credentials." Else ‘ Code to authenticate the user and  
return ‘ the account balance goes here. End If End  
Function
```

Answer: A

Explanation: Step 1:

Defining a SOAP header is accomplished by defining a class representing the data in a particular SOAP header and deriving it from the SoapHeader class.

Step 2:

Apply a SoapHeader attribute to each XML Web service method that intends to process the SOAP header. Set the MemberName property of the SoapHeader attribute to the name of the member variable created in the first step..In this scenario: <WebMethod(), SoapHeader("authenticateUserHeader")>

Reference:

.NET Framework Developer's Guide, Using SOAP Headers [Visual Basic]

Incorrect Answers B, D: The class must inherit from the SoapHeader class.

C: We must add a SoapHeader attribute to the XLM Web service method. We can't use just <WebMethod()> .

Question: 28

You create a serviced component named SessionDispenser. This computer is in the XYZ.Utilities assembly and is registered in a COM+ server application. SessionDispenser has multiple callers.

You discover that there are logic problems in the Create New Session method. You want to debug any calls to this method.

What should you do?

- A. Open the SessionDispenser solution. Set a breakpoint on the CreateNewSession method. Start the debugger.
- B. Attach the debugger to the client process. Set a breakpoint on the SessionDispenser.CreateNewSession method.
- C. Attach the debugger to the XYZ.Utilites.exe process. Set a breakpoint on the CreateNewSession method.
- D. Attach the debugger to a Dllhost.exe process. Set a breakpoint on the CreateNewSession method.

Answer: D

Explanation:

Since this is a COM+ SERVER application we have to attach the debugger to the Dllhost.exe.

Reference:

.NET Framework Developer's Guide, Using Serviced Components with the Global Assembly Cache

Incorrect Answers

A: The debugger must be attached to the program that should be debugged.

B: The debugger should be attached to Dllhost.exe, not to the client process.

C: We are not debugging a Library application, so we should not attach the debugger to the XYZ.Utilities.exe process.

Question: 29

You create an XML Web service named XYZCode. Your project source includes a code-behind file and a file named XYZCode.asmx. During implementation, you use the Debug class to record debugging log messages, to verify values, and to report debugging failures. You want to deploy XYZCode to a production computer. You do not want any of the debuggingcode to execute on the production computer. What should you do?

- A. Set the project's active configuration to **Release** and rebuild the DLL.
- B. Modify the trace element of the Web.config file by setting the enabled attribute to "**false**".
- C. Modify the compilation element of the Web.config file by setting the debug attribute to "**false**".
- D. Add code to the constructor of the XYZCode class to set the AutoFlash property of the Debug class to **false**.
- E. Add code to the constructor of the XYZCode class to call the Clear method of the Debug.Listeners property.

Answer: A

Explanation:

We can only exclude the debugging code from being executed by setting the Project Active Configuration to 'Release' and rebuild the Web Server again.

Note:

Project build configurations are listed in the Project Property Pages dialog box and list all of the available types of project builds, such as Debug or Release

Reference:

Visual Studio, Creating Solution and Project Build Configurations

Question: 30

You create an XML Web service named TimeService. Each time TimeService is started, it checks for the existence of an event log named TimeServiceLog. If TimeServiceLog does not exist, TimeService creates it. You discover that when TimeService creates TimeServiceLog, it throws a System.Security.SecurityException. The exception includes the following message: "Requested registry access is not allowed". You need to resolve this problem. What should you do?

- A. Configure Inetinfo.exe to run as the local administrator user account.
- B. Create an installer for TimeService, and create the new event log in the installer code.
- C. Modify the Web.config file by adding an identity element to impersonate the LOGON user specified by Internet Information Services (IIS).
- D. Modify the permissions of the HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Eventlog registry key to give full control to the IUSR_computername user account.

Answer: B

Explanation: There really is no good answer here. A- you dont really want to do that, big security issue. B- Best answer but does not work if a user deletes the eventlog or the log gets corrupted. C- There is no description on what authentication mechanism is being used so it may not work. D- yet again, a bad security issue that will not even work since the aspnet_wp.exe process that hosts the web service runs under the aspnet user account.

Question: 31

You create a serviced component named Scheduler. Scheduler is registered in a library application. The Scheduler methods parse String objects into Date Time objects.

You write a console application named EXCoverage.exe to test each method in Scheduler. You want Coverage.exe to test Scheduler for multiple cultures to verify its globalization support.

What should you do?

- A. Create a CultureInfo object for each culture locale before calling the Scheduler methods.
- B. Create a RegionInfo object for each culture locale before calling the Scheduler methods.
- C. Set the current thread's CurrentCulture property to each culture locale before calling the Scheduler methods.
- D. Create a EXCoverage.exe.config file and add a <location> element to the configuration file for each culture locale.

Answer: C.

Explanation:

We set the CurrentCulture property to a local culture, then we call the Scheduler method. We repeat this step for each local culture.

Reference:

Visual Studio, Globalization Testing

Incorrect Answers

- A:** CultureInfo objects would not by themselves be tested.
- B:** RegionInfo objects would not by themselves be tested.
- D:** This is not how to set up this.

Question: 32

You create a Windows service that processes XML messages placed in a MSMQ queue. You discover that the service is not functioning properly. You need to debug the service to correct the program.

What should you do?

- A. Start the Windows service. Then attach a debugger to the process.
- B. Attach a debugger to the Windows service. Then start the Windows service.
- C. Start the Windows service. Then run the .NET Services Installation tool (Regsvcs.exe).
- D. Place a breakpoint in the Main method of the Windows service. Then run the application within the Visual Studio .NET integrated development environment (IDE).

Answer: A

Explanation:

First we start the service, and then we attach the debugger to it. We must attach to available running processes.

Note:

Microsoft Message Queuing Services (MSMQ) enables applications running at different times to communicate across heterogeneous networks and systems that may be temporarily offline.

Reference:

Visual Studio, Attaching to a Running Program

Incorrect Answers

B: We must attach the debugger to a running service.

C: The .NET Services Installation Tool (Regsvcs.exe) cannot help in debugging the service processing the MSMQ queue.

Note:

Regsvsc.exe loads and registers an assembly, generates, registers, and installs a type library into a specified COM+ 1.0 application, and configures services that you have added programmatically to your class.

Question: 33

You are creating an XML Web service that processes highly confidential messages. The service exposed a Web method named RetrieveMessage that takes as input a code name and returns an encrypted message.

You create a SOAP extension and override the extension's ProcessMessage method so that you can encrypt the message before it is sent back to the caller. You need to encrypt only the data within the RetrieveMessageResult node of the SOAP response. You create a function named EncryptMessage that encrypts the RetrieveMessageResult node. You need to ensure that this method gets called before sending the message back to the caller.

During which SoapMessageStage should you call EncryptMessage?

- A. BeforeSerialize
- B. AfterSerialize
- C. BeforeDeserialize
- D. AfterDeserialize

Answer: B

Explanation:

An encryption SOAP extension might encrypt the XML portion of the SOAP message, after ASP.NET serializes the client's arguments, and then decrypt the SOAP message on the Web server before ASP.NET deserializes the SOAP message. The

SOAP extension is encrypting in the AfterSerialize stage and decrypting in the BeforeDeserialize stage.

Note:

The AfterSerialize stage occurs just after a SoapMessage is serialized, but before the SOAP message is sent over the wire.

Reference:

.NET Framework Developer's Guide, Altering the SOAP Message Using SOAP Extensions .NET Framework Class Library, SoapMessageStage Enumeration

Incorrect Answers

A: The BeforeSerialize stage occurs just prior to a SoapMessage being serialized.

C: The BeforeDeserialize stage occurs just before a SoapMessage is deserialized from the SOAP message sent across the network into an object.

D: The AfterDeserialize stage occurs just after a SoapMessage is deserialized from a SOAP message into an object..

Question: 34

You are developing an application named XYZApp by using Visual C# .NET and Visual Basic .NET.

The application will use functions from a DLL written in unmanaged code. One function requires the calling application to allocate unmanaged memory, fill it with data, and pass the address of the memory to the function. On returning from the function, the calling application must deallocate the unmanaged memory.

You need to decide how your application will handle unmanaged memory.

What should you do?

A. Use a byte array.

B. Use the methods of the Marshal class.

C. Use the methods of the MemoryStream class.

D. Derive a new class from the Stream class, and override the allocation methods.

Answer: B

Explanation:

The Marshal class provides a collection of methods pertaining to allocating unmanaged memory, copying unmanaged memory blocks, and converting managed to unmanaged types.

Reference:

.NET Framework Class Library, Marshal Class [Visual Basic]

Incorrect AnswersA, D: Bytes and streams can not be used for allocating and deallocating memory.

C: The MemoryStream class creates a stream whose backing store is memory.

Question: 35

You are creating an ASP.NET application named EXWebApp. To EXWebApp, you add a Web reference to an XML Web service named UserService.

UserService consists of a Web method named RetrieveUserInfo. This Web method takes a userID as input and returns a DataSet object containing user information. If the userID is not between the values 1 and 1000, a System ArgumentException is thrown. In EXWebApp, you write a try/catch block to capture any exceptions that are thrown by UserService.

You invoke RetrieveUserInfo and pass 1001 as the user ID..

Which type of exception will be caught?

- A. System.ApplicationException
- B. System.ArgumentException
- C. System.Web.Service.Protocols.SoapException
- D. System.Web.Service.Protocols.SoapHeaderException

Answer: C

Explanation:

The SoapException is thrown when an XML Web service method is called over SOAP and an exception occurs.

Note:

Simple Object Access Protocol (SOAP) codifies the practice of using XML and HTTP to invoke methods across networks and computer platforms. SOAP is a XML-based protocol that lets you activate applications or objects within an application across the Internet.

Reference:

.NET Framework Class Library, SoapException Class

Incorrect Answers

A: The ApplicationException is thrown when a non-fatal application error occurs. ApplicationException is thrown by a user program, not by the common language runtime.

B: The ArgumentException exception is thrown when one of the arguments provided to a method is not valid.

D: The SoapHeaderException is thrown when an XML Web service method is called over SOAP and an exception occurs during processing of the SOAP header.

Question: 36

You create three Windows services named EXService1, EXService2, and EXService3. You want to install all three services on a computer named XYZA by using the Installer tool (Installutil.exe).

On the command line of XYZA, you enter and run the following command: Installutil EXService1 EXService2 EXService3

During the installation process, EXService3 throws an installation error. The installation process completes.

How many of the three services are now installed on XYZ1?

- A. None
- B. One
- C. Two
- D. Three.

Answer: A

Explanation:

Installutil.exe performs installation in a transactional manner; if one of the assemblies fails to install, it rolls back the installations of all other assemblies.

Reference:

.NET Framework Tools, Installer Tool (Installutil.exe)

Incorrect Answers B, C; D:

The installation of EXService3 fails and the installation of EXService2 and EXService1 is rolled back.

Question: 37

You create two serviced components named OrderPipeline and OrderAdmin. Each component is registered in a separate COM+ server application.

Both components use pricing data. OrderPipeline reads the pricing data for placing user orders. OrderAdmin modifies the pricing data.

You want to ensure that OrderPipeline accesses the pricing data as quickly as possible, while still being able to immediately retrieve any pricing changes made by OrderAdmin.

What should you do?

A. Store the pricing data in the Shared Property Manager.

B. Store the pricing data in Microsoft SQL Server database.

C. Store the pricing data in a Hashtable object within OrderAdmin.

Expose the Hashtable object through a property on OrderAdmin.

D. Store the pricing data in an XmlDocument object within OrderAdmin. Expose the XmlDocument object through a property on OrderAdmin.

Answer: C**Explanation:**

A Hashtable can safely support one writer and multiple readers concurrently. This is the most efficient solution

Reference:

.NET Framework Class Library, Hashtable.IsSynchronized Property Platform SDK: COM+ (Component Services), The Shared Property Manager

Incorrect Answers

A: A Shared Property Manager would be a possible solution. However it is not required and is not the most efficient solution.

Note:

In COM+, shared transient state for objects is managed by using the Shared Property Manager (SPM). The SPM is a resource dispenser that you can use to share state among multiple objects within a server process.

B: SQL Server could provide a solution. However, it would not be the most efficient solution.

D: A hash table would be more efficient.

Question: 38

You have a .NET Remoting object named XYZUtils. The XYZUtils class is a client-activated .NET Remoting object.

You want to write a client application that creates and uses a XYZUtils object. You want the client application to hold onto a reference to a XYZUtils object for the duration of its execution.

What should you do?

- A. Construct the XYZUtils object, and hold the object in a member variable.
- B. Construct the XYZUtils object, and set the LifeTimeService.LeaseTime to 0.
- C. In the client application, create an Implementation of the ISponsor interface. Implement the Renewal method to extend the lease.
- D. In the client application, create an Implementation of the ILease interface. Implement the CurrentLeaseTime property to return Int32.MaxValue.

Answer: C

Explanation:

We must create a sponsor, on the ISponser interface, that implements the renewal method to extend the lease. This will ensure that the object lease will be renewed as long the client application is running.

Note:

Each Marshal-by-reference object (MBR) has a lifetime that is controlled by a combination of leases, a lease manager, and some number of sponsors. A sponsor is an object that can request a new a lease for a particular object by registering itself with the lease manager. The lease manager periodically examines all leases for expired lease times. If a lease has expired, the lease manager walks its list of sponsors for that object and requests whether any of them want to renew the lease. If no sponsor renews the lease, the lease manager removes the lease and the object is deleted and its memory reclaimed by garbage collection. The CurrentLeaseTime can be changed, either from an ILease.Renew call or when the lease manager calls ISponsor.Renewal on a sponsor.

Reference:

.NET Framework Developer's Guide, Lifetime Leases .NET Framework Class Library, ILease.CurrentLeaseTime Property [Visual Basic]

Incorrect Answers

- A:** This would not renew the release of the object. The default lease time is 5 minutes.
- B:** A lease time of zero sets the lease to an infinite lifetime..
- D:** The ILease.CurrentLeaseTime is a read-only property of the ILease interface. We cannot configure this property.

Question: 39

You create a serviced component named Tracker that uses attributes to dynamically register itself for COM+ services. Tracker is in an assembly file named XYZ.dll. Tracker uses transactions and role-based security. The roles and the application identity for Tracker are configured on the development computer.

You are preparing to hand off Tracker to and administrator for deployment to production computers.

You want all the COM+ configuration information for Tracker to be installed on the production computers.

What should you do?

- A. Use the Component Services tool to export Tracker to an .msi file. Provide to the administrator the .msi file with instructions to run the installer.
- B. Provide to the administrator the XYZ.dll file. Instruct the administrator to copy XYZ.dll to all production computers and to install it

in the global assembly cache.

- C. Provide to the administrator the XYZ.dll file. Instruct the administrator to use the .NET Services Installation tool (Regsvcs.exe) to install Tracker.
- D. Add a new merge module to your solution. Add XYZ.dll to the merge module. Provide to the administrator the .msm file with installation instructions.

Answer: A

Explanation:

We use the Components services tool to create an installation package. The installation package will include COM+ configuration information. The installation package can be installed on a separate system.

Procedure to create the .msi package: Step 1: Open the **Component Services** Console: Start->Program->Administrative Tools->Component Services

Step 2:

Right click the appropriate COM+ service and select export.

Step 3:

Finish the Welcome to COM+ Application Export Wizard.

Note:

The Component Services administrative tool enables you to configure and administer COM components and COM+ applications. With Component Services, administrators can deploy and administer Component Services applications through a graphical user interface or automate administrative tasks by using a scripting or programming language. Software developers can use Component Services to visually configure routine component and application behavior, such as security and participation in transactions, and to integrate components into Component Services applications..

Reference:

Windows XP Help.

Incorrect Answers

B: The dll file does not include COM+ configuration information.

C: Regsvcs.exe cannot be used to transfer the COM+ dll from one computer to another. **Note:** The .NET Services Installation tool performs the following actions:

- * Loads and registers an assembly.
- * Generates, registers, and installs a type library into a specified COM+ 1.0 application.
- * Configures services that you have added programmatically to your class.

D: To install a merge module, it must first be merged by using a merge tool into a .msi file. **Note:** A merge module is like a snapshot of a particular version of a component. A new merge module should be created for each successive version of a component in order to avoid version conflicts.

Question: 40

You are creating an XML Web service that provides a daily quotation from literary works to its customers. This quotation is requested in many different languages, thousands of times every day, and by thousands of Web sites operating many different platform.

A Web method named GetEXQuotes takes a languageID as input. GetEXQuotes uses this language ID to retrieve a translated version of the daily quotation from a Microsoft SQL Server database and to return that quotation to the customer.You want to

minimize the time it takes to return the translated version.

What should you do?

- A. Store each translated quotation by using the Cache object.
- B. Store each translated quotation by using the Session object.
- C. Set the BufferResponse property of the WebMethod attribute to **false**.
- D. Set the CacheDuration property of the WebMethod attribute to an interval greater than zero.

Answer: A

Explanation:

We should store each translated quotation in the Cache, more specifically we use the translation quotation to construct a Cache object.

Reference:

.NET Framework Developer's Guide, Adding Items to the Cache [Visual Basic].NET Framework Class Library, WebMethodAttribute.BufferResponse Property.NET Framework Class Library, WebMethodAttribute.CacheDuration Property [Visual Basic]

Incorrect Answers

B: The Session object is used to store information needed for a particular user-session. The objects would have to be recreated for every single session.

C: The BufferResponse property gets or sets whether the response for this request is buffered. If set to false, no buffering would be used. This is the opposite to the requirements. **Note:** Setting BufferResponse to true, serializes the response of the XML Web service method into a memory buffer until either the response is completely serialized or the buffer is full. The default value is **True**.

D: WebMethodAttribute.CacheDuration property gets or sets the number of seconds the response should be held in the cache.

Question: 41

You are creating a .NET Remoting object named PropertyCache. PropertyCache will hold a Hashtable object or name/value pairs.

A variety of remote client applications will communicate with PropertyCache to set and get property values. You need to ensure that properties set by one client application are also accessible to other client applications.

Which two actions should you take? (Each correct answer presents part of the solution. Choose two)

- A. Configure PropertyCache to be a client-activated object.
- B. Configure PropertyCache to be a server-activated Singleton object.
- C. Configure PropertyCache to be a server-activated SingleCall object.
- D. Derive the PropertyCache class from MarshalByRefObject and override InitializeLifetimeService() to return null.
- E. Mark the PropertyCache class with the Serializable attribute. Implement the ISponsor interface in the PropertyCache class.
- F. Implement the ISerializable and ILease interfaces in the PropertyCache class. Implement ILease.CurrentLeaseTime to return Int32.MaxValue.

Answer: B & D

Explanation:

Correct answer should be B, D. E is incorrect because it is not necessary to serialise a Singleton object class. You only need to inherit it from MarshalByRefObject. Furthermore, D overrides initializeLifetimeService() to return null to return an object with infinite lifetime. It will solve the object life time issue that Answer E was trying to resolve through implementing ISponsor.

Question: 42

You create a .NET Remoting object named EXPatientinfo that exposes medical patient information.

Because of the confidential nature of the information, you must ensure that the data remains secure.

You want client applications to connect to EXPatientinfo over a secure communication channel.

You want to accomplish this task by writing the minimum amount of code.

What should you do?

- A. Create your own host application and use a TcpChannel and BinaryFormatter.
- B. Create your own host application and use an HttpChannel and a SoapFormatter.
- C. Install EXPatientinfo in an Internet Information Services (IIS) virtual directory. Configure EXPatientinfo to use a TcpChannel and a BinaryFormatter. Configure IIS to use SSL.
- D. Install EXPatientinfo in an Internet Information Services (IIS) virtual directory. Configure EXPatientinfo to use an HttpChannel and a SoapFormatter. Configure IIS to use SSL.

Answer: D**Explanation:**

To minimize the coding we use IIS to deploy the .NET Remoting Object. We then use SSL to encrypt the HTTP traffic.

Reference:

SSL in WinHTTP

Incorrect Answers**A, B:** Creating your own host application would require more coding.

C: SSL encrypts HTTP traffic, not TCP traffic.

Question: 43

You are creating an XML Web service named InventoryService for a national automobile dealership.

Each branch of the dealership will build its own client application to consume InventoryService. Each branch connects to the main office of the dealership by using a virtual private network (VPN). All computers in the dealership run on Microsoft Windows operating systems.

You need to ensure that callers of InventoryService are authenticated based on their Windows logon name and password. You configure Internet Information Services (IIS) according to your security needs.

You need to configure the authentication type in the Web.config file.

Which code segment should you use?

- A. <authentication mode="Basic" />
- B. <authentication mode="Forms" />
- C. <authentication mode="Integrated" />

D. <authentication mode="Windows" />

Answer: D

Explanation:

Integrated Windows authentication can delegate security credentials among computers running Windows 2000 and later that are trusted and configured for delegation.

Note:

ASP .NET supports Forms Authentication, Passport Authentication, Windows Authentication, and None. In the Web.config file these are denoted Cookie, Passport, Windows and None.

Reference:

Building Distributed Applications, Authentication in ASP .NET: .NET Security Guidance

Incorrect Answers:

A: Basic authentication does not use the Windows logon name and password.

B: Integrated is not a valid authentication mode in the Web.config file. Furthermore Cookie authentication mode does not use Windows login and Windows password.

C: Integrated is not a valid authentication mode in the Web.config file.

Question: 44

You have a DataSet object that contains a single DataTable object named XYZEmployees. XYZEmployees has a column named EmployeeID. EmployeeID contains no duplicate data.

You are creating a function that accepts a parameter of EmployeeID and searches Employees to return the DataRow object for the specified EmployeeID..

You want to use the Find method of the rows collection in XYZEmployees to return the requested DataRow object from the function. You need to ensure that you can use the Find method to accomplish this goal.

What should you do?

- A. Ensure that EmployeeID is the first column in XYZEmployees.
- B. Ensure that EmployeeID is unique for each row in XYZEmployees.
- C. Ensure that XYZEmployees has a primary key on EmployeeID.
- D. Ensure that XYZEmployees is sorted in ascending order on EmployeeID.

Answer: C

Explanation:

To use the Find method, the DataTable object to which the DataRowCollection object belongs to must have at least one column designated as a primary key column.

Incorrect Answers

A: The first column has no particular significance.

B: The unique constraint is not enough. Employees must have a primary key column.

D: Sorting will not help.

Question: 45

You are developing an application to monitor store inventory. When inventory falls below a specified level, the application automatically generates a purchase request. Suppliers have requested that you transmit purchase requests to them in an XML document. Suppliers will accept the XML document in any valid form, except they do not want the data set definition to be included in the XML file.

You create a method named `GeneratePurchaseRequest`. You write the code to populate a `DataSet` object named `myDataSet` with the purchase request data. You define a variable named `fileName` that contains the name and path of the output file.

You need to create an XML file from the data in `myDataSet` by adding code to `GeneratePurchaseRequest`. You want to accomplish this task by writing the minimum amount of code.

Which code segment should you use?

- A. `myDataSet.WriteXML(fileName, XmlWriteMode.IgnoreSchema)`
- B. `myDataSet.WriteXML(fileName, XmlWriteMode.WriteSchema)`
- C. `myDataSet.WriteXMLSchema(filename)`
- D. `TextWriter myWriter = new StreamWriter(fileName) myDataSet.WriteXMLSchema(myWriter).`

Answer: A

Explanation:

The `DataSet.WriteXml` method (String, XmlWriteMode) method writes data and optionally the schema to the specified file. The `IgnoreSchema` `XmlWriteMode` writes the current contents of the `DataSet` as XML data, without an XSD schema as was required by the suppliers.

Reference:

.NET Framework Class Library, `DataSet.WriteXml` Method (String, XmlWriteMode) [Visual Basic] .NET Framework Class Library, `XmlWriteMode` Enumeration [Visual Basic]

Incorrect Answers

B: `XmlWriteMode.WriteSchema` writes the current contents of the `DataSet` as XML data with the relational structure as inline XSD schema. However, the suppliers do not want the data set definitions.

C: The `DataSet.WriteXmlSchema` (String) method writes the `DataSet` structure as an XML schema to a file. The schema includes table, relation, and constraint definitions, but not the actual data.

D: The `DataSet.WriteXmlSchema` (Stream) method writes the `DataSet` structure as an XML schema to the specified `System.IO.Stream` object.

Question: 46

You are planning to create a `DataSet` object named `EXDataSet` to be used in a bond-trading application. Several developers will need to write code to manipulate `EXDataSet`, and you want to ensure that `myDataSet` is easy for them to use. You decide to create `EXDataSet` as a strongly typed data set. Which two actions should you take? (Each correct answer presents part of the solution. Choose two)

- A. Create an XSD schema that defines `EXDataSet`.
- B. Create an XDR schema that defines `EXDataSet`.
- C. Create a class for `EXDataSet` that is based on the schema and that inherits from the `DataSet` class.
- D. Create a class for `EXDataSet` that is based on the schema and that inherits from the `XmlSchema` class.
- E. Create a key pair for `EXDataSet` by using the Strong Name tool (`Sn.exe`).

Answer: A & C

Explanation:

A: The XML Schema definition language (XSD) enables you to define the structure and data types for XML documents. Given an XML Schema that complies with the XML Schema definition language (XSD) standard, you can generate a strongly typed DataSet.
C: The class should inherit from the DataSet class.

Reference:

.NET Framework Developer's Guide, Generating a Strongly Typed DataSet [Visual Basic] .NET Framework General Reference, XML Schema Reference (XSD)

Incorrect Answers

B: XML-Data Reduced (XDR) schemas are used to validate XML documents.

D: The class should inherit from the DataSet class.

E: The Strong Name tool (Sn.exe) helps sign assemblies with strong names. However, we are creating a DataSet not an assembly.

Question: 47

XYZ Inc. provides a credit card processing application for its customers. The current application supports only computers that run on a Microsoft Windows operating system.

You are asked to rewrite the current application as a .NET application. This .NET application does not need to be backward compatible with the current application.

You must ensure that this new application meets the following requirements:

- Must support asynchronous processing.

- Must be able to pass data through firewalls.

- Must pass only SOAP-Compliant formatted data validated by using an XSD schema.

- Must not be limited to client computers running on a Microsoft operating system.

You want to accomplish this task by using the minimum amount of development effort.

Which type of .NET application should you use?

- A. Windows service
- B. XML Web service
- C. Serviced component
- D. .NET Remoting object

Answer: B**Explanation:**

An XML Web service would:

- * support asynchronous processing.

- * XML traffic would be allowed to passed through firewalls

- * can use SOAP-compliant formatted data validated by an XSD schema.

- * could be implemented on heterogeneous systems.

Reference:

Designing Distributed Applications with Visual Studio .NET, Programming the Web with XMLWeb Services

Incorrect Answers

A: A Windows service can only run on a Windows computer.

C: Serviced components cannot be run on heterogeneous systems. A serviced component is a class that is authored in a CLS-compliant language and that derives directly or indirectly from the `System.EnterpriseServices.ServicedComponent` class. Classes configured in this way can be hosted by a COM+ application and can use COM+ services. **D:** .NET Remoting objects can be run on different operating systems. However, a XML Web service meets the requirement in a better way.

Question: 48

You are creating a .NET Remoting object named XYZPayroll. The XYZPayroll class allows remote client applications to access payroll data for your company. Client applications are developed by using Windows Forms and Web Forms.

You must ensure that remote client applications are securely authenticated prior to gaining access to Payroll object. You want to accomplish this task by writing the minimum amount of code.

What should you do?

- A. Use a `TcpChannel` and a `BinaryFormatter` for the XYZPayroll class.
- B. Use an `HttpChannel` and a `SoapFormatter` for the XYZPayroll class.
- C. Host the XYZPayroll class in Internet Information Services (IIS) and implement Basic authentication.
- D. Host the XYZPayroll class in Internet Information Services (IIS) and implement Integrated Windows authentication.

Answer: D

Explanation:

Hosting the application on an IIS server configured for Windows authentication would:
client applications are securely authenticated prior to gaining access to the Class.
minimal coding would be required

Incorrect Answers

A: This proposed solution does not address the secure authentication requirement. A `TcpChannel` provides an implementation for a sender-receiver channel that uses the TCP protocol to transmit messages. The `BinaryFormatter` Class serializes and deserializes an object, or an entire graph of connected objects, in binary format.

B: This proposed solution does not address the secure authentication requirement. A `HttpChannel` provides an implementation for a sender-receiver channel that uses the HTTP protocol to transmit messages. The `SoapFormatter` serializes and deserializes an object, or an entire graph of connected objects, in SOAP format..

C: Basic authentication is not secure.

Question: 49

You are creating an XML Web service named `ListBoxService`. This service provides content, such as states, countries, and geographical regions, for use in drop-down list boxes.

`ListBoxService` contains a Web method named `RetrieveRegionsListBox`. This method runs a `DataSet` object that contains every geographical region in the world.

`RetrieveRegionsListBox` calls a Microsoft SQL Server database to load the `DataSet` object with region data. You want to minimize the amount of time the method takes to return to the caller.

What should you do?

- A. Use a stored procedure to return the data.

- B. Store each DataSet object by using the Session object.
- C. Set the BufferResponse property of the WebMethod attribute to **false**.
- D. Set the CacheDuration property of the WebMethod attribute to an interval greater than zero.

Answer: D

Explanation:

The BufferResponse property denotes the number of seconds the response should be held in the cache. The default is 0, which means the response is not cached. Caching the response would improve performance.

Reference:

.NET Framework Class Library, WebMethodAttribute.CacheDuration Property [Visual Basic] .NET Framework Class Library, WebMethodAttribute.BufferResponse Property [Visual Basic]

Incorrect Answers

A: A stored procedure is located at the SQL Server computer. It improves performance, especially if the code is run repeatedly. However, this is not the case in this scenario.

B: Storing each DataSet object by using session object would increase the overhead.

C: The WebMethodAttribute.BufferResponse property gets or sets whether the response for this request is buffered. Setting the value to false would not buffer the request.

Question: 50

You are creating an XML Web service that will be accessed by callers who cannot use SSL encryption because of firewall restrictions. To protect sensitive data, you want to encrypt a portion of the data returned from the service by using objects in the Cryptography namespace. The service will use a standard encryption routine to encrypt the data before it is sent to the caller. The caller will decrypt the data by using instructions provided by you.

You need to write code to encrypt the sensitive data that is in a local variable named XYZData. First, you create an instance of a Cryptography Service Provider.

What should you do next?

- A. Create an Encryptor object that passes in a key and an initialization vector (IV) as parameters. Call the GetHashCode method of the Encryptor object to generate a new hash code. Convert the generated hash code to a stream and use the CryptoStream object to write the value of the hash code to an encrypted stream. Convert the output stream to a string.
- B. Create a UnicodeEncoding object and use it to encode the value of XYZData into a byte array. Use the ComputeHash method of the Cryptography Service Provider to create a hash from the encoded byte array. Convert the output of ComputeHash from a byte array to a string.
- C. Create a UnicodeEncoding object and use it to encode the value of XYZData into a byte array. Use the GetHashCode method of the Cryptography Service Provider to create a hash from the encoded byte array. Convert the output of GetHashCode from a byte array to a string.
- D. Create an Encryptor object that passes in a key and an initialization vector (IV) as parameters. Create a CryptoStream object that passes in an output stream and the Encryptor object as parameters. Convert XYZData to a stream and use the CryptoStream object to write the value of XYZData to an encrypted stream. Convert the output stream to a string.

Answer: D

Explanation:

The common language runtime uses a stream-oriented design for cryptography. The core of this design is CryptoStream.

The SymmetricAlgorithm.CreateEncryptor Method creates a symmetric encryptor object with the current Key and initialization vector (IV). We then use this encryptor object and pass it to stream. The stream will then be encrypted. The value of myDate can be

written to the encrypted stream by the send, and the receiver can retrieve it and decrypt it to a string.

Reference:

.NET Framework Developer's Guide, Encrypting Data [Visual Basic].NET Framework Class Library, CryptoStream Class [Visual Basic] .NET Framework Class Library, SymmetricAlgorithm.CreateEncryptor Method [Visual Basic]

Incorrect Answers

A: The Encryptor object will be required when setting up the CryptoStream. We cannot use a hash code of the Encryptor object..

B, C:

UniEncoding is used to convert characters between the Unicode and ASCII standards. UniEncoding is not used for encryption.

Question: 51

You have a .NET Remoting object named ProductLoaderEX. The ProductLoaderEX class is a server-activated Singleton object.

The ProductLoaderEX class loads product data into a Microsoft SQL Server database. The Load method of the ProductLoaderEX class is a time-consuming method to call.

You are developing a client application that uses the ProductLoaderEX class. You want to ensure that the client application can continue to respond to user input while the Load method of the ProductLoaderEX class is called.

What should you do?

- A. Use an AsyncDelegate instance to call the Load method.
- B. Modify the ProductLoaderEX class to be derived from IAsyncResult.
- C. Configure the ProductLoaderEX class to be a client-activated .NET Remoting object.
- D. Configure the client application to have its own remoting channel that matches the server's channel and formatter.

Answer: A

Explanation:

Asynchronous execution will enable the caller to continue to execute. One of the innovations provided by the asynchronous pattern is that the caller decides whether a particular call should be asynchronous.

It is not necessary for a called object to do additional programming for supporting asynchronous behavior by its clients; asynchronous delegates provide for this in the pattern.

Reference:

.NET Framework Developer's Guide, Asynchronous Design Pattern Overview

Incorrect Answers

B: Incomplete solution.

C: Remoting objects do not meet the requirements of this scenario.

D: Channels are just a way to communicate.

Question: 52

You are creating a .NET Remoting object named BankOps. BankOps exposes methods for creating, finding, and modifying objects in a class named BankCustomer. BankCustomer has a large number of read/write properties..

You expect a large number of remote client applications to frequently connect to BankOps. You expect these remote client

applications to use many of the BankCustomer properties. You want to ensure that network traffic is minimized.

What should you do?

- A. Add the Serializable attribute to the BankCustomer class.
- B. Implement the IDisposable interface in the BankCustomer class.
- C. Derive the BankCustomer class from ContextBoundObject.
- D. Derive the BankCustomer class from MarshalByRefObject. Override the inherited InitializeLifetimeService method to return null.

Answer: A

Explanation:

Making the Class Serializable would make the properties available. The easiest way to make a class serializable is to mark it with the Serializable attribute.

Note:

The basic idea of serialization is that an object should be able to write its current state, usually indicated by the value of its member variables, to persistent storage. Later, the object can be re-created by reading, or deserializing, the object's state from the storage.

Reference:

.NET Framework Class Library, MarshalByRefObject Class

Incorrect Answers

B: The IDisposable interface defines a method to release allocated unmanaged resources.

C: A context is a set of properties or usage rules that define an environment where a collection of objects resides. The rules are enforced when the objects are entering or leaving a context. Objects that reside in a context and are bound to the context rules are called context-bound objects.

D: A MarshalByRefObject enables access to objects across application domain boundaries in applications that support remoting. The InitializeLifetimeService method obtains a lifetime service object to control the lifetime policy for this instance.

Question: 53

You are developing an ASP.NET application that consumes an XML Web service named AccountInformation. AccountInformation exposes a Web method named GetAccountBalance that expects encrypted user credentials to be passed in the SOAP header.

AccountInformation also exposes a public class named AuthenticateUser. AuthenticateUser has two properties named Username and Password that are both defined as string..

In the application, you create two local variable named encryptedUsername and encryptedPassword that you will use to pass user credentials to GetAccountBalance. You need to write code that will execute the GetAccountBalance Web method.

Which code segment should you use?

- A. Dim EXAccountInformation As New AccountInformation() Dim EXAuthenticateUser As New AuthenticateUser()
EXAuthenticateUser.Username = encryptedUsername EXAuthenticateUser.Password = encryptedPassword
EXAccountInformation.AuthenticateUserValue = _myAuthenticateUser Dim accountBalance As String accountBalance =
myAccountInformation. GetAccountBalance()
- B. Dim EXAccountInformation As New AccountInformation() Dim EXAuthenticateUser As New
AuthenticateUser() EXAuthenticateUser.Username = encryptedUsername
EXAuthenticateUser.Password = encryptedPassword Dim accountBalance As String

- accountBalance = EXAccountInformation.GetAccountBalance()
- C. Dim EXAccountInformation As New AccountInformation() Dim EXAuthenticateUser As New AuthenticateUser() Dim Username As New SoapHeaderAttribute("Username") Username.MemberName = encryptedUserPassword Dim accountBalance As String accountBalance = EXAccountInformation.GetAccountBalance()
- D. Dim EXAccountInformation As New AccountInformation() Dim EXAuthenticateUser As New AuthenticateUser() EXAuthenticateUser.Username = encryptedUsername EXAuthenticateUser.Password = encryptedPassword Dim EXSoapHeaderCollection As New SoapHeaderCollection() EXSoapHeaderCollection.Add(myAuthenticateUser) Dim accountBalance As String accountBalance = EXAccountInformation.GetAccountBalance()

Answer: A

Question: 54

You are creating an XML Web service named XYZService. This service has a function named WriteMessage that writes messages to a flat file in the C:\EXServiceLog directory..

You want to implement security for WriteMessage so that WriteMessage and all the code it calls can write messages only to the EXServiceLog directory.

Which code segment should you use?

- A. Dim filePermission As New FileIOPermission_(FileIOPermissionAccess.Write, "C:\EXServiceLog")
filePermission.Demand()
- B. Dim filePermission As New FileIOPermission_(FileIOPermissionAccess.Write, "C:\EXServiceLog")
filePermission.Deny()
- C. Dim filePermission As New FileIOPermission_(FileIOPermissionAccess.Write, "C:\EXServiceLog")
filePermission.PermitOnly()
- D. Dim filePermission As New FileIOPermission_(FileIOPermissionAccess.Write, "C:\EXServiceLog")
filePermission.Assert()

Answer: C

Explanation:

The CodeAccessPermission.PermitOnly method prevents callers higher in the call stack from using the code that calls this method to access all resources except for the resource specified by the current instance.

Reference:

.NET Framework Developer's Guide, PermitOnly .NET Framework Class Library, CodeAccessPermission.Demand Method .NET Framework Class Library, CodeAccessPermission.Assert Method

Incorrect Answers A:We want to grant permission, not check the permission. **Note:** The CodeAccessPermission.Demand method forces a SecurityException at run time if all callers higher in the call stack have not been granted the permission specified by the current instance.

B: We must allow permission, not deny it.

D: The CodeAccessPermission.Assert method asserts that calling code can access the resource identified by the current permission through the code that calls this method, even if callers higher in the stack have not been granted permission to access the resource.

Question: 55

You develop an application named EXApp. This application needs to run on the same computer as a Windows service named EXService.

You want to ensure that EXService starts from EXApp if EXService is not already running..

Which code segment should you use?

- A. Dim myServiceController As New _
 ServiceController("EXService")
If myServiceController.Status = _ ServiceControllerStatus.Stopped Then myServiceController.Start() End If
- B. Dim myServiceController As New _
 ServiceController("EXService")myServiceController.Start()
- C. Dim myServiceController As New _ ServiceController() Dim myArgs(1)As
 String my Args(0)="EXService" If myServiceController.Status =
 ServiceControllerStatus.Stopped
 Then myServiceController.Start(myArgs)
End If
- D. Dim myServiceController As New _ ServiceController() Dim myArgs(1) As String my Args(0)= "EXService"
 myServiceController.Start(myArgs)

Answer: A

Explanation:

First we create a new instance of MyService. Then we check the current state of it with the **Status** property. Finally we use the ServiceController **start** method to start it if it was stopped..

Note: A Service Controller object represents a Windows service and allows you to connect to a running or stopped service, manipulate it, or get information about it.

Reference:

.NET Framework Class Library, ServiceController Class .NET Framework Class Library, ServiceController Members .NET Framework Class Library, ServiceControllerStatus Enumeration [Visual Basic] .NET Framework Class Library, ServiceController Constructor [Visual Basic] Visual Basic and Visual C# Concepts, Creating ServiceController Component Instances

Incorrect Answers

B: The constructor is incorrect. **C, D:**Here the ServiceController constructor is used with two parameters. The first parameter correctly references the existing server EXService. The second parameter, 'my', specifies the computer that the service runs on. My has no special significance (we don't know the name of the computer). Furthermore, we do not have to specify the computer name if the service runs on the local computer.

Question: 56

You are creating an XML Web service named LegalXYZService. This service exposes two Web methods named SendMessage and ReceiveMessage.

SendMessage is used to send highly confidential messages to its customers. ReceiveMessage is used to receive highly confidential messages from its customers and to process these messages for future use.

You need to ensure that these messages cannot be intercepted and viewed by anyone other than LegalXYZService and the customers who access LegalXYZService. Which security mechanism should you use?

- A. SSL
- B. Authorization
- C. Authentication
- D. Impersonation

Answer: A

Explanation:

Secure Sockets Layer (SSL) meets the requirements of this scenario. SSL encrypts data, which protects the data from being viewed from outside parties.

Incorrect Answers

B: Authorization is used to assign permissions and rights to users. It is not used to secure transmitted data.

C: Authentication is used to identify users. It is not enough to secure the data transmitted.

D: Impersonation is the ability of a to execute in a security context other than from that of the original user-It would not help protecting the transmitted data however.

Question: 57

You are creating an XML Web service named XYZSalesInformation. This service provided sales information to regional managers and directors by using a virtual private network (VPN).

XYZSalesInformation exposes a Web method named GetSalesInfo that returns sales information to the caller. You must use role-based security to restrict access to GetSalesInfo to only members of the two Windows groups named Manager and Director. You configure XYZSalesInformation to use Integrated Windows authentication.

You write the following code to create permissions in GetSalesInfo: Dim myPermission1 As New_PrincipalPermission(Nothing, "Manager") Dim myPermission2 As New_PrincipalPermission(Nothing, "Director")

You need to write the remaining code in GetSalesInfo to ensure that only users in the Manager group and the Director group can access SalesInformation.

Which code segment should you use?

- A. myPermission1.Intersect(myPermission2).Demand()
- B. myPermission1.Union(myPermission2).Demand()
- C. myPermission1.Demand() myPermission2.Demand().
- D. myPermission2 = myPermission1.Copy() myPermission2.Demand()

Answer: B

Explanation:

The Union method creates a permission that is the union of the current permission and the specified permission. We want a union of the Manager and the Director group.

Reference:

.NET Framework Class Library, SecurityPermission.Union Method [Visual Basic] .NET Framework Class Library, PrincipalPermission.Demand Method [Visual Basic]

Incorrect Answers

A: An intersect would only give permissions of to users that are members of both the Manager and the Director groups.

C: This code first test the membership of the Managers groups and the tests the membership of the Director group. Unless both these conditions match an exception will be thrown.

D: The copy method creates and returns an identical copy of the current permission. The code would only test the membership of the Manager group.

Question: 58

You develop an ASP.NET application that consumes a third-party XML Web service named CreditService. CreditService contains a Web method named ChargeCard. ChargeCard takes as input a credit card number, a billing address, and a monetary amount and returns a Boolean variable that indicated whether or not the card was charged.

Calls to ChargeCard take one minute to complete. You do not want users to have to wait while ChargeCard executes. You want users to be taken automatically to the next Web page of application.

Which code segment should you use to call CreditService?

- A. `CreditService.ChargeCard(ccNumb, _
billAddress, amount) Server.Transfer("process.aspx")`
- B. `CreditService.ChargeCard(ccNumb, _
billAddress, amount) Response.Redirect("process.aspx")`
- C. `CreditService.BeginChargeCard(ccNumb, billAddress, _ amount, New
AsyncCallback(AddressOf _
CCResponse), Nothing) Server.Transfer("process.aspx")Private Sub CCResponse(aRes As IAsyncResult)
CreditService.EndChargeCard(aRes)
End Sub`
- D. `Dim IAsyncResult As IAsyncResult. AsyncResult = CreditService.BeginChargeCard(ccNumb, _
billAddress, amount, Nothing, Nothing) AsyncResult.AsyncWaitHandle.WaitOne()
CreditService.EndChargeCard(AsyncResult) Server.Transfer("process.aspx")`

Answer: C

Explanation:

AsyncCallback provides a way for client applications to complete an asynchronous operation.

This callback delegate is supplied to the client when the asynchronous operation is initiated. The event handler referenced by AsyncCallback contains program logic to finish processing the asynchronous task for the client.

Reference:

.NET Framework General Reference, Asynchronous Programming Design Pattern [Visual Basic] .NET Framework Class Library, AsyncCallback Delegate [Visual Basic]

Incorrect Answers A, B: Asynchronous operation is not set up.

D: We must use the AsyncCallback delegate.

Question: 59

You are creating an XML Web service named EXWebService. Callers must be authenticated by using credentials passed in the SOAP header of each Web service call. You want to use role-based security to secure each method on EXWebService. The roles that users are assigned are stored in a custom database table. You need to write code that will allow you to dynamically change which roles can execute specific methods at run time. What should you do?

- A. Create a WindowsIdentity object and a WindowsPrincipal object. Then implement declarative role-based security.
- B. Create a WindowsIdentity object and a WindowsPrincipal object. Then implement imperative role-based security.
- C. Create a GenericIdentity object and a GenericPrincipal object. Then implement declarative role-based security.
- D. Create a GenericIdentity object and a GenericPrincipal object. Then implement imperative role-based security.

Answer: D.

Explanation:

The GenericIdentity class in conjunction with the GenericPrincipal class to create an authorization scheme that exists independent of a Windows NT or Windows 2000 domain. Furthermore, we should use imperative role-based security to allow dynamic permissions that are decide at runtime.

Reference:

.NET Framework Developer's Guide, Creating GenericPrincipal and GenericIdentity Objects [Visual Basic]

Incorrect Answers

A, B: WindowsPrincipal allows code to check the Windows group membership of a Windows user. However, in this scenario we are creating a customized security scheme and have no use of WindowsPrincipal objects.

C: Declarative role-based security would not allow dynamic permissions that are decide at runtime.

Question: 60

You are developing a Windows-based application that requires the use of a calculation function named CalculateValue. This function includes the following signature: CalculateValue(x As Integer) As Integer CalculateValue is located in an unmanaged DLL named UsefulFunctions.dll, and is not part of a COM interface. You need to be able to use CalculateValue in your application. Which action or actions should you take? (Choose all that apply.)

- A. Use Regsvr32.exe to register UsefulFunctions.dll.
- B. Use Visual Studio .NET to add a reference to UsefulFunctions.dll.
- C. To your application, add the following code segment: Imports UsefulFunctions
- D. To your application, add the following code segment: Declare Function CalculateValue _ Lib "UsefulFunctions.dll" (x As Integer) As Integer

Answer: C, D

Question: 61

You are creating an XML Web service named myWebService. This service will be used to exchange highly confidential information over the Internet with your company's business partner named XYZ, Inc.

You want only callers from XYZ, Inc., to be able to access myWebService. You do not want to have to accept a user name and password from callers.

Once callers are authenticated, you want to use Windows user accounts to authorize access to the Web methods exposed by the Web service. You set up two Windows user accounts named XYZAssociate and XYZManager. You need to configure myWebService to meet these security requirements.

Which type of authentication should you use?

- A. Basic
- B. Digest
- C. Anonymous
- D. Client Certificate

Answer: D

Explanation:

Client certificate authentication meets the requirements of this scenario:

would only allow specific users to gain access
no username or password would be required.

Incorrect Answers A, B: Basic authentication and Digest Authentication would require a user name and a password from the callers.

C: Anonymous access would allow public access.

Question: 62

You create a serviced component named OrderProcessor. OrderProcessor implements the IOrderInit interface. The component and the interface contain the following code segments:

```
<GuidAttribute("0B6ABB29-43D6-40a6-B5F2-83A457D062AC"), _ InterfaceType(ComInterfaceType.InterfaceIsDual)> _ Public  
Interface IOrderInit ' IOrderInit methods go here End Interface
```

```
Public Class OrderProcessor Inherits ServicedComponent Implements  
IOrderInit ' OrderProcessor methods go here.End Class
```

You discover that every time you rebuild OrderProcessor, existing unmanaged client code fails. The HRESULT for the exception is 0x80040154.

The exception includes the following message: "Class not registered." You need to resolve this problem.

What should you do?

- A. Add a Guid attribute to the OrderProcessor class.
- B. Add a ComImport attribute to the IOrderInit interface.
- C. To the OrderProcessor class, add the following attribute:
ClassInterface(ClassInterfaceType.AutoDual)
- D. To the end of every method, add the following line of code: Marshal.ReleaseComObject(Me)

Answer: C

Explanation:

The class interface, which is not explicitly defined in managed code, is an interface that exposes all public methods, properties, fields, and events that are explicitly exposed on the .NET object. This interface can be a dual or dispatch-only interface. Class interfaces are only generated when the ClassInterfaceAttribute is set to ClassInterfaceType.AutoDual.

Reference:

.NET Framework Class Library, ClassInterfaceAttribute Class

Incorrect Answers

A: The Guid attribute is used to specify a globally unique identifier (GUID) for a class or an interface. This information is primarily useful for interoperability with COM.

B: When placed on a class, the ComImport attribute marks the class as an externally implemented Com class. Such a class declaration enables the use of a C# name to refer to a COM class.

D: The Marshal.ReleaseComObject method decrements the reference count of the supplied runtime callable wrapper

Question: 63

You are using Visual Studio .NET to develop a new application to replace an older COM-based application named XYZLegacy. The new application will use some of the old COM components until they can be replaced by Visual Studio .NET code.

Your application uses a COM DLL named OurCOM.dll. The Visual Studio .NET assembly for OurCOM.dll must be named OurDotNetCOM. You must use the name "ProjectX" for the namespace of the COM components. You must ensure that your application uses these naming guidelines.

What should you do?

- A. Reference OurCOM.dll from Visual Studio .NET. Change the assembly name in Solution Explorer. Change the namespace name by editing the assembly.
- B. Reference OurCOM.dll from Visual .NET. Change the assembly name in Solution Explorer. Change the namespace name by using the Namespace property of a CodeNamespaceImport object.
- C. Run the Type Library Importer (Tlbimp.exe) with the /namespace and /out options to create the assembly.
- D. Run the Type Library Importer (Tlbimp.exe) with the /out option to create the assembly. Change the namespace by using the Namespace property of a CodeNamespaceImport object.

Answer: C

Explanation:

The Type Library Importer converts the type definitions found within a COM type library into equivalent definitions in a common language runtime assembly. We should use the /namespace option to specify the namespace in which to produce the assembly. We must use the /out option to specify output file, assembly, and namespace in which to write the metadata definitions.

Reference:

.NET Framework Tools, Type Library Importer (Tlbimp.exe)

Incorrect Answers

A: Not a practical solution.

B: An incomplete solution.

D: We should use the /namespace option to specify the namespace in which to produce the assembly.

Question: 64

You create an XML Web service named XYZA. You use the Debug.Assert method in your code to verify parameter values and ranges.

You find that XYZA does not display assertion failure messages. Instead, XYZA returns an HTTP 500 error message when an assertion fails. You want to view the assertion failure messages.

What should you do?

- A. Modify the Web.config file to stop the Debug.Assert method from displaying a message box.
- B. Modify the compilation element of the Web.config file by setting the debug attribute to **"true"**.
- C. In the constructor for XYZA, set the Debug.AutoFlush property to **false**.
- D. In the constructor for XYZA, add an EventLogTraceListener object to the Listeners property of the Debug class.

Answer: D.

Explanation:

We do not want the Web service to return error messages, but we still want to view failure messages. This is accomplished by using a TraceListener.

Note: The default behavior displays a message box when the application runs in user-interface mode, and outputs the message to the default trace output. You can customize this behavior by adding a TraceListener to, or removing one from, the Listeners

collection.

Reference:

.NET Framework Class Library, Debug.Assert Method (Boolean, String) [Visual Basic]

Incorrect Answers

A: We still want to view assertion failure messages.

B: Setting the debug attribute of the compilation element to true does not make any difference in this scenario.

C: Setting AutoFlush to true means that data will be flushed from the buffer to the stream. It would not affect the problem at hand, however.

Question: 65

You create an XML Web service that provides stock information to its customers. You successfully test the service. You are now ready to deploy the service to a new virtual directory on a production computer.

You want to deploy the service without having to manually configure any settings on the production computer.

Which deployment mechanism should you use?

- A. FTP
- B. Xcopy command
- C. Web setup project
- D. Copy Project command

Answer: C

Explanation:

Using deployment to install files on a Web server provides an advantage over simply copying files, in that deployment handles any issues with registration and configuration automatically.

Reference:

Visual Studio, Deployment of a Web Setup Project

Incorrect Answers

A: Download files through FTP would require manual registration and configuration.

B: Just copying the files would require manual registration and configuration.

D: Copying a project, rather than deploying it, is the simpler way to move your project's content to a target Web server. However, copying does not automatically configure Internet Information Services (IIS) directory settings..

Question: 66

You are using Visual Studio .NET to develop an application that uses a non-COM DLL named XYZFunctions.dll. This DLL is written in unmanaged code.

The DLL contains a function that parses a string into an array of string words and an array of numbers.

A call to the function includes the following pseudocode:

input = "A string with 6 words and 2 numbers" words = Nothing Numbers = Nothing Parse(input, words, numbers)

After execution, words contains all string words found in input and numbers contains all integers found in input. You need to enable

your application to call this function.

Which code segment should you use?

- A. Declare Function Parse Lib "XYZFunctions.dll" _
 (ByVal input As String, ByVal words() As String, ByVal Numbers()
 As Integer) As Integer
- B. Declare Function Parse Lib "XYZFunctions.dll" _
 (ByVal input As String, ByRef Words() As String, ByRef numbers()
 As Integer) As Integer
- C. Declare Function Parse Lib "XYZFunctions.dll" _
 (ByRef input As String, ByVal words() As String, ByVal numbers()
 As Integer) As Integer
- D. Declare Function Parse Lib "XYZFunctions.dll" _
 (ByRef input As String, ByRef words() As String, ByRef numbers()
 As Integer) As Integer

Answer: B

Explanation:

Only the value of the *input* parameter is used by the function so we must use **ByVal**. The *words* and the *Numbers* parameters on the other hand must be changed by the function. We must pass these parameters with **ByRef**.

Note: Functions cannot change a **ByVal** variables or any of their members. Functions can **ByRef** variables and their members.

Reference:

Visual Basic Language Concepts, Argument Passing Mechanism

Incorrect Answers A, C:

The *Words* and *Numbers* parameters are changed by the function, they must be passed with **ByRef**.

D: The *input* parameter is not changed by function, and therefore **ByVal** is preferred..

Question: 67

You create a .NET Remoting object named AdminService, which is hosted in Internet Information Services (IIS). The object uses an HttpChannel and a BinaryFormatter.

AdminService is in an assembly named AdminService.dll. The URL for AdminService is <http://localhost/AdminService/AS.rem>.

You write a test console application named Tester.exe to test the AdminService interface. Tester.exe includes the following code segment:

```
Module Tester
    Sub Main() Dim service As New AdminService() End Sub
End Module
```

You write a configuration file for Tester.exe. The configuration file is named Tester.exe.config and includes the following code segment:

```
<configuration> <system.runtime.remoting>
  <application>
    <client> <wellknown url="http://XYZSrv/AdminService/AS.rem" type="AdminService, AdminService"
    />
  </client> </application>
</system.runtime.remoting> </configuration>
```

You run Tester.exe. The application immediately throws a System.NullReferenceException. The exception includes the following message: "Object reference not set to an instance of an object."

You need to resolve this exception.

What should you do?

A. **To the application element of the Tester.exe.config file, add the following code segment:**

```
<channels> <channel ref="http"> <clientProviders>
  <formatter ref="binary"/> </clientProviders>
</channel> </channels>
```

B. **Replace the use of the AdminService constructor in Tester.exe with the following code segment:.**

```
Dim o as Object
o = Activator.CreateInstance(GetType(AdminService)) service = CType(o, AdminService)
```

C. **At the beginning of the Main method in Tester.exe, add the following line of code:**

```
RemotingConfiguration.Configure("Tester.exe.config")
```

D. **Rename the configuration file from Tester.exe.config to Tester.config.**

Answer: C

Explanation:

To use the remoting settings in the Tester.exe.config file, we must call RemotingConfiguration.Configure on the application configuration file name.

Note: Developers publishing or consuming remotable objects are responsible for configuration of the .NET Remoting system so that applications using .NET Remoting work correctly. You can do this programmatically, or using the application configuration file or the machine configuration file.

Reference:

.NET Framework Developer's Guide, Remote Object Configuration

Incorrect Answers**A, B:** There is no need to change the application configuration file.

D: The current file name is appropriate.

Question: 68

You are creating an XML Web service that processes credit card information. This service will be consumed by computers that run on Microsoft Windows operating systems, as well as computers that run on other operating systems.

You must ensure that client credentials passed to the service are secure and cannot be compromised. You are not as concerned with the length of time that Web method calls take to maintain this level of security.

You need to configure authentication for this service. Which type of authentication should

you use?

- A. Basic
- B. Forms
- C. Client Certificate
- D. Integrated Windows

Answer: C

Explanation:

Client certificates can be used on both Windows and non-Windows systems. Client certificates provide a secure connection..

Note: Client Certificates is used for secure identification of clients in Internet and intranet scenarios. It requires each client to obtain a certificate from a mutually trusted certificate authority.

Reference:

.NET Framework Developer's Guide, Securing XML Web Services Created Using ASP.NET [Visual Basic]

Incorrect Answers

A: Basic authentication is not secure. Login name and password are transferred unencrypted in clear text.

B: Forms authentication is not supported by XML Web services. It is a system by which unauthenticated requests are redirected to an HTML form using HTTP client-side redirection.

D: Integrated Windows authentication can only be used on Windows computers.

Question: 69

You create a serviced component named StockQuote that implements the IStockQuote interface. The StockQuote class includes the following code segment:

```
Public Class StockQuote Inherits ServicedComponent Implements IStockQuote Public Function GetQuote(stock as Ticker) as Price_
    Implements IStockQuote.GetQuote
    'Implementation code goes here.
End Function End Class
```

You want to secure StockQuote so that it can only be accessed by users in the Customers and Managers roles. Which actions should you take? (Each correct answer presents part of the solution. Choose two)

- A. **To the StockQuote class, add the following attribute:** <ComponentAccessControl>
- B. **To the StockQuote class, add the following attribute:**
<Transaction(TransactionOption.Required)>
- C. Implement the ISecurityCallContext COM interface in the StockQuote class. Implement the IsCallerInRole method for the Customers and Managers roles.
- D. **To the StockQuote class, add the following attributes:**
<SecurityRole("Customers", False),_ SecurityRole("Managers", False)>
- E. **To the beginning of the GetQuote method, add the following code segment:**
IfNot ContextUtil.IsCallerInRole("Managers,Customers")_ Then Throw New SecurityException("Access is denies.")

Answer: A & D

Explanation:.

A: The component attribute `ComponentAccessControl` is used to enable or disable access checks at the component level.

D: You can use the `SecurityRole` attribute to add the roles at the assembly level. We must set the **SetEveryoneAccess** property to **false**: `[SecurityRole("Customers", false)] [SecurityRole("Managers", false)]`

Incorrect Answers

B: We are not interested in configuring a transaction.

C: Incomplete.

E: The `IsCallerInRole` method determines whether the caller is in the specified role. We must specify a single role, we cannot specify two roles.

Question: 70

You create a collection of serviced components that performs bank transfers for XYZ Ltd. All the components are marked with the `Transaction(TransactionOption.Required)` attribute. All the methods in the components are marked with the `AutoComplete()` attribute. You discover that incorrect balance amounts are being transferred. You decide to debug the components. During debugging, a `System.Runtime.InteropServices.COMException` is thrown. The `HRESULT` for the exception is `0x8004E002`. The exception includes the following message: "The root transaction wanted to commit, but transaction aborted."

You find that this exception occurs only during the debugging session, and not when the components run outside of the debugger. This exception is preventing you from continuing to debug the components. You need to resolve this problem. What should you do?

- A. Remove the `AutoComplete` attribute from each method. Within each method implementation, add calls to the `ContextUtil.SetComplete()` and `ContextUtil.SetAbort()` methods
- B. Remove the `AutoComplete` attribute from each method. Within each method implementation, add calls to the `ContextUtil.MyTransactionVote` and `ContextUtil.DeactivateOnReturn` properties.
- C. Increase the transaction timeout in the Component Services tool by using the **Properties** dialog box for My Computer.
- D. Replace each method implementation with the following code segment:
Try ' The original method implementation goes here. Finally
`ContextUtil.SetComplete()` End Try.

Answer: C**Explanation:**

The debugging process makes the execution time longer. The transactions will get timed out. We must therefore increase the transaction timeout interval.

Note:

A `COMException` is thrown when an unrecognized `HRESULT` is returned from a COM method call.

Reference:

.NET Framework Class Library, `COMException` Class [Visual Basic]

Incorrect Answers Note: The COM+ done bit determines how long the object remains active after finishing its work and can affect the duration of a transaction. The consistent bit casts a vote to commit or abort the transaction in which it executes, and the done bit finalizes the vote.

A: The `ContextUtil.SetComplete` method sets the consistent bit and the done bit to true in the COM+ context. The `ContextUtil.SetAbort` method sets the consistent bit to false and the done bit to true in the COM+ context.

B: The `ContextUtil.MyTransactionVote` property gets or sets the consistent bit in the COM+ context. The `ContextUtil.DeactivateOnReturn` property gets or sets the done bit in the COM+ context.

D: The ContextUtil.SetComplete method sets the consistent bit and the done bit to true in the COM+ context. If asked, the COM+ context will commit the current transaction, and the object is deactivated on method return.

Question: 71

You create an XML Web service named myService. This service exposes a Web method named MyMethod. You need to register myService in UDDI. First, you add a new business name and a new tModel. You now need to list a valid access point to myService.

Which URL should you use?

- A. <http://XYZServer/AppPath/myService>
- B. <http://XYZServer/AppPath/myService=wsdl>
- C. <http://XYZServer/AppPath/myService.asmx>
- D. <http://XYZServer/AppPath/myService.asmx?MyMethod>

Answer: C

Explanation:

XML Web services are access through Web browser using an URL. The URL to access an XML Web service has the format: <http://servername/apppath/webservicename.asmx>

The XML Web service's HTML description file is displayed. The XML Web service's HTML description page shows you all the XML Web service methods supported by a particular XML Web service, including a valid access to the method..

Note:

The UDDI (Universal Description, Discovery and Integration) specifications define a standard way to publish and discover information about XML Web services. The XML schemas associated with UDDI define four types of information that would enable a developer to use a published XML Web service. These are: business information, service information, binding information, and information about specifications for services.

Reference:

.NET Framework Developer's Guide, Accessing XML Web Services from a Browser [Visual Basic]

Incorrect Answers

A: The .asmx extension must be specified as well.

B: Use of Web Services Description Language (WSDL) is not required (and the syntax is incorrect as well).

D: This is not the format used to access a method within a XML Web service. The format to directly access an method within a service is: <http://servername/appath/webservicename.asmx/Methodname?parameter=value>

Question: 72

You create a serviced component named BankTransfer. BankTransfer is in a COM+ application named XYZ Bank. BankTransfer is secured by using the SecurityRole attribute for the Tellers and Managers roles.

You want members of the XYZBankTellers group to be assigned to the Tellers role.

What should you do?

- A. Add another SecurityRole attribute to the BankTransfer class for the XYZBankTellers group.
- B. Modify the Tellers SecurityRole attribute on the BankTransfer class to include the XYZBankTellers group.
- C. Use the Component Services tool to add a new role named XYZBankTellers.
- D. Use the Component Services tool to add the XYZBankTellers group to the existing Tellers role.

Answer: D

Question: 73

You create an XML Web service named XYZ1 that exposed your company's inventory data. This data is used by other companies to place orders. XYZ1 must conform to existing formatting standards for inventory data.

You deploy XYZ1. You discover that some client applications are rejecting your XML formatting because the XML is inconsistent with the expected standard. You want to debug this problem by tracing the XML responses.

What should you do?

- A. In the Web.config file, enable tracing by setting the enabled attribute of the trace element to **"true"**.
- B. Inside each Web method, use the Debug class to write the contents of the inherited Context.Response property to a log file.
- C. Create a SOAP extension to log the SoapMessageStage.AfterSerialize output to a log file.
- D. On each Web method, use the SoapHeader attribute to map all SOAP headers to a member variable for the XYZ1 class. Then use the Trace.WriteLine method to log the headers to a log file.

Answer: C

Explanation:

The AfterSerialize stage occurs after a SoapMessage is serialized, but before the SOAP message is sent over the wire. Logging the output of this stage is useful in this scenario.

Reference:

.NET Framework Class Library, SoapMessageStage Enumeration [Visual Basic]

Question: 74

You are creating a serviced component named EXComponent that will be distributed to your customers. You are also creating a setup project that will register the component in the global assembly cache on each customer's computer.

You anticipate that there will be future updates to EXComponent that you will provide to your customers. All updates to EXComponent will be backward compatible. You will create similar setup projects for each update of EXComponent that will register the updated assembly in the global assembly cache.

You need to ensure that any applications on your customers' computer that reference EXComponent use the most recent version of the component.

Which action or actions should you take? (Choose all that apply)

- A. Sign EXComponent by using a strong name.
- B. Compile EXComponent as a satellite assembly.
- C. Include a publisher policy file that is registered in the global assembly cache on your customer's computers.
- D. Increment the assembly version for each update of EXComponent.
- E. Add an application configuration file to EXComponent that includes assembly binding information that redirects prior versions to the updated version.

Answer: A, C & D

Explanation:

A: We must use a strong name for ESComponent.

Note:

You cannot redirect versions for assemblies that are not strong-named. The common language runtime ignores the version for assemblies that are not strong-named.

C: Vendors of assemblies can state that applications should use a newer version of an assembly by including a publisher policy file with the upgraded assembly. In this scenario a publisher policy can be used since the newer versions of the component will be backward compatible.

D: We must make sure that we increment the assembly version for each update of the component.

Reference:

.NET Framework Developer's Guide, Redirecting Assembly Versions

Incorrect Answers

B: An satellite assembly is not required.**Note:** By definition, satellite assemblies only contain resource files. They do not contain any application code. In the satellite assembly deployment model, you create an application with one default assembly (which is the main assembly) and several satellite assemblies.

E: An application configuration file can be used to redirect one version of an assembly to another. However, it is not the preferred solution and is mostly used for non-backward compatible components.

Question: 75

You create a serviced component named HealthInfo. The component exposes patient health records. You declaratively secure HealthInfo by using role-based security.

You must ensure that the security checks are enforced. You want to prevent HealthInfo from executing if administrators turn off security for the COM+ application.

What should you do?

- A. To the project source code, add the following attribute:
<Assembly: ApplicationAccessControl(AccessChecksLevel:= AccessChecksLevelOption.ApplicationComponent)>
- B. To all methods, add the following attribute: <SecurityRole("Administrators", False)>
- C. To the beginning of all methods, add the following code segment: IfNot ConnectUtil.IsSecurityEnabled Then ContextUtil.DisableCommit() End If
- D. To the beginning of all methods, add the following code segment: IfNot ContextUtil.IsSecurityEnabled Then Throw New SecurityException(_ "Security must be enabled.") End If

Answer: D

Explanation:

We use ContextUtil.IsSecurityEnabled property to decide whether role-based security is active in the current context. If it is not active we throw a securityException. This will prevent HealthInfo from executing if security is disabled.

Reference:

.NET Framework Class Library, ContextUtil.IsSecurityEnabled Property [Visual Basic]

Incorrect Answers

A: The `AccessChecksLevelOption.ApplicationComponent` specifies the level of access checking for an application. It is not of use here.

B: Does not apply here.

C: The `ContextUtil.DisableCommit` method is used in the context of transactions. It does not apply here.

Question: 76

You create a Windows service named `FxListener` that performs financial transactions by using files in a drop directory. When a new XML file appears in the drop directory, `FxListener` opens the file and performs the financial transaction contained within the XML code.

You want updates to each XML file to be logged in the Windows application log. A `String` object named `EXMessage` contains the message to be logged.

Which code segment should you use?

- A. `EventLog.WriteEntry("FxListener", EXMessage)`
- B. `Dim log As New EventLog("Application") log.WriteEntry(EXMessage)`
- C. `Dim log As New EventLog("Application") Trace.WriteLine(log, my Message)`
- D. `Dim log As New EventLog("FxListener") log.Source = "Application" log.WriteEntry(EXMessage, EventLogEntryType.SuccessAudit)`

Answer: D

Explanation: Statement 1:

`Dim log As New EventLog("FxListener")` The `EventLog(logname)` constructor initializes a new instance of the `EventLog` class. It associates the instance with a log on the local computer.

Statement 2:

`log.Source = "Application"` We must set the `Source` property on your `EventLog` component before writing entries to the log.

Statement 3:

`log.WriteEntry(myMessage, EventLogEntryType.SuccessAudit)` The `EventLog.WriteEntry(message, EventLogEntryType)` method writes an entry of a specified `EventLogEntryType` to the event log.

Reference:

.NET Framework Class Library, `EventLog` Constructor (String) [Visual Basic] .NET Framework Class Library, `EventLog.WriteEntry` Method (String, `EventLogEntryType`) [Visual Basic].NET Framework Class Library, `EventLog.Source` Property [Visual Basic]

Incorrect Answers

A: The `EventLog.WriteEntry` method (*source, message*) writes an information type entry with the given message text to the event log, using the specified registered event source. However, we specify the Windows service `FxListener` not a valid event source. The event source must already be registered as an event source for the appropriate log.

B: We should set the `Source` property on your `EventLog` component before writing entries to the log.

C: We are writing log entries, not tracing entries.

Question: 77

You have an application named `MyApp` that contains a reference to version 1.0.0.0 of a strongly named serviced component named `XYZComponent`. This component is located in the `bin` directory of `MyApp`.

You receive version 2.0.0.0 of XYZComponent, which you install in the global assembly cache.

You reconfigure the application configuration file to redirect calls to version 2.0.0.0.

You now receive version 3.0.0.0 of XYZComponent, which you install in the global assembly cache.

You do not reconfigure the application configuration file. You then run MyApp.

Which version of XYZComponent is loaded and from which location is it loaded?

- A. Version 1.0.0.0 from the bin directory.
- B. Version 2.0.0.0 from the global assembly cache.
- C. Version 2.0.0.0 from the bin directory.
- D. Version 3.0.0.0 from the global assembly cache.

Answer: B

Explanation:

The runtime uses the following steps to resolve an assembly reference:

- 1 Determines the correct assembly version by examining applicable configuration files, including the application configuration file, publisher policy file, and machine configuration file. In this scenario the application configuration file states that Version 2.0.0.0 should be used.
- 2 Checks whether the assembly name has been bound to before and, if so, uses the previously loaded assembly.
- 3 Checks the global assembly cache. If the assembly is found there, the runtime uses this assembly. In this scenario Version 2.0.0.0 is installed in the Global assembly cache.
- 4 Probes for the assembly using additional steps.

Reference:

.NET Framework Developer's Guide, How the Runtime Locates Assemblies

Incorrect Answers

A: The application configuration file states that version 2.0.0.0 should be used.

C: The global assembly cache is checked first..

D: The application configuration file states that version 2.0.0.0 should be used. Newer versions will not be considered.

Question: 78

You create a serviced component named WorkItem that implements an interface named IWorkItem.

You want to ensure that calls to the serviced component through IWorkItem are queued.

What should you do?

- A. To WorkItem, add the following attribute: <InterfaceQueuing(True, Interface:="IWorkItem")>
- B. To WorkItem, add the following attribute: <Transaction(TransactionOption.Disabled, Isolation:=TransactionIsolationLevel.Serializable)>
- C. To the WorkItem assembly, add the following attribute: <Assembly: ApplicationQueuing(Enabled:=True, QueueListenerEnabled:=True)>
- D. In the WorkItem implementation, override the Activate method from the ServicedComponent class. In the Activate method, add the following code segment: Dim q As New Queue() q.Enqueue(Me)

Answer: A

Question: 79

You are using Visual Studio .NET to develop an application to replace a COM-based application. A former colleague began writing a .NET class for the new application. This class will be used by client applications as a COM object. You are assigned to finish writing the class.

The class includes the following code segment:

```
<ComVisible(False)> Public Class EXClass Public Sub New() 'Implementation code goes here.
End Sub <ComVisible(True)>_ Public Function EXMethod(param As String) As Integer
    Return 0 End Function <ComVisible(True)>_
    Protected Function EXOtherMethod() As Boolean
    Return True End Function <ComVisible(True)>_
    Public ReadOnly Property EXProperty() As Integer
    Get
    Return 0
    End get

    End Property 'More implementation code goes here. End
    Class
```

When this code runs, it will expose one or more methods to the client applications through COM.

Which member or members will be exposed? (Choose all that apply)

- A. EXMethod
- B. EXOtherMethod
- C. EXProperty
- D. EXClass constructor

Answer: A & C

Explanation:The ComVisible attribute must be **True** to make a member visible. Furthermore, the member must also be declared as public.

Incorrect Answers

B: A protected function is not visible.

D: ComVisible(False) ensures that the EXClass Constructor is not visible..

Question: 80

You are creating an XML Web service named Tracker to track orders for your company. Tracker includes a Web method named OrderStatus for tracking the status of individual orders. You anticipate that many client applications will use the service.

You want administrators of Tracker to be able to monitor the requests per second for OrderStatus.

Which code segment should you use?

- A. Dim counter As New PerformanceCounter("Tracker",_ "XYZ OrderStatus req/sec",
False)
- B. PerformanceCounterCategory.Create("Tracker",_ "category", "XYZ OrderStatus

req/sec", "req/sec")

- C. Dim counterData() As CounterCreationData = _ {New CounterCreationData("XYZ OrderStatus req/sec", "help", PerformanceCounterType.RateOfCountsPerSecond32)} Dim collection As New_ CounterCreationDataCollection(counterData) PerformanceCounterCategory.Create("Tracker", _ "Tracker performance counters", collection)
- D. Dim counterData() As CounterCreationData = _ {New CounterCreationData("Int32", "second", _ PerformanceCounterType.AverageTimer32)} Dim collection As New_ CounterCreationDataCollection(counterData) PerformanceCounterCategory.Create("OrderStatus", _ "requests per second", collection)}

Answer: C

Explanation:

A CounterCreationData object defines the counter type, name, and help string for a custom counter. A counter with the **RateOfCountsPerSecond32** PerformanceCounterType is a difference counter that shows the average number of operations completed during each second of the sample interval.

Reference:

.NET Framework Class Library, CounterCreationData Class [Visual Basic] .NET Framework Class Library, PerformanceCounterType Enumeration [Visual Basic]

Incorrect Answers

- A:** The use of the PerformanceCounter constructor is incorrect. The first parameter should be categoryName and the second parameter should be counterName.
- B:** Just creating a new PerformanceCounterCategory would not enable us to use any new counters.
- D:** We want to measure the requests per second not the average time it takes to complete the process. We should not use the PerformanceCounterType of AverageTimer32. **Note:** An AverageTimer32 counter is an average counter that measures the time it takes, on average, to complete a process or operation..

Question: 81

You create a Windows service named EXService that quires a table named Orders in a Microsoft SQL Server database. You want EXService to check every 30 seconds for new rows in Orders. You create the following method in myService:

```
Private Sub ProcessOrders(ByVal source As Object, ByVal eventArguments As Timers.ElapsedEventArgs) 'Code to process orders goes here. End Sub
```

You need to add additional code to EXService to invoke the ProcessOrders method.

What should you do?

- A. **To the OnStart method, add the following code segment:** Dim EXTimer As New Timers.Timer() AddHandler EXTimer.Elapsed, AddressOf ProcessOrders EXTimer.Interval = 30000 EXTimer.Enabled = True
- B. **To the OnCustomCommand method, add the following code segment:** Dim EXTimer As New Timers. Timer() AddHandler EXTimer.Elapsed, AddressOf ProcessOrders EXTimer.Interval = 30000 EXTimer.Enabled = True
- C. **To the OnStart method, add the following code segment:** Dim EXTimer As New Timers. Timer() AddHandler EXTimer.Elapsed, AddressOf ProcessOrders EXTimer.Interval = 30000 EXTimer.AutoReset = True
- D. **To the OnCustomCommand method, add the following code segment:** Dim EXTimer As New Timers. Timer() AddHandler EXTimer.Elapsed, AddressOf ProcessOrders EXTimer.Interval = 30000 EXTimer.AutoReset = True

Answer: A

Explanation:.

Use OnStart to specify the processing that occurs when the service receives a Start command. OnStart is the method in which you specify the behavior of the service. OnStart can take arguments as a way to pass data, but this usage is rare. After configuration of the timer we must start it by raising the Enabled event.

Reference:

.NET Framework Class Library, ServiceBase.OnStart Method [Visual Basic] .NET Framework Class Library, Timer Members .NET Framework Class Library, ServiceBase.OnCustomCommand Method [Visual Basic]

Incorrect AnswersB, D: OnCustomCommand executes when the Service Control Manager (SCM) passes a custom command to the service. The OnCustomCommand is not a good place to place define and onfigure a timer.

C: The Timer.AutoReset property indicates whether the Timer should raise the Elapsed event each time the specified Interval elapses or only after the first time it elapses. The default value is True, so there is no need to set to true in this scenario. Furthermore, the timer will not start until the Enabled property is set to true.

Question: 82

You are using Visual Studio .NET to develop an application named NewApp to replace a COM-based application EXOrderProcessing. You are assigned to write a .NET class that will be used by client applications as a COM object. Your class code is being moved and modified while development continues on the new application.

You want to minimize any possible disruption to the COM interface as a result of code changes.

Which code segment should you use?

- A. `<ClassInterface()> Public Class MyClassToExpose Public Function Calc()as Integer 'Implementation code goes here. End Function
End Class`
- B. `<Guid("9ED54F84-A89D-4fcd-A854-44251E92F09")> Public Interface IMyClassToExpose Public Function Calc() as Integer
End Interface
<ClassInterface(ClassInterfaceType.None)>_ Public Class MyClassToExpose Implements IMyClassToExpose Public Function
Calc() as Integer 'Implementation code goes here.
End Function. End Class`
- C. `<Guid("9ED54F84-A89D-4fcd-A854-44251E92F09"), _ComVisible(true)>_Public Class MyClassToExpose Public Function
Calc() as Integer 'Implementation code goes here. End Function End class`
- D. `<ClassInterface(ClassInterfaceType.AutoDispatch)> Public Class MyClassToExpose Public Function Calc() as Integer '
Implementation code goes here. End Function End class`

Answer: D

Explanation:

By using AutoDispatch, we indicate that the class only supports late binding for COM clients. A dispinterface for the class is automatically exposed to COM clients on request. The type library produced by TlbExp does not contain type information for the dispinterface in order to prevent clients from caching the Displd s of the interface. The dispinterface does not exhibit the versioning problems.

Reference:

.NET Framework Class Library, ClassInterfaceType Enumeration

Incorrect Answers**A, C:** The interface would be disrupted if the implementation of it would be changed.

B: The keyword 'Public' is not valid in an interface method declaration as used for Function Calc.

Question: 83

You are creating a .NET Remoting object. You want to add code to the object to log error messages and warning messages. You want to log messages written to both a log file and to the Windows application log.

Which code segment should you use?

- A. Dim eventLog As New EventLog("remobj") Dim fileLog As FileStream = File.Create("remobj.log") Trace.WriteLine(eventLog, "XYZ sample message") Trace.WriteLine(fileLog, "XYZ sample message")
- B. Dim eventLog as New EventLog("remobj") Dim fileLog As FileStream = File.Create("remobj.log"). Trace.Write(eventLog) Trace.Write(fileLog) Trace.WriteLine("XYZ sample message")
- C. Trace.Listeners.Add(new EventLogTraceListener("remobj")) Trace.Listeners.Add(_
new TextFileTraceListener("remobj.log")) Trace.WriteLine("XYZ sample message")
- D. Trace.Listeners.Add(new EventLogTraceListener()) Trace.Listeners.Add(_
new TextFileTraceListener("remobj.log")) Trace.WriteLine("XYZ sample message")

Answer: C

Explanation:

Listeners direct the tracing output to an appropriate target, such as a log, window, or text file. An EventLogTraceListener redirects output to an event log. A TextWriterTraceListener redirects output to an instance of the TextWriter class. We should take care to use the **new EventLogTraceListener("remobj")** constructor.

Note:

Any listener in the Listeners collection gets the same messages from the trace output methods. If we set up two listeners: a TextWriterTraceListener and an EventLogTraceListener. Each listener receives the same message. The TextWriterTraceListener would direct its output to a stream, and the EventLogTraceListener would direct its output to an event log.

Reference:

Visual Basic and Visual C# Concepts, Trace Listeners .NET Framework Class Library, EventLogTraceListener Class [Visual Basic]

Incorrect Answers

A:

The EventLog object provides interaction with Windows event logs and filestreams enables writing of data to files. However, they are not appropriate for logging warning and error messages.

B:

The following statements are incorrect. Trace.Write(eventLog) Trace.Write(fileLog) The correct usage is Trace.Write(Parameter), where Parameter is either an Object or a String that should be written.

D:

The EventLogTraceListener constructor() (with no parameter) initializes a new instance of the EventLogTraceListener class without a trace listener.

Question: 84

You are using Visual Studio .NET to develop an application. You have a common business logic component that was created in COM that you want to use until you can replace it with Visual Studio .NET code..

You create the Visual Studio .NET solution for the new application. You want to use the COM component in your Visual Studio .NET solution.

What should you do?

- A. Register the COM component by using Regsvr32.exe.
- B. Run the Type Library Exporter (Tlbexp.exe) and pass the COM component as the filename parameter.
- C. Use Visual Studio .NET to add a reference to the COM component.
- D. Run the Assembly Registration tool (Regasm.exe) and pass the COM component as the filename parameter.

Answer: C

Explanation:

We simply need to add a reference to the COM component.

Reference:

.NET Framework Developer's Guide, Registering Assemblies with COM .NET Framework Tools, .NET Framework Tools

Incorrect Answers

- A:** Regsvr32 is not required in Visual Studio .NET. Regsvr32 was used for Visual Basic 6.0, and for Visual C++ 6.0 components.
- B:** Tlbexp.exe generates a type library from a common language runtime assembly. Tlbexp.exe generates a type library but does not register it.
- D:** We only use Regasm.exe when we need to access .NET Framework classes in COM Clients. However, in this scenario we want to access the COM Component into our Visual Studio .NET solution.

Note:

To register or unregister a .NET class with COM, you must run a command-line tool called the Assembly Registration Tool (Regasm.exe). Regasm.exe adds information about the class to the system registry so COM clients can use the .NET class transparently.

Question: 85

You are creating a serviced component that will perform several distributed transactions across different databases. The serviced component will be called from managed and unmanaged client applications.

You create a new class library project. You write code in the class modules to implement the logic.

You want to detect and correct any registration errors before any client applications use the component.

What should you do next?

- A. Assign a string name to the assembly. Compile the assembly. Run the .NET Services Installation tool (Regsvcs.exe) to add the component to Component Services.
- B. Run the Type Library Exporter (Tlbexp.exe) to export the definition for the assembly..
- C. Assign a string name for the assembly. Compile the assembly. Run the Global Assembly Cache tool (Gacutil.exe) to add the component to the global assembly cache.
- D. Use the Assembly Registration tool (Regasm.exe) to create entries in the registry that describe the assembly.

Answer: A

Explanation:

The .NET Services Installation tool performs loads and registers an assembly, generates, registers, and installs a type library into a specified COM+ 1.0 application, and configures services that you have added programmatically to your class.

Reference:

.NET Framework Tools, .NET Services Installation Tool (Regsvcs.exe)

Incorrect Answers

B: The Type Library Exporter generates a type library that describes the types defined in a common language runtime assembly.

C: The Global Assembly Cache tool allows you to view and manipulate the contents of the global assembly cache and download cache.

D: The Assembly Registration tool reads the metadata within an assembly and adds the necessary entries to the registry, which allows COM clients to create .NET Framework classes transparently.

Question: 86

You create an XML Web service that uses the Trace class to output error messages, warning messages, and informational messages to a log file. The service uses a TraceSwitch object to filter the trace output. The DisplayName property of the TraceSwitch object is "XYZSwitch". On a development computer, all trace output appears in the log file. You move the service to a production computer. You must configure the production XML Web service to output only error messages to the log file. What should you do?

- A. To the Web.config file, add the following code segment: `<system.diagnostics> <switches> <add name="XYZSwitch" value="1" /> </switches> </system.diagnostics>`
- B. To the Web.config file, add the following code segment: `<system.diagnostics> <switches> <add name="XYZSwitch" value="TraceSwitch" /> </switches> </system.diagnostics>`
- C. To the Web.config file, add the following code segment: `<system.diagnostics> <switches> <add name="TraceSwitch" value="1" /> </switches> </system.diagnostics>`
- D. To the Web.config file, add the following code segment: `<system.diagnostics> <switches> <add name="TraceSwitch" value="XYZSwitch" /> </switches> </system.diagnostics>`

Answer: A**Explanation:**

In the Web.config file we should specify the name of the switch (XYZSwitch) and the appropriate Tracelevel through the value attribute. Tracelevel corresponds to the values 1 through 4. Tracelevel 1 only displays error messages.

Note:

A switch provides an efficient mechanism for controlling tracing and debugging output at run time using external settings. The Switch class implements default behavior for switches, allowing you to change the switch level at run time.

Reference:

.NET Framework Class Library, Switch Class [Visual Basic] Visual Basic and Visual C# Concepts, Trace Switches

Incorrect Answers

B: Incorrectly the value attribute is set to "TraceSwitch". Valid Tracelevel values are 1 through 4.

C, D: We should specify the name of the switch with a name attribute in the Web.config file. We must specify XYZSwitch, not

TraceSwitch.

Question: 87

You create an XML Web service named PhoneNumberService that returns the telephone numbers of people in a specified geographical region. If an error occurs when the service is processing requests, a custom application exception named PhoneNumberException is thrown.

You create an ASP.NET application named EXPhoneBook that contains a Web reference to PhoneNumberService. You need to wrap any calls made to PhoneNumberService in a try/catch block to catch any PhoneNumberException that may be thrown.

Which two code segments are possible ways to achieve this goal? (Each correct answer presents a complete solution. Choose two)

- A. Try ' Code to call PhoneNumberService method goes here.
Catch ex As SoapException ' Handle the exception End Try
- B. Try ' Code to call PhoneNumberService method goes
 here. Catch ex As SoapHeaderException
 ' Handle the exception..
End Try
- C. Try ' Code to call PhoneNumberService method goes
 here. Catch ex As Exception
 ' Handle the exception
End Try
- D. Try ' Code to call PhoneNumberService method goes
 here. Catch ex As ApplicationException
 ' Handle the exception. End Try

Answer: A & C.

Explanation:

A: XML Web service methods can generate a SoapException by simply throwing an exception within the XML Web service method. If the client accessed the method over SOAP, the exception is caught on the server and wrapped inside a new SoapException. This also applies even if the custom exception class 'PhoneNumberException' is inherited from ApplicationException class.

C: The Exception class is the base class for all exceptions. Any exception would be intercepted.

Reference:

.NET Framework Class Library, SoapException Class [Visual Basic] .NET Framework Class Library, Exception Class [Visual Basic]
.NET Framework Class Library, ApplicationException Class [Visual Basic]

Incorrect Answers

B: The SoapHeaderException exception that is thrown when an XML Web service method is called over SOAP and an exception occur during processing of the SOAP header.

D: An applicationException is thrown by a user program, not by the common language runtime. In this scenario we use a Web Service, however.

Question: 88

You create a class named Billings that stored billing information for XYZ Inc. Billings connects to a local Microsoft SQL Server database to store the billing information. Billing must run under a local user account to connect to the database.

The billing class includes the following code:

Public Class Billings

Public Sub Submit(By Val name As String, ByVal As DateTime, By Val hours As Double) ' Method implementation goes here. End Sub.

' Private implementation goes here. End Class

You want to ensure that client applications on other computers can use Billings by using .NET Remoting.

What should you do?

- A. Derive the Billings class from MarshalByRefObject.
- B. Implement the ISerializable interface in the Billings class.
- C. Implement the IRemoteDispatch interface in the Billings class.
- D. To the Billings class, add the following attribute: <Serializable(>

Answer: A

Explanation:

The MarshalByRefObject enables access to objects across application domain boundaries in applications that support remoting.

Reference:

.NET Framework Class Library, MarshalByRefObject Class .NET Framework Class Library, ISerializable Interface

Incorrect Answers

- B:** The ISerializable interface allows an object to take part in its own serialization and deserialization. It would not enable other computer to using the interface by .NET remoting however.
- C:** The IRemoteDispatch interface supports the .NET Framework infrastructure and is not intended to be used directly from your code.
- D:** The Serializable attribute would not by itself enable other computer to using the interface by .NET remoting.

Question: 89

You create an XML Web service that uses an existing COM component. You implement the service so that it does not return COM exceptions to its callers. Instead, the service translates the COM exceptions into more specific exception types based on the HRESULT, as shown in the following code segment:

```
<WebMethod> Try ' Code to call the COM component goes here. Catch ce As COMException Select Case ce.ErrorCode Case &H80070005 Throw New SecurityException("Access denied", ce) ' Additional case statements go here. End Select End Try.
```

You want to record the original COM exception that was thrown. What should you do?

- A. At the beginning of the catch block, add the following code segment: Console.WriteLine("{0} COMException caught.", ce)
- B. At the beginning of the catch block, add the following code segment: Context.Trace.Write(ce, "COMException caught.")
- C. Within each case statement add the following code segment: ce.ToString()
- D. Within each case statement, add the following code statement: Console.WriteLine("{0} COMException caught.", ce.StackTrace)

Answer: B

Explanation:

The original exception is caught in the following statement: `Catch ce As COMException` We should immediately save this information with the following statement: `Context.Trace.Write(ce, "COMException caught.")`

Reference:

.NET Framework Class Library, `Trace.Write Method (String, String)` [Visual Basic]

Incorrect Answers

A: `Console.WriteLine` only displays the message on the console. The message will not be recorded.

C: We should only record the statement in the beginning of the catch block. Furthermore, `ce.ToString()` will not record the exception.

D: We should only record the statement in the beginning of the catch block. Furthermore, `Console.WriteLine` only displays the message on the console. The message will not be recorded.

Question: 90

You are developing a Windows-based application that requires the use of a calculation named `CalculateValue`. This function includes the following signature:

`CalculateValue (x As Integer) As Integer` `CalculateValue` is located in an unmanaged DLL named `UsefulFunctions.dll`, and is not part of a COM interface. You need to be able to use `CalculateValue` in your application. Your project directory contains a copy of `UsefulFunctions.dll`.

While you are working in Debug mode, you attempt to run your application. However, a `System.DllNotFoundException` is thrown..

You verify that you are using the correct function name. You also verify that the code in the DLL exposes `CalculateValue`. You have not modified the project assembly, and you have not modified machine-level security. You need to test your application immediately.

What should you do?

- A. Move `UsefulFunctions.dll` to your project's bin directory.
- B. Move `UsefulFunctions.dll` to your project's Debug directory.
- C. Immediately before the declaration of `CalculateValue`, add the following code segment:
`<SuppressUnmanagedCodeSecurityAttribute(>_`
- D. Immediately before the call to `CalculateValue`, add the following code segment: `Dim perm As New _ SecurityPermission(_ SecurityPermissionFlag.UnmanagedCode) perm.Assert()`

Answer: D

Explanation:

The `UnmanagedCode SecurityPermissionFlag` denotes the ability to call unmanaged code. The proposed solution gives permission to run unmanaged code.

Note:

The `DllNotFoundException` is thrown when a DLL specified in a DLL import cannot be found.

Reference:

.NET Framework Class Library, `DllNotFoundException Class` [Visual Basic] .NET Framework Class Library, `SuppressUnmanagedCodeSecurityAttribute Class` [Visual Basic] .NET Framework Class Library, `SecurityPermissionFlag Enumeration` [Visual Basic]

Incorrect Answers

A: The dll is located in the Project folder. The debugger should be able to locate the dll file in this folder.

B: No special directory is used for debugging.

C: The SuppressUnmanagedCodeSecurityAttribute allows managed code to call into unmanaged code without a stack walk. It can be applied to methods that want to call into native code without incurring the performance loss of a run-time security check when doing so. It only affects performance and would not solve the problem of this scenario.

Question: 91

You have a .NET Remoting object named XYZOrder. The XYZOrder class allows remote client applications to submit orders in batches. Each XYZOrder object holds state information that is specific to each remote client application. The XYZOrder class has overloaded constructors for initializing an object. You want to develop a server application to host XYZOrder objects. What should you do?

- A. Create a Windows service, and register XYZOrder as a client-activated object.
- B. Create a Windows service, and register XYZOrder as a server-activated Singleton object.
- C. Host XYZOrder in Internet Information Services (IIS) and create a Web.config file to register XYZOrder as a server-activated SingleCall object.
- D. Host XYZOrder in Internet Information Services (IIS) and create a Web.config file to register XYZOrder as a server-activated object with an infinite lease.

Answer: A

Explanation:

Client-activated objects are objects whose lifetimes are controlled by the calling application domain. This is the appropriate solution in this scenario.

Reference:

.NET Framework Developer's Guide, Client Activation .NET Framework Developer's Guide, Server Activation

Incorrect Answers B, C: Singleton types never have more than one instance at any one time.

If an instance exists, all client requests are serviced by that instance.

D: Server-activated objects with an infinite lease would not be appropriate.

Question: 92

You create an XML Web service that calculates taxes. You deploy the service to a production computer named XYZ1. The URL of the production XML Web service is <http://XYZ1/WS/TaxCalc.asmx>.

The service does not support all international tax rates. You want to find out which unsupported tax rates are being requested by users. If a user requests a tax rate that is not supported, the service records the request by using a trace message. You want to view the unsupported rates that have been requested. Which two actions should you take? (Each correct answer presents part of the solution. Choose two)

- A. Modify the trace element in the Web.config file of the service by setting the pageOutput attribute to **"true"**.
- B. Modify the trace element in the Web.config file of the service by setting the enabled attribute to **"true"**.
- C. To the constructor of the TaxCalc class, add the following code segment: `Public Sub New() InitializeComponent() Trace.AutoFlush = True End Sub`
- D. To the constructor of the TaxCalc class, add the following code segment: `Public Sub New() InitializeComponent(). Trace.Flush() End Sub`
- E. View the page at <http://XYZ1/WS/TaxCalc.asmx>.
- F. View the page at <http://XYZ1/WS/Trace.axd>.

Answer: B & F

Explanation:

B: You can enable tracing for an entire application in the web.config file in the application's root directory. We should set the trace attribute enabled to true: `<trace enabled="true"...`

F: Once you have enabled tracing for your application, when each page in the application is requested, it will execute any trace statements that it contains. You can view these statements and the additional trace information in the trace viewer. You can view the trace viewer by requesting **trace.axd** from the root of your application directory.

Reference:

.NET Framework Developer's Guide, Enabling Application-Level Tracing

Incorrect Answers

A: If you want trace information to appear appended to the end of the page that it is associated with, set the pageOutput attribute in the tracing configuration section of the web.config file to true. However, only you, and not the users should view the tracing information.

C: Setting AutoFlush to true means that data will be flushed from the buffer to the stream. This will not help on providing trace information.

D: The Trace.Flush method flushes the output buffer, and causes buffered data to be written to the Listeners.

E: This is the application file. We don't want it to show any trace information.

Question: 93

You are creating an XML Web service named EXStockService. The service contains a Web method named RetrieveStockInfo. RetrieveStockInfo takes as input a stock symbol and returns a DataSet object that contains information about that stock. You want to capture all incoming SOAP messages in RetrieveStockInfo and write the messages to a file for future processing. What should you do?

- A. Enable sessions in RetrieveStockInfo.
- B. Create a SOAP extension for RetrieveStockInfo.
- C. Apply a SoapHeader attribute to RetrieveStockInfo.
- D. Apply a SoapRpcMethod attribute to RetrieveStockInfo..

Answer: B

Explanation:

The ASP.NET SOAP extension architecture revolves around an extension that can inspect or modify a message at specific stages in message processing on either the client or the server. A SOAP extension would allow the capture and processing of SOAP messages.

Reference:

.NET Framework Class Library, SoapExtension Class

Incorrect Answers

A: Would not help.

C: SoapHeader is applied to an XML Web service method or an XML Web service client to specify a SOAP header the Web service method or XML Web service client can process.

D: Applying the SoapRpcMethodAttribute to a method specifies that SOAP messages sent to and from the method use RPC formatting. This would not help in capturing the SOAP messages however.

Question: 94

You have a .NET Remoting object named Promotions. The Promotions class allows remote client applications to add new product promotions to an online catalog application. The Promotions class is an assembly file named XYZ.dll.

You have an Internet Information Services (IIS) virtual directory named PromotionsObject. The XYZ.dll file is in the PromotionsObject\bin directory. You want to host the Promotions class in IIS.

What should you do?

- A. Create a Web.config file that includes the following code segment:


```
<appSettings>
  add key="activation" value="wellknown"/> </appSettings> <httpHandlers>
  <add verb="*" path="Promotions.rem" type="XYZ, Promotions"/> </httpHandlers>
```
- B. Create a Web.config file that includes the following code segment:


```
<appSettings> <add key="activation" value="wellknown"/>
<add key="mode" value="SingleCall"/> </appSettings> <httpHandlers>
  <add verb="*" path="Promotions.rem" type="XYZ, Promotions"/> </httpHandlers>
```
- C. Create a Web.config file that includes the following code segment:


```
<configuration> <system.runtime.remoting>
  <application>
    <service>
      <wellknown>. mode="SingleCall" objectUri="Promotions.rem" type="Promotions,XYZ"/>
    </service><channels> <channel ref="http"/>
  </channels>
</application></system.runtime.remoting> </configuration>
```
- D. Create a Web.config file that includes the following code segment:


```
<configuration> <system.runtime.remoting>
  <application> <service>
    <wellknown mode="SingleCall" objectUri="Promotions.rem"
      type="Promotions,XYZ"/>
    </service><channels>
      <channel ref="tcp" port="8080"> <serverProviders> <formatter ref="soap"/>
    </serverProviders> </channel> </channels>
  </application> </system.runtime.remoting>
</configuration>
```

Answer: C

Explanation:

The HTTP channel does not require a custom-written listener because IIS provides the listening functionality. Advantages of using IIS as the HTTP listener include: ease of configuration, scalability, and process recycling.

Reference:

Visual Studio Samples: Fitch and Mather 7.0, .NET Remoting

Incorrect Answers A, B: These are inadequate since we want to host the application on the IIS server. We must, for example, configure channels.
D: TCP channel would require development of an extra listener to process the request that enters the TCP channel.

Question: 95

You are creating an XML Web service named CustomerService. This service receives an XML file of customer information in the following format: <CustomerData> <Customers> <CustomerID>1234</CustomerID>

<CompanyName>Adventure Works</CompanyName> </Customers> <Customers> <CustomerID>2345</CustomerID>

<CompanyName>XYZ Ltd</CompanyName> </Customers> </CustomerData>

You want to parse the XML file to build a flat file that will be used by another application. The flat file should be in the following format:

CustomerID=1234 CompanyName=Adventure Works CustomerID=2345 CompanyName=Coho Winery

You write the following code: Dim myXML.Doc As New XmlDocument() myXML.DOC.LOAD("C:\TableSchemaXML.xml") Dim myRootNode As XmlNode = myXML.Doc.FirstChild Dim customerOutput As String Dim curNode As XmlNode Dim i As Integer

You need to write the code that will parse the document and build the customerOutput string that will be used to write each row in the file.

Which code segment should you use?

- A. Dim myNodeList As XmlNodeList =
_myRootNode.SelectNodes("/CustomerData/Customers") For Each curNode In myNodeList If curNode.HasChildNodes Then
customerOutput = "" For i = 0 To curNode.ChildNodes.Count - 1 customerOutput = curNode.ChildNodes(i).Name & _ "=" +
curNode.ChildNodes(i).InnerText ' Code to write the output files goes here. Next i End If Next
- B. Dim myNodeList As XmlNodeList = _myRootNode.SelectNodes("/CustomerData/Customers") For Each curNode In
myNodeList If curNode.HasChildNodes Then customerOutput = "" For i = 0 To curNode.ChildNodes.Count - 1 customerOutput
= curNode.ChildNodes(i).Name & _ "=" + curNode.ChildNodes(i).Value 'Code to write the output file goes here. Next i. End If
Next
- C. Dim myNodeList As XmlNodeList = myRootNode.SelectNodes("/Customers") For Each curNode In myNodeList If
curNode.HasChildNodes Then customerOutput = "" For i = 0 To curNode.ChildNodes.Count -1 customerOutput =
curNode.ChildNodes(i).Name & _ "=" + curNode.ChildNodes(i).InnerText 'Code to Write the output file goes here. Next i End If
Next
- D. Dim myNodeList As XmlNodeList = _myRootNode.SelectNodes("/Customers") For Each curNode In myNodeList If
curNode.HasChildNodes Then customerOutput = "" For i = 0 To curNode.ChildNodes.Count -1 customerOutput =_
curNode.ChildNodes(i).Attributes(0).value + "=" & _curNode.ChildNodes(i).Attributes(1).Value 'Code to write the output file goes
here. Next i End If
Next

Answer: A

Explanation:The **SelectNodes** property selects a list of nodes matching the XPath expression. We should use the XPath expression /CustomerData/Customers to match the format in the XML file.

The **InnerText** property gets or sets the concatenated values of the node and all its children.

Reference:

.NET Framework Class Library, XmlElement Members .NET Framework Class Library, XmlNode.SelectNodes Method [Visual Basic]

Incorrect Answers

B: The Value property gets or sets the value of the current node only.

C: The XPath expression used, /Customers, does not match the XML file.

D: The XPath expression used, /Customers, does not match the XML file. Furthermore we should use the InnerText property, not the Value property..

Question: 96

You are creating an XML Web service named InventoryService for a nationwide clothing retailer XYZ Inc. The service provides near real-time inventory information to individual store managers by using a virtual private network (VPN).

InventoryService exposes a Web method named RetrieveInventory that returns inventory information to the caller. You configure Internet Information Services (IIS) and InventoryService to use Integrated Windows authentication.

You need to write code in InventoryService to ensure that only members of the Manager group can access RetrieveInventory.

What should you do?

- A. To the <authorization> section of the Web.config file, add the following element: <allow roles="Manager" />
- B. To the <authorization> section of the Web.config file, add the following element: <allow users="Manager" />
- C. In RetrieveInventory, add the following code segment: If User.Identity.Name.Equals("Manager") Then ' Code to retrieve inventory data goes here. End If
- D. In RetrieveInventory, add the following code segment: If User.Identity.AuthenticationType.Equals("Manager")_ Then ' Code to retrieve inventory data goes here. End If

Answer: A

Explanation:

We should use the authorization element of the Web.config file to allow the Manager group with the <allow roles="Manager" /> element.

Reference:

.NET Framework General Reference, <authorization> Element

Incorrect Answers

B: This proposed solution would allow the user name Manager access, not the group.

C: The Name property gets the user's Windows logon name. We cannot compare this to a group name.

D: The proposed solution is incorrect. The AuthenticationType cannot be equal to "Manager"..

Question: 97

You create a class named BankAccount that represents a customer's bank account. BankAccount includes the following code segment:

```
Public Class BankAccount
    Public ReadOnly Property AccountId() As String
    Get
        Return acctId
    End Get
End Property
Public ReadOnly Property Balance() As Decimal
    Get
        Return bal
    End Get
End Property
Sub New(ByVal AccountId As String, ByVal balance As Decimal)
    acctId = AccountId
    bal = balance
End Sub
Private acctId As String
Private Bal As Decimal
End Class
```

You are now creating a .NET remoting object named Teller. The Teller Class returns lists of BankAccount objects.

You anticipate that large numbers of client applications will use the Teller object to retrieve BankAccount objects. You must ensure that network traffic is minimized. What should you do?

- A. Add the Serializable attribute to the BankAccount class.
- B. Add the NonSerialized attribute to the BankAccount class.
- C. Derive the BankAccount class from MarshalByRefObject.

D. Implement the ISerializable interface in the BankAccount class.

Answer: D

Explanation:

The basic concept of object serialization is the ability to read and write objects to streams. This would, in this scenario, ensure that network traffic is minimized. The most effective method to implement serialization is to implement ISerializable interface and serialize only the required fields.

Reference:

.NET Framework Developer's Guide, Serialization guidelines .NET Framework Class Library, ISerializable Interface

Incorrect Answers

A: It is possible to serialize the entire class with the Serializable attribute. However, this would not minimize network traffic.

B: We want to serialize to minimize network traffic through use of streams.

C: The MarshalByRefObject enables access to objects across application domain boundaries in applications that support remoting. This is not called for in this scenario.

Question: 98

You are creating an XML Web service named DistributionService. This service must be able to access and manipulate data in a table named XYZInventory in a Microsoft SQL Server database.

Some functions within Distribution Service need the inventory data to be exposed as XML data. Other functions within DistributionService need the inventory data to be exposed as a DataSet object.

You need to create the object that will provide this data access.

Which object should you use?

- A. XmlDocument
- B. XmlDocumentFragment
- C. XPathDocument
- D. XmlDataDocument

Answer: D

Explanation:

XmlDataDocuments allows structured data to be stored, retrieved, and manipulated through a relational DataSet. XMLDataDocuments enables you to load either relational data or XML data and manipulate that data

Reference:

.NET Framework Class Library, XmlDataDocument Class [Visual Basic]

Incorrect Answers

A: XmlDocument does not support relational data.

B: An XmlDocumentFragment object represents a lightweight object that is useful for tree insert operations.

C: XPathDocument provides a fast and performant read-only cache for XML document processing.

Question: 99

You develop an application that uses a Windows Form, a Microsoft SQL Server database, and several database components. You want to restrict users from writing their own applications to access your application's database components.

You need to configure your database component assemblies to accomplish this goal.

What should you do?.

- A. Apply the StrongNameIdentityPermission attribute, and specify SecurityAction.LinkDemand. Set the PublicKey property to the public key of the key file you use to sign your application's assemblies.
- B. Apply the StrongNameIdentityPermission attribute, and specify SecurityAction.RequestMinimum. Set the PublicKey property to the public key of the key file you use to sign your application's assemblies.
- C. Apply the PublisherIdentityPermission attribute, and specify SecurityAction.Deny.
- D. Apply the PublisherIdentityPermission attribute, and specify SecurityAction.RequestMinimum.

Answer: B

Explanation:

The RequestMinimum security action is used to request for the minimum permissions required for code to run. We use the PublicKey property and the public key of our software certificate to protect the assembly.

Reference:

.NET Framework Class Library, SecurityAction Enumeration

Incorrect Answers

A: A link demand causes a security check during just-in-time compilation and only checks the immediate caller of your code.

C, D: The PublisherIdentityPermission represents the identity of a software publisher. However, we have not specified the specified the software publisher. A certificate must be used.

Question: 100

You create a class named XYZUser that provides user information from a variety of data sources.

Different instances of User connect to different data sources to load the data. User is a read-only representation of user information and does not support writing changes back to a data source.

The User class includes the following code segment:

```
<Serializable(> Public Class XYZUser Public Sub New(String connectionString) Me.connectionString = connectionString '
Additional construction code goes here. End Sub Friend ReadOnly Property ConnectionString() As String Get Return
connectionString End Get End Property Private connectionString As String.
'Other methods and properties go here. End Class
```

Once a XYZUser object has been populated, it no longer needs the connectionString member variable.

You have a .NET Remoting object named Project that returns User objects. You want to prevent remote client applications from being able to view the contents of the connectionString member variable. What should you do?

- A. Make the ConnectionString property private.

- B. Remove the connectionString parameter from the constructor.
- C. Add the NonSerialized attribute to the connectionString property.
- D. Add the NonSerialized attribute to the connectionString member variable.

Answer: D

Explanation:

By making the connectionString member variable NonSerialized it will not be included in serialized data stream and client application from view the contents of it.

Note:

A class often contains fields that should not be serialized. We can prevent member variables from being serialized by marking them with the NonSerialized attribute.

Reference:

.NET Framework Developer's Guide, Selective Serialization

Incorrect Answers

A: The ConnectionString property would still be included in the serialized data stream.

B: The connectionString parameter must be included to establish a connection.

C: The NonSerialized attribute cannot be added to the connectionString property.

Question: 101

You are troubleshooting a Visual Studio .NET application that was developed by a former colleague. The application contains a NextToken function. This function reads product names from a file. You find the following code segment code within a large assembly:

```
Dim xwriter As New XmlTextWriter("productNames.xml", _ System.Text.Encoding.UTF8) xwriter.WriteStartDocument(True)
xwriter.WriteStartElement("data", "www.XYZ.com") Dim val As String = NextToken() While val <> ""
xwriter.WriteString("item", _ "www.XYZ.com", val) val = NextToken().xwriter.WriteEndElement()xwriter.WriteEndElement()
xwriter.Close()
```

You find that productsNames.xml contains only two entries: prod0 and prod1.

Which XML output is produced by this code segment?

- A. <?xml version="1.0"?> <data xmlns="www.XYZ.com"> <item = "prod0"/> <item = "prod1"/> </data>
- B. <?xml version="1.0" encoding="utf-9" standalone="yes"=> <data> <item xmlns="www.XYZ.com">prod0</item> <item xmlns="www.XYZ.com">prod1</item> </data>
- C. <?xml version="1.0"?> <data> <item>prod0</item> <item>prod1</item> </data>
- D. <?xml version="1.0" encoding="utf-8" standalone="yes"?> <data xmlns="www.XYZ.com"> <item>prod0</item> <item>prod1</item> </data>

Answer: D

Explanation:

The XmlTextWriter.WriteStartElement writes the specified start tag. A data element is specified. The XmlWriter.WriteString

Method write XMLElements such as <item>prod0</item>.

Reference:

.NET Framework Class Library, XmlWriter.WriteElementString Method (String, String, String) [Visual Basic].NET Framework Class Library, XmlTextWriter.WriteStartElement Method [Visual Basic]

Incorrect Answers

A: Two items with proper start and end tags is produced. There is no </item> end tags here.

B: The xmlns"www.XYZ.com" attribute is only used in the startelement, not in each XML element.

C: The specified data element in the WriteStartElement statement is not present.

Question: 102

You create a .NET Remoting object named DocumentStore. DocumentStore is a server-activated Singleton object. It uses a TcpChannel to listen on port 9000. The object URI for DocumentStore is DocumentStore.

You need to write a client application to use DocumentStore from a computer named XYZSrv. Which code segment should you use?.

- A. RemotingConfiguration.Configure(_
"tcp://XYZSrv :9000/DocumentStore") Dim doc As New DocumentStore()
- B. Dim t As Type t = GetType(DocumentStore) RemotingConfiguration.RegisterWellKnownClientType(_
t, "TcpChannel,9000, **XYZSrv** ")Dim doc As New DocumentStore()
- C. Dim t As Type Dim temp As Object Dim doc As DocumentStore t = GetType(DocumentStore) temp =
Activator.CreateInstance(t, _
"tcp://XYZSrv :9000/DocumentStore") doc = CType(temp, DocumentStore)
- D. Dim t As Type Dim temp As Object Dim doc As DocumentStore ChannelServices.RegisterChannel(new TcpChannel(9000)) t =
GetType(DocumentStore) temp = Activator.CreateInstance(t, " **XYZSrv** ") oc = CType(temp, DocumentStore)

Answer: C

Explanation:

Server-activated objects are objects whose lifetimes are directly controlled by the server. The server application domain creates these objects only when the client makes a method call on the object. There are two activation modes (or WellKnownObjectMode values) for server-activated objects, Singleton and SingleCall. To create an instance of a server-activated type, clients either configure their application programmatically (or using a configuration file) and call new, or they pass the remote object's configuration in a call to Activator.GetObject().

Note:

Any client that knows the URI of a registered well-known object can obtain a proxy for the object by registering the channel it prefers with ChannelServices, and activating the object by calling new or Activator.GetObject. To activate a well-known object with new, you must first register the well-known object type on the client using the RegisterWellKnownClientType method. Calling the RegisterWellKnownClientType method gives the remoting infrastructure the location of the remote object, which allows the new keyword to create it. If, on the other hand, you use the Activator.GetObject method to activate the well-known object, you must supply it with the object's URL as an argument, so no prior registration on the client end is necessary.

Reference:

.NET Framework Developer's Guide, Server Activation [Visual Basic] .NET Framework Class Library, Activator.CreateInstance Method [Visual Basic].NET FrameworkClass Library, RemotingConfiguration.RegisterWellKnownClientType Method(Type,String)

Incorrect Answers

- A:** The RemotingConfiguration.Configure method reads the configuration file and configures the remoting infrastructure. This solution is inadequate.
- B:** The Problem with answer B is that the second parameter of the RegisterWellKnownClientType is "TCPChannel, 9000, XYZSrv" where as it is supposed to be a URL such as "tcp://XYZSrv:9000/DocumentStore".
- D:** You need to use the Activator.GetObject method and NOT the Activator.GetInstance The Activator.CreateInstance method creates an instance of the specified type using the constructor that best matches the specified parameters.

Question: 103

You are creating an XML Web service that retrieves customer-order data. Customer orders are retrieved by specifying a customer ID or family name. You write two overloaded Web methods to retrieve this data. The Web method signatures are shown in the following code segments:

```
<WebMethod(> Public Function Load( ByVal customerID As_ Integer) As DataSet 'Code to retrieve and return order data goes here. End Function
<WebMethod(> Public Function Load( ByVal familyName As_ String) As DataSet 'Code to retrieve and return data goes here. End Function
```

You need to ensure that the Web service engine can map requests to the appropriate method. What should you do?

- A. Set the Description property of each WebMethod attribute to a unique description.
- B. Set the MessageName property of each WebMethod attribute to a unique message name.
- C. Add the Overloads keyword to both signatures between the Public keyword and the Function keyword.
- D. Add the Overloads keyword to only the second signature between the Public keyword and the Function keyword.

Answer: B

Explanation:

Old answer was B, but the Overloads keyword does not apply here. Changing different MessageName property will solve this problem. The MessageName property of the WebMethod attribute enables the XML Web service to uniquely identify overloaded methods using an alias. Unless otherwise specified, the default value is the method name. When specifying the MessageName, the resulting SOAP messages will reflect this name instead of the actual method name. For more information, see WebMethodAttribute.MessageName Property.

Question: 104

You have a DataSet object named customersDataSet that contains a DataTable object named XYZCustomers. XYZCustomers retrieves information from a Microsoft SQL Server database. Customers contains a column named Region.

You want to create a DataView object named customersDataView that contains only customers in which the value in the Region column is France.

Which code segment should you use?

- A. Dim customersDataView As New DataView(customersDataSet.Tables("TsEXCustomers"))
customersDataView.FindRows("Region = France")
- B. Dim customersDataView As New DataView(customersDataSet.Tables("XYZCustomers"))
customersDataView.FindRows("Region = 'France'")
- C. Dim customersDataView As
New DataView(customersDataSet.Tables("XYZCustomers")) customersDataView.RowFilter = ("Region = France")
- D. Dim customersDataView As New DataView(customersDataSet.Tables("XYZCustomers"))
customersDataView.RowFilter = ("Region = 'France'")

Answer: D

Explanation:

We use the RowFilter property to set the filter of the DataView. We also take care to use quotes for the value France..

Note 1:

The DataView.RowFilter gets or sets the expression used to filter which rows are viewed in the DataView.

Note 2:

The DataView.FindRows method returns an array of DataRowView objects whose columns match the specified sort key value.

Reference:

.NET Framework Class Library, DataView.RowFilter Property [C#]

Incorrect Answers

A: The DataRows method does not update the DataView it just produces a result. Furthermore, the search string is incorrect.

B: The DataRows method does not update the DataView it just produces a result.

C: The search string is incorrect. The value must be in quotes.

Question: 105

You are developing an application that retrieves a list of geographical regions from a table in a Microsoft SQL Server database. The list of regions is displayed in a drop-down list box on a Windows Form.

You want to populate the list box with data from a DataSet object. You want to fill the DataSet object by using a SqlDataAdapter object.

You create a SqlConnection object named EXConnection and a SQL query string named regionSQL.

You need to write the code to create the SqlDataAdapter object.

Which code segment should you use?

- A. Dim myDataAdapter As New SqlDataAdapter() myDataAdapter.SelectCommand.Connection = EXConnection myDataAdapter.SelectCommand.CommandText = regionSQL
- B. Dim myDataAdapter As New SqlDataAdapter(regionSQL, EXConnection)
- C. Dim SqlCommand As New SqlCommand(regionSQL) Dim myDataAdapter As New SqlDataAdapter() myDataAdapter.SelectCommand.Connection = EXConnection myDataAdapter.SelectCommand = SqlCommand
- D. Dim SqlCommand As New SqlCommand() Dim myDataAdapter As New SqlDataAdapter() SqlCommand.CommandText = regionSQL myDataAdapter.SelectCommand.Connection = EXConnection myDataAdapter.SelectCommand = SqlCommand

Answer: B

Explanation:The **SqlDataAdapter** (*String, SqlConnection*) constructor initializes a new instance of the SqlDataAdapter class with a SelectCommand and a SqlConnection object..

Note:

A SqlDataAdapter represents a set of data commands and a database connection that are used to fill the DataSet and update a SQL Server database. SqlDataAdapter is used in conjunction with SqlConnection and SqlCommand to increase performance when connecting to a Microsoft SQL Server database.

Reference:

.NET Framework Class Library, SqlDataAdapter Members .NET Framework Class Library, SqlDataAdapter Constructor (String, SqlConnection) [Visual Basic]

Incorrect Answers

A: This is also a plausible solution. B) is more straightforward.

C, D: First we set the Adapter.SelectCommand.Connection to EXConnection. But then we reset this property by setting the Adapter.SelectCommand to SqlCommand.

Question: 106

You are creating a serviced component named ItemInventory. An online catalog application will use ItemInventory to display the availability of products in inventory.

Additional serviced components written by other developers at XYZ will continuously update the inventory data as orders are placed.

The ItemInventory class includes the following code segment:

```
<Transaction(TransactionOption.Required)> _ Public Class  
ItemInventory Inherits ServicedComponent
```

‘ Method code goes here. End Class ItemInventory is configured to require transactions. You want ItemInventory to respond to requests as quickly as possible, even if that means displaying inventory values that are not up to date with the most recent orders. What should you do?

- A. To the ItemInventory class, add the following attribute: <ObjectPooling(True)>
- B. To all methods of the ItemInventory class, add the following attribute: <AutoComplete(False)>
- C. Modify the Transaction attribute of the ItemInventory class to be the following attribute:
<Transaction(TransactionOption.Required, Timeout:=1)>
- D. Modify the Transaction attribute of the ItemInventory class to be the following attribute:
<Transaction(TransactionOption.Required, _ IsolationLevel:=. TransactionIsolationLevel.ReadUncommitted)>

Answer: D

Explanation:

The ReadUncommitted transaction isolation level makes a dirty read is possible, meaning that no shared locks are issued and no exclusive locks are honored. This will reduce the number of locks, compared to the default transaction isolation level of readcommitted. Reduced number of locks will increase the performance.

Reference:

.NET Framework Class Library, IsolationLevel Enumeration

Incorrect Answers

A: Object pooling is a COM+ service that enables you to reduce the overhead of creating each object from scratch. However, object pooling is not much use in transactions.

B: Autocomplete does not apply here.

C: Timeout configuration would not address performance issue.

Question: 107

You develop an application that uses a Microsoft SQL Server database and a SqlClient data provider. Your application includes the following four code segments which are each called once:

```
Dim EXConnection1 As New SqlConnection()EXConnection1.ConnectionString = "Data Source=" _ &
"ProdServer;Initial Catalog=Billing;" _ & "Integrated Security=true"EXConnection1.Open() Dim EXConnection2 As
New SqlConnection()EXConnection2.ConnectionString = "DataSource=" _ & "ProdServer;Initial Catalog=Billing;" _ &
"Integrated Security=true"EXConnection2.Open() Dim EXConnection3 As New
SqlConnection()EXConnection3.ConnectionString = "Data Source=" _ & "SearchServer;Initial Catalog=Search;" _ &
"Integrated Security=true"EXConnection3.Open() Dim EXConnection4 As New SqlConnection()
EXConnection4.ConnectionString = "Data Source=" _ & "ProdServer;Initial Catalog=OrderEntry;" _ & "Integrated
Security=true" EXConnection4.Open()
```

You verify that your application is the only application that is using SQL Server. Your application runs all code segments by using the same identity..

You run the application. Connection pooling is enabled, and the entire application runs within the connection timeout parameter. How many connection pools are created?

- A. One
- B. Two
- C. Three
- D. Four

Answer: C

Explanation:

EXConnection1 and EXConnection2 use exactly the same connection string, while EXConnection3 and EXConnection4 use separate connections strings. The three separate connection strings will create three connections pools-

Note:

When a connection is opened, a connection pool is created based on an exact matching algorithm that associates the pool with the connection string in the connection. Each connection pool is associated with a distinct connection string. When a new connection is opened, if the connection string is not an exact match to an existing pool, a new pool is created.

Reference:

.NET Framework Developer's Guide, Connection Pooling for the SQL Server .NET Data Provider

Incorrect Answers A, B; D: One connection pool will be created for each unique connection strings. Three unique connections strings are used, not 1, 2 or 4.

Question: 108

You have a strongly typed DataSet object named customersDataSet. This object contains a single DataTable object named XYZCustomers. XYZCustomers has an integer data column named CustomerID.

You want to access the CustomerID value by using the type-safe code conventions provided by customersDataSet. You want to assign the value to a string variable named customerID.

Which code segment should you use?

- A. `customerID = customersDataSet.XYZCustomers(0).CustomerID.ToString()`
- B. `customerID = customersDataSet.XYZCustomers.Columns("CustomerID").ToString()`
- C. `CustomerID = customersDataSet.Tables("XYZCustomers").Columns("CustomerID").ToString()`
- D. `customerID = customersDataSet.Tables("XYZCustomers").Rows(0) ("CustomersID").ToString()`

Answer: A

Explanation:

We are ensured type safety if access the columns only by index, and not by name.

Note:

Type-safe code is code that accesses types only in well-defined, allowable ways.

Incorrect Answers B, C, D: We must access the columns only by name.

Question: 109

You are creating an XML Web service that will consist of a class named `Stock`. `Stock` will expose the following public fields:

`Symbol`, `CompanyName`, and `CurrentPrice`.

When serialized by the `XmlSerializer`, `stock` will take the following form:

```
<Stock symbol=" " <Company /> <CurrentPrice />
</Stock>
```

You need to construct the `Stock` class. Which code segment should you use?

- A. `Public Class Stock <XmlElementAttribute("symbol")>_ Public Symbol As String <XmlElementAttribute()>_ Public Company Name As String Public CurrentPrice As Double End Class`
- B. `Public Class Stock Public Symbol As String <XmlElementAttribute("Company")>_ Public CompanyName As String Public CurrentPrice As Double End Class`
- C. `Public Class Stock <XmlAttributeAttribute("symbol")>_ Public Symbol As String <XmlElementAttribute("Company")>_ Public CompanyName As String. Public CurrentPrice As Double End Class`
- D. `Public Class Stock <XmlAttributeAttribute()>_ Public Symbol As String <XmlElementAttribute()>_ Public CompanyName As String <XmlElementAttribute()>_ Public CurrentPrice As Double End Class`

Answer: C

Explanation: `XmlAttributeAttribute("symbol")` specifies that `symbol` will be serialized as an XML attribute. Then we defined a XML element with the `XmlElementAttribute("company")`

Note:

XML serialization is the process of converting an object's public properties and fields to a serial format, XML for example, for

storage or transport.

Reference:

.NET Framework Developer's Guide, Attributes that Control XML Serialization

Incorrect Answers

A: We should use the **XmlAttributeAttribute** for *symbol*.

B: We should use the **XmlAttributeAttribute** for *symbol*.

D: Company, not CompanyName, should be defined as an XML element.

Question: 110

You are developing an application that queries a Microsoft SQL Server database. The application will package the results of the query as XML data. The XML data will be retrieved directly from the database and transmitted electronically to a business partner.

The query must retrieve all rows and all columns from a database table named XYZCustomers.

Which query should you use?

- A. SELECT * FROM XYZCustomers FOR XML AUTO
- B. SELECT * FROM XML FROM XYZCustomers
- C. SELECT * FROM XYZCustomers as XMLDATA
- D. SELECT * FROM OPENXML('<XYZCustomers'.'/Root/Customers', 1) with (CustomerId varchar(10))

Answer: A

Explanation:

You can execute SQL queries against existing SQL Server relational databases to return results as XML documents rather than as standard rowsets. To retrieve results directly, use the FOR XML clause of the SELECT statement like in this scenario.

Reference:

SQL Server 2000 Books Online, Retrieving XML Documents Using FOR XML

Incorrect Answers B, C: Incorrect syntax.

D: We should produce XML, not read from a XML data source..

Question: 111

You are creating a data access component for an XML Web service. You need to populate and process a DataSet object with data from a table named Customers in a Microsoft SQL Server database named CompanyA. You write the following code segment: Dim myConnection As New SqlConnection(myConnectionString) Dim myDataAdapter As New SqlDataAdapter_ ("SELECT * FROM Customers", myConnection) Dim myDataSet As New DataSet() Dim CustomerName as String

You want to capture all SQL Server errors and general exceptions that occur. You want to process SQL Server errors separate from general exceptions.

Which code segment should you use?

- A. Try myDataAdapter.Fill(myDataSet, "Customers") customerName = myDataSet.Tables(0). _Rows(0).Item("CustomerName") Catch mySqlException As SqlException Throw New SqlException("Sql exception occurred") Catch myException As

```

Exception ' Code to process general exceptions goes here. End Try
B. Try myDataAdapter.Fill(myDataSet, "Customers")  customerName =myDataSet.Tables(0)._Rows(0).Item("CustomerName")
   Catch mySqlException As SqlException  For Each mySqlException In mySqlException.Errors  ' Code to process SQL Server
   errors goes here.  Next Catch myException As Exception ' Code to process general exceptions goes here. End Try
C. Try myDataAdapter.Fill(myDataSet, "Customers")  customerName = myDataSet.Tables(0)._Rows(0).Item("CustomerName")
   Catch mySqlException As SqlException  Dim mySqlError As SqlError  For Each mySqlError In mySqlException.Errors  'Code
   to process SQL Server errors goes here. Next  Catch myException As Exception  ' Code to process general exceptions goes
   here. End Try
D. Try myDataAdapter.Fill(myDataSet, "Customers") customerName =  myDataSet.Tables(0)._Rows(0).Item("CustomerName")
   Catch myException As Exception  Throw New Exception("General exception occurred")  Catch mySqlException As
   SqlException  Dim mySqlError As SqlError  For Each mySqlError In mySqlExaption.Errors  'Code to process SQL Server
   errors goes here. Next End Try

```

Answer: C

Explanation:

First we must catch the most specific errors, the SQL Errors. We then use a general catching of exceptions.

Note:

An SQLException is an exception that is thrown when SQL Server returns a warning or error.

Reference:

.NET Framework Class Library, SqlException Class [Visual Basic]

Incorrect Answers

A: The scenario requires that each SQLServer error must be processed, not just that an SQLException occurred.

B: The following statement is incorrect: For Each mySqlException In mySqlException.Errors The mySQLException variable should be of SqlError type, not SQLException type. We are processing SQLErrors, not SQLExceptions.

D: We must catch the SQL errors first.

Question: 112

You are creating an XML Web service named HousingService that exposed two Web methods name SearchHouse and BuyHouses. Prior to deploying the service, you want to customize the default template that is displayed when a customer makes a request through the browser.

You create a Web Form named HousingServiceDescription.aspx that is a customized version of the default template. You place the Web Form in the bin directory of the HousingService project.

The Web Form needs to override the default template when a request is made. You need to ensure that customers who request HousingService through a browser view HousingServiceDescription.aspx.

What should you do?

- A. Create a SOAP extension to redirect the user to HousingServiceDescription.aspx.
- B. Set the Namespace property of the WebService attribute to the location of HousingServiceDescription.aspx.
- C. In the Web.config file, enable tracing and the set TraceMode node to bin\HousingServiceDescription.aspx.
- D. In the Web.config file, set the HRef property of the wsdlHelpGenerator node to bin\HousingServiceDescription.aspx.

Answer: D

Explanation:

The `wsdlHelpGenerator` element specifies the XML Web service Help page (an .aspx file) that is displayed to a browser when the browser navigates directly to an ASMX XML Web services page

Reference:

.NET Framework General Reference, `<wsdlHelpGenerator>` Element

Incorrect Answers:

A: Soap extensions are used to inspect or modify a message at specific stages in message processing on either the client or the server. It is not useful here.

B: We are not interested in defining a name space.

C: We are not interested in enabling tracing.

Question: 113

You have a `SqlDataReader` object named `productsDataReader`. The `productsDataReader` object contains three columns in the following order:

ProductID as Integer

ProductName as nvarchar(40)

• UnitsInStock as Integer

You want to use `productsDataReader` to create an inventory management report. You define the following three variables:

EXProductID as Integer.

EXProductName as String

EXUnits as Integer

EXProductID = `productsDataReader.Item(1)` EXProductName = `productsDataReader.Item(2)` EXUnits = `productsDataReader.Item(3)`

EXProductID = `productsDataReader.Item(0)` EXProductName = `productsDataReader.Item(1)` EXUnits = `productsDataReader.Item(2)`

EXProductID = `productsDataReader.Item("ProductID")` EXProductName = `productsDataReader.Item("ProductName")` EXUnits = `productsDataReader.Item("UnitsInStock")`

EXProductID = `productsDataReader.GetName("ProductID")` EXProductName =

`productsDataReader.GetName("ProductName")` EXUnits = `productsDataReader.GetName("UnitsInStock")`

You need to ensure that the report runs as quickly as possible.

Which code segment should you use?

Answer: B**Explanation:**

We should use ordinal-based lookups since they are more efficient than named lookups. Column ordinals are zero-based: `EXProductID` has ordinal number 0, `EXProductName` has ordinal number 1, and `EXUnits` has ordinal number 2.

Reference:

.NET Framework Class Library, `SqlDataReader.GetOrdinal` Method [Visual Basic]

Incorrect Answers:

A: Column ordinals are zero-based, not one-based.

C: Ordinal-based lookups are more efficient than named lookups.

D: The `DataReader.GetOrdinal` method gets the column ordinal, given the name of the column. We are not interested in the Ordinal

numbers. They should only be used to speed up the process.

Question: 114

You are developing an application that receives product information from external vendors in the form of XML documents. The information will be stored in a Microsoft SQL Server database XYZSrv.

The application must validate all incoming XML data. It uses an XmlValidatingReader object to read each XML document. If any invalid sections of XML are encountered, the inconsistencies are listed in a single document.

You must ensure that the validation process runs as quickly as possible.

What should you do?.

- A. Set the ValidationType property of the XmlValidatingReader object to Schema.
- B. Set the CanResolveEntity property of the XmlValidatingReader object to True.
- C. Create and register a ValidationEventHandler method.
- D. Use a try/catch block to catch validation exceptions.

Answer: C

Explanation:

There are two exception events that can occur during schema validation: warnings and errors. To handle errors and warnings, the Schema Object Model (SOM) supports the use of a ValidationEventHandler delegate, which is a callback that you design. This callback is called when an error or warning occurs during validation.

Reference:

.NET Framework Developer's Guide, Validation and the Schema Object Model [Visual Basic]

Incorrect Answers

- A:** The ValidationType Schema validates according to XSD schemas. However, there is no schema in this scenario. Furthermore, we must provide a mechanism that handles the errors.
- B:** The XmlReader.CanResolveEntity Property is read-only. **Note:** CanResolveEntity Property gets a value indicating whether this reader can parse and resolve entities.
- D:** It would be very awkward to use try/catch blocks. It would be less effective as well.

Question: 115

You are creating a serviced component named Travelltinerary. Travelltinerary included the following code segment:

```
<Transaction(TransactionOption.Required)> Public Class Travelltinerary Inherits ServicedComponent <AutoComplete()>_ Public
Function SaveIntinerary(ByVal travelData_As DataSet) As DataSet Dim airline As New AirlineServer.AirlineService() Dim hotel As
New HotelServer.HotelService()airline.ReserveFlight(travelData) 'Code to record reservation in database goes here.
hotel.ReserveHotel(travelData) 'Code to record reservation in database goes here. Return travelData
End Function
End Class
```

The Transactionproperty of both ReserveFlight and ReserveHotel is set to TransactionOption.Required..You create an application to test Travelltinerary. When the test application is run, an exception is thrown in HotelService. How are transactions in Travelltinerary and in each Web service affected by this exception?

- A. All transactions are rolled back.

- B. Transactions in only HotelService are rolled back. Transactions in only Travelltinrary and AirlineService remain committed.
- C. Transactions in only HotelService and Travelltinrary are rolled back. Transactions in only AirlineService remain committed.
- D. Transactions in only AirlineService and Travelltinrary are rolled back. Transactions in only HotelService remain committed.

Answer: B

Explanation:

Each XML Web service method participates in their own transaction, only the HotelService transaction is rolled backed.

Note:

If an XML Web service method, with a Transactionproperty of Required or RequiresNew invokes another XML Web service method with a Transactionproperty of Required or RequiresNew, each XML Web service method participates in their own transaction, because an XML Web service method can only act as the root object in a transaction.

Reference:

.NET Framework Class Library, WebMethodAttribute.TransactionProperty

Incorrect AnswersA, C; D: Only the HotelService transaction is rolled backed.

Question: 116

You are developing an application that loads two DataReader objects from a Microsoft SQL Server database XYZSales. The DataReader objects are named customersDataReader and productsDataReader.

The customersDataReader object is loaded from the Customers table. The productsDataReader object is loaded from the Products table.

You create a SqlCommand object named myCommand and a SqlConnection object named myConnection. You write the following code segment. (Line numbers are included for reference only.)

```
01 myCommand.Connection = myConnection 02 Dim CustomersDataReader As SqlDataReader 03 Dim productsDataReader As
SqlDataReader 04 myCommand.CommandText = "SELECT * FROM Customers" 05 myConnection.Open() 06
customersDataReader = myCommand.ExecuteReader 07 ' Code to process the data reader goes here 08 ' Insert new code..09
myCommand.CommandText = "SELECT * FROM Products" 10 productsDataReader = myCommand.ExecuteReader 11 ' Code to
process the data reader goes here.
```

You run the application and an exception is thrown on line 10. To correct the problem, you need to insert additional code on line 08. Which code segment should you use?

- A. myCommand.ResetCommandTimeout()
- B. myCommand.Dispose()
- C. customersDataReader.NextResult()
- D. customersDataReader.Close()

Answer: D

Explanation:

You should always call the Close method when you have finished using the DataReader object. While a DataReader is open, the Connection is in use exclusively by that DataReader. You will not be able to execute any commands for the Connection, including creating another DataReader, until the original DataReader is closed.

Reference:

.NET Framework Developer's Guide, Retrieving Data Using the DataReader [Visual Basic]

Incorrect Answers

A: Resetting the CommandTimeout to its default value will not change anything. It has already the default value.

B: The SqlConnection.Dispose method releases the unmanaged resources used by the SqlConnection and optionally releases the managed resources.

C: The SqlCommand.NextResult method advances the data reader to the next result, when reading the results of batch Transact-SQL statements.

Question: 117

You are creating an XML Web service named EXHealthInfo. EXHealthInfo exposed patient health records for your client customers. To the beginning of each EXHealthInfo method, you add the following code segment:

```
Dim uiPerm As New UIPermission(_ UIPermissionWindow.AllWindows,_ UIPermissionClipboard.AllClipboard) Dim filePerm As New FileIOPermission(_PermissionState.None) filePerm.AllFiles = FileIOPermissionAccess.AllAccess.
```

As one part of making HealthInfo as secure as possible, you must ensure that the HealthInfo Web methods do not perform any file I/O or access the user interface.

Which code segment should you use?

- A. uiPerm.Deny() filePerm.Deny()
- B. uiPerm.Deny() uiPerm.RevertAssert() filePerm.Deny()
- C. uiPerm.Deny() uiPerm.RevertDeny() filePerm.Deny()
- D. Dim permSet As New PermissionSet(_PermissionState.None) permSet.AddPermission(uiPerm) permSet.AddPermission(filePerm) permSet.Deny()

Answer: D

Explanation:

We should add permission for uiPerm. We allow access to Windows windows and user input events and permit use of the Clipboard: permSet.AddPermission(uiPerm) Then we deny filepermission: permSet.AddPermission(filePerm)

Note:

AllWindows allows users to use all windows and user input events without restriction. AllClipboard allows clipboard to be used without restriction.

Reference:

.NET Framework Class Library, UIPermissionWindow Enumeration [Visual Basic] .NET Framework Class Library, UIPermissionClipboard Enumeration [Visual Basic]

Incorrect Answers A, B; C: We should not deny access to Windows and user input or to the clipboard. The code uiPerm.Deny() should not be used.

Question: 118

You create an XML Web service project named LocalizationService. LocalizationService consists of two XML Web services named ContentService and UserService. Each service contains a Web method named Save.

The Web method signatures are shown in the following code segments:

```
<WebMethod ()> Public Function Save(ByVal contentInfo As DataSet)As DataSet  
<WebMethod()> Public Function Save(ByVal userInfo As DataSet) As DataSet
```

You are developing an ASP.NET application that will consume LocalizationService. You add a Web reference to the services. You discover that UserService is missing from the resulting proxy class that is generated by Visual Studio .NET. You need to correct the problem in LocalizationService.

What should you do?.

- A. Set the Name property of the WebService attribute on ContentService and UserService to a unique name.
- B. Set the Namespace property of the WebService attribute on ContentService and UserService to a unique URI.
- C. Set the Description property of the WebMethod attribute on ContentService and UserService to a unique description.
- D. Set the MessageName property of the WebMethod attribute on ContentService and UserService to a unique message name.

Answer: D

Explanation:

Changing different MessageName property will solve this problem. The MessageName property of the WebMethod attribute enables the XML Web service to uniquely identify overloaded methods using an alias. Unless otherwise specified, the default value is the method name. When specifying the MessageName, the resulting SOAP messages will reflect this name instead of the actual method name. For more information, see WebMethodAttribute.MessageName Property.

Question: 119

You create an XML Web service named ReportService for an application on XYZ's intranet. You configure Internet Information Services (IIS) and ReportService to use Integrated Windows authentication. You configure the Access Control List (ACL) for ReportService to allow access to only members of a Windows group named FieldAgents. You test and confirm that only members of the FieldAgents group can use ReportService. ReportService includes a method named SubmitSurveillance that calls a serviced component named ReportData. ReportData uses COM+ role-bases security to restrict component access to members of the COM+ Agents role. The COM+ Agents role is configured to include the FieldAgents group. You call SubmitSurveillance. However, when the call to ReportData is attempted, an exception is thrown indicating that access is denied. You need to correct this problem. What should you do?

- A. In IIS, enable Anonymous access.
- B. In the <system.web> section of the Web.config file, add the following line of code: <identity impersonate="true"/>.
- C. In the <system.web> section of the Web.config file, add the following line of code: <identity impersonate="false"/>
- D. In the <system.web> section of the Web.config file, add the following line of code: <authentication mode="None"/>

Answer: B

Explanation:

We must allow impersonation to allow the COM+ Agents role to be used, if they the FieldAgent group is running the ReportService.

Note:

Impersonation is when ASP.NET executes code in the context of an authenticated and authorized client.

Reference:

.NET Framework General Reference, <identity> Element

Incorrect Answers

A: Anonymous access would be a security risk.

C: We should allow, not deny, impersonation.

D: Authentication mode none, specifies that no authentication. Only anonymous users are expected.

Question: 120

You have a SqlDataReader object named ordersDataReader. This object contains a column named OrderQuantity as an integer value. This object also contains one row for each order received during the previous week.

You need to write code that will process each row in ordersDataReader and pass OrderQuantity to a function named EXFunction.

Which code segment should you use?

- A. While ordersDataReader.Read Call EXFunction(ordersDataReader("OrderQuantity")) End While
- B. While ordersDataReader.NextResult Call EXFunction(ordersDataReader("OrderQuantity")) End While
- C. Dim orderCount as Integer While orderCount < ordersDataReader.FieldCount Call EXFunction(ordersDataReader("OrderQuantity")) orderCount += 1 ordersDataReader.Read End While
- D. Dim orderCount as Integer While orderCount < ordersDataReader.FieldCount Call EXFunction(ordersDataReader("OrderQuantity")) orderCount += 1 ordersDataReader.NextResult End While

Answer: A.

Explanation:

The SqlDataReader.Read method advances the SqlDataReader to the next record. The return value is true if there are more rows; otherwise, false. We can therefore use it as the condition in the while loop.

Reference:

.NET Framework Class Library, SqlDataReader.Read Method [Visual Basic]

Incorrect Answers

B: SqlDataReader.NextResult method advances the data reader to the next result, when reading the results of batch Transact-SQL statements. There is not a batch of Transact SQL statements in this scenario however.

C, D: The SqlDataReader.FieldCount property gets the number of columns in the current row. It would be incorrect to use this value in the condition expression for the while loop.

Question: 121

Your Microsoft SQL Server database contains a table named XYZCustomers. XYZCustomers contains three columns named FamilyName, PersonalName, and Address.

You instantiate a SqlCommand object named myCommand that you will use to populate a DataReader object named customersDataReader. You need to initialize myCommand to load customersDataReader to include FamilyName and PersonalName for all rows in XYZCustomers.

Which code segment should you use?

- A. myCommand.CommandText = "SELECT FamilyName," & "PersonalName FROM XYZCustomers"
- B. myCommand.CommandType = "SELECT FamilyName," & "PersonalName FROM XYZCustomers")
- C. myCommand.Parameters.Add("SELECT FamilyName," & "PersonalName FROM XYZCustomers")
- D. myCommand.ExecuteNonQuery()

Answer: A

Explanation:

The CommandText property gets or sets the Transact-SQL statement or stored procedure to execute at the data source. We should use it to set the SQL command we want to be executed.

Reference:

.NET Framework Class Library, SqlCommand Members

Incorrect Answers

B: The CommandType property gets or sets a value indicating how the CommandText property is to be interpreted.

C: The parameters should include the SQL code.

D: We must the SQL Statements before we execute them..

Question: 122

You are creating an XML Web service named EXFlightService that provides flight information to its users. To retrieve flight information, a user first must be authenticated by FlightService. Once authenticated, a key that identifies that user is returned to the caller. This key then will be presented in the SOAP header on all subsequent flight information requests to validate that user.

You need to construct EXFlightService so that it can receive the key in a SOAP header. First, you add a class to EXFlightService by writing the following code segment:

```
Public Class UserKeyHeader Inherits SoapHeader Public key As String End Class
```

Next, you add a Web method to EXFlightService by writing the following code segment:

```
Public keyHeader As UserKeyHeader <WebMethod(), SoapHeader(>_ Public Function RetrieveFlightInformation() As DataSet  
'Code to check SOAP header goes here.  
'Code to retrieve flight information goes here.
```

End Function You attempt to build EXFlightService, and discover that it does not compile. You need EXFlightService to compile.

What should you do?

- A. Change the declaration of the keyHeader variable from public to private.
- B. Set the memberName parameter of the SoapHeader attribute to "keyHeader".
- C. Set the Direction property of the SoapHeader attribute to SoapHeaderDirection.In.
- D. Set the Direction property of the SoapHeader attribute to SoapHeaderDirection.Out.

Answer: B

Explanation:

In order for the XML Web service method to receive the contents of the SOAP header, a member is added to the XML Web service class of a type derived from SoapHeader. The SoapHeaderAttribute.MemberName contains the member of the XML Web service

class representing the SOAP header contents.

Reference:

.NET Framework Class Library, SoapHeaderAttribute.MemberName Property

Incorrect Answers

A: Changing the declaration of keyHeader variable does not achieve much.

C, D: TheSoapHeaderAttribute.Direction property gets or sets whether the SOAP header is intended for the XML Web service or the XML Web service client or both. This attribute is not the reason of the compile error..

Question: 123

You Microsoft SQL Server database named XYZBackOrders that contains a table that consists of more than 1 million rows. You need to develop an application that reads each row in the table and writes the data to a flat file. The application will run only once each day. You want the application to process the data as quickly as possible.

Which class should you use to retrieve the data?

- A. DataSet
- B. DataTable
- C. DataReader
- D. DataAdapter

Answer: C

Explanation:

The ADO.NET DataReader is used to retrieve a read-only, forward-only stream of data from a database. Using the DataReader can increase application performance and reduce system overhead because only one row at a time is ever in memory. DataReader would meet the requirements of this scenario.

Reference:

.NET Framework Developer's Guide, Retrieving Data Using the DataReader [Visual Basic]

Incorrect Answers

A: Datasets is used when you want to work with a set of tables and rows while disconnected from the data source. It would not be optimal when accessing the amount of data in this scenario.

Furthermore, only read-forward access is required.

B: A Data table represents one table of in-memory data.

D: The DataAdapter serves as a bridge between a DataSet and a data source for retrieving and saving data.

Question: 124

Your Microsoft SQL Server database has a stored procedure that sums the total number of orders received each day. The stored procedure returns a result that is a single data value of type integer.

You need to write code that will execute the stored procedure and return the result as an integer value.

You instantiate a SqlCommand object named XYZCommand and initialize all appropriate parameters.

Which XYZCommand method should you use?

- A. ExecuteReader

- B. ExecuteNonQuery
- C. ExecuteScalar
- D. ExecuteXMLReader.

Answer: C

Question: 125

Your Microsoft SQL Server database contains a table named Regions. Regions contains all the sales regions of a sales-tracking application.

You create a DataSet object named regions DataSet by using a SqlDataAdapter object named EXDataAdapter. This object uses a single SQL SELECT statement to populate the regionsDataSet. You bind regionsDataSet to a DataGrid object named regionsDataGrid to display the contents of Regions. You now want to use the same regionsDataSet, EXDataAdapter, and regionsDataGrid to insert, update, and delete data in Regions. You want to accomplish this task by writing the minimum amount of code. What should you do?

- A. Instantiate a SqlCommandBuilder object that has EXDataAdapter as a constructor argument. Add an Update button to the form and add code to the Click event to update regionsDataSet by using EXDataAdapter.
- B. Instantiate a SqlCommandBuilder object that has EXDataAdapter as a constructor argument. Create one stored procedure for each of the insert, update, and delete functions and associate the stored procedures with the InsertCommand, UpdateCommand, and DeleteCommand properties of EXDataAdapter. Add an Update button to the form and add code to the Click event to update regionsDataSet by using EXDataAdapter.
- C. Create one stored procedure for each of the insert, update, and delete functions and associate the stored procedures with the InsertCommand, UpdateCommand, and DeleteCommand properties of EXDataAdapter. Add an Update button to the form and add code to the Click event to update regionsDataSet by using EXDataAdapter.
- D. Create one SQL string for each of the insert, update, and delete functions and associate the SQL strings with the InsertCommand, UpdateCommand, and DeleteCommand properties of EXDataAdapter. Add an Update button to the form and add code to the Click event to update regionsDataSet by using EXDataAdapter.

Answer: A

Question: 126

You have a DataSet object named ordersDataSet. This object contains two DataTable objects named Orders and OrderDetails. Both Orders and OrderDetails contain a column named OrderID. You create a DataRelation object named orderRelation between Orders and OrderDetails on OrderID. Order is the parent table. OrderDetails is the child table. You add orderRelation to the ordersDataSet relation collection by using the following line of code: ordersDataSet.Relations.Add(orderRelation; You verify that prior to adding orderRelation, there were no constraints on either table. You then run the line of code. How many constraints does each table have now?

- A. One on Orders; none on OrderDetails.
- B. None on Orders; one on OrderDetails.
- C. None on Orders; none on OrderDetails.
- D. One on Orders; one on OrderDetails.

Answer: D

Question: 127

You create a collection of serviced components that performs bank transfers. All the components are marked with the Transaction(TransactionOption.Required) attribute. All the methods in the components are marked with the AutoComplete() attribute.

You discover that incorrect balance amounts are being transferred. You decide to debug the components.

During debugging, a `System.Runtime.InteropServices.COMException` is thrown. The HRESULT for the exception is 0x8004E002. The exception includes the following message: "The root transaction wanted to commit but transaction aborted."

You find that this exception occurs only during the debugging session, and not when the components run outside of the debugger. This exception is preventing you from continuing to debug the components. You need to resolve this problem.

What should you do?

- A. Remove the `AutoComplete` attribute from each method. Within each method implementation, add calls to the `ContextUtil.SetComplete()` and `ContextUtil.SetAbort()` methods.
- B. Remove the `AutoComplete` attribute from each method. Within each method implementation, add calls to the `ContextUtil.MyTransactionVote` and `ContextUtil.DeactivateOnReturn` properties.
- C. Increase the transaction timeout in the Component Services tool by using the Properties dialog box for My Computer..
- D. Replace each method implementation with the following segment: `try { // Existing method body goes here. } Finally { ContextUtil.SetComplete() }`

Answer: C

Question: 128

You create a strongly named serviced component. The component uses a third-party .NET assembly named `XYZ.Encryptor.dll` to perform encryption and decryption. `XYZ.Encryptor.dll` is registered in the global assembly cache. You deploy the services component and `XYZ.Encryptor.dll` to a production computer.

A new version of `XYZ.Encryptor.dll` becomes available. You remove the original version and install the new version on the production computer. The services component throws a `System.TypeLoadException` when it attempts to use `XYZ.Encryptor.dll`.

You need to correct this problem.

What should you do?

- A. Unregister and re-register the services component in the global assembly cache.
- B. Use the Strong Name tool (`Sn.exe`) to create a new key file for the services component.
- C. Create a configuration file named `Dllhosts.exe config` to redirect the services component to the new version of `XYZ.Encryptor.dll`.
- D. Create a publisher policy assembly for `XYZ.Encryptor.dll` and register the assembly in the global assembly cache.

Answer: D

Explanation:

Vendors of assemblies can state that applications should use a newer version of an assembly by including a publisher policy file with the upgraded assembly. The publisher policy file specifies assembly redirection and code base settings, and uses the same format as an application configuration file. The publisher policy file is compiled into an assembly and placed in the global assembly cache.

There are three steps involved in creating a publisher policy:

- 1 Create a publisher policy file.
- 2 Create a publisher policy assembly.
- 3 Add the publisher policy assembly to the global assembly cache.

Reference:

.NET Framework Developer's Guide, Creating a Publisher Policy File

Question: 129

You create an assembly that contains a collection of serviced components. You want to secure these components by using a collection of COM+ roles. Different groups of roles will secure different components.

You need to ensure that role-based security is enforced in the assembly. You want to accomplish this goal by adding an attribute to the project source code.

Which attribute should you use?

- A. [assembly: SecurityRole("Assembly", true)]
- B. [assembly: SecurityPermission(SecurityAction.RequestOptional)]
- C. [assembly: ApplicationActivation(ActivationOption.Server)]
- D. [assembly: ApplicationAccessControl(AccessChecksLevel = AccessChecksLevelOption.ApplicationComponent)]

Answer: D

Explanation:

ApplicationComponent enables access checks at every level on calls into the application.

Reference:

.NET Framework Developer's Guide, Registering Serviced Components

Incorrect Answers

A: This allows a role named *assembly* access. It also allows everyone access. This does not make much sense.

B: We don't want to configure permission for additional functionality.

C: Server specifies that serviced components in the marked application are activated in a system- provided process.

Question: 130

You create a services component named OrderStatus that is in an assembly named XYZOrders. OrderStatus is in its own COM+ application named XYZApp.

OrderStatus is used by multiple client applications to look up the status of orders. Because you anticipate that client applications will frequently access OrderStatus, you need to ensure that the method calls are processed as quickly as possible.

What should you do?

- A. Configure OrderStatus to require a transaction.
- B. Configure XYZApp to be a library application.
- C. Add the AutoComplete attribute to all methods in OrderStatus.
- D. Configure XYZOrders to be a shared assembly, and install it in the global assembly cache..

Answer: B

Question: 131

XYZ buys and sells used refrigerators. External vendors frequently send you XML documents that list one type of used appliances for sale. The documents that you receive contain either only washers or only refrigerators as in the following example.

```
<!-- A document with refrigerators --> <saleList>
<refrigerators> <refrigerator type="freezer on bottom" ,
price="210"/> </refrigerators> </saleList>
```

```
<!-- A document with washers --> <saleList> <washers>
<washer type="front load" , price="145"/> </washer>
```

```
type="top load" , price="130"/> </washers> </saleList>
```

All incoming XML documents are loaded into a MemorySystem object named usedList.

You need to automate a process that will discover XML documents contain refrigerator elements. As soon as you ascertain that a document contains refrigerators, you can stop processing the document.

You decide to use Visual studio .NET to develop an application that will contain a Boolean variable named hasRefrigerator. A value of True for this variable means that a document contains refrigerator elements. A value of false means that it does not. You want to ensure that the discovery process occurs as quickly as possible.

What should you do?

- A. Create an XmlDocument object and load it from usedList. Use the SelectSingleNode method to search the XmlDocument object for the saleList/refrigerators node. If this node is found, set hasRefrigerator to **True**. Otherwise, set hasRefrigerator to **False**.
- B. Create an XmlXPathDocument object and load it from usedList. Use an XPathNavigator object to search the XmlXPathDocument for the saleList/refrigerators node. If this node is found, set hasRefrigerator to **True**. Otherwise, set hasRefrigerator to **False**.
- C. Create an XmlTextReader object on usedList. Loop through usedList by using the MoveToContent method of the XmlTextReader object and comparing for the saleList/refrigerators node. If this node is found, set hasRefrigerator to **True**. Otherwise, set hasRefrigerator to **False**.
- D. Create a DataSet object and use its ReadXml method to load usedList into the object. If the Count property of the Rows collection of the "refrigerators" entry in the object is not equal to zero, set hasRefrigerator to **True**. Otherwise, set hasRefrigerator to **False**.

Answer: A

Explanation:

The SelectSingleNode method selects the first XmlNode that matches the XPath expression. If no nodes match the query, it returns Null. This suggested procedure would meet the requirements of this scenario. Furthermore, this would be the fastest solution.

Note:

An XmlDocument object represents an XML document and enables the navigation and editing of this document.

Reference:

.NET Framework Class Library, XmlNode.SelectSingleNode Method [Visual Basic]

Incorrect Answers

B: There is no such thing as a XmlXPathDocument.

C: XmlReader provides forward-only, read-only access to a stream of XML data. The MoveToContent method can be used on a XmlReader stream to provide a possible solution in this scenario. However, it would be fastest solution.

Note: The MoveToContent method checks whether the current node is a content (non-white space text,CDATA, Element, EndElement, EntityReference, or EndEntity) node. If the node is not a content node, the reader skips ahead to the next content node or end of file.

D: This proposed solution is not straightforward, and is therefore slow.

Question: 132

You create an XML web service that retrieves data from Microsoft SQL Server database. You instantiate a SqlConnection object named XYZConnection and set the Max Pool Size property of the connectionString to 50. All 50 connections are now in use. However, a request for connection number 51 is received.

What is the most likely result?

- A. An exception is immediately thrown.
- B. The current connection pool is expanded by 50 additional connections.
- C. A new connection pool is created that has the same maximum number of connections.
- D. The request is queued until a connection becomes available or until the timeout limit is reached.

Answer: D

Explanation: The **Max Pool Size** property denotes the maximum number of connections allowed in the pool. If the maximum pool size has been reached and no usable connection is available, the request is queued. The object pooler satisfies these requests by reallocating connections as they are released back into the pool. If the time-out period elapses before a connection object can be obtained, an error occurs.

Reference:

.NET Framework Developer's Guide, Connection Pooling for the SQL Server .NET Data Provider

Incorrect Answers

A: An exception is only thrown after the request has been queued and after the timeout limit is reached.

B: The maximum number of concurrent connections has been reached. No further connections would be allowed at the moment.

C: No new connection pool is created.

Question: 133

You have a strongly types DataSet object named XYZDataSet. This object contains three DataTable objects named Customers, Orders and OrderDetails.

Customers and Orders have a data column named CustomerID. Orders and OrderDetails have a data column named OrderID.

Orders have a foreign key constraint between Customers and Orders on CustomerID. OrderDetails has a foreign key constraint between Orders and OrderDetails on OrderID.

You want to populate Customers, Orders and OrderDetails with data from Microsoft SQL Server database.

In which order should you fill the Data table objects?

- A. Customers OrderDetails
Orders
- B. OrderDetails. Orders Customers
- C. Customers Orders OrderDetails
- D. Orders OrderDetails Customers

Answer: C

Explanation:

We most populate the tables that are references by the foreign-key constraints first, namely the Customers and the Orders table. We should populate the OrderDetails table last.

XYZ Illustrative Diagram



Incorrect Answers A B: There would be no corresponds rows in the Orders table if we populate the OrderDetails table before the Orders table.

D: There would be no corresponds rows in the Customers table if we populate the OrderDetails table before the Customers table.

Question: 134

Your Microsoft SQL Server 6.5 database contains a table named XYZPurchases that consists of more than 1 million rows.

You are developing an application to populate a DataReader object with data from XYZPurchases. You want to ensure that the application processes the data as quickly as possible.

You create a SQL SELECT statement in a local variable named EXSQLSelect. You need to initiate a SqlConnection object and a SqlCommand object you will use to populate the DataReader object.

Which code segment should you use?

- A. `Dim myConnection As New OleDbConnection _ (myOleDbConnectionString)`
`Dim EXCommand As New OleDbCommand _ (EXSQLSelect)`
- B. `Dim myConnection As New OleDbConnection _ (myOleDbConnectionString)`
`Dim EXCommand As New OleDbCommand _ (EXSQLSelect, myConnection)`
- C. `Dim myConnection As New SqlConnection _ (mySqlConnectionString)`
`Dim EXCommand As New SqlCommand _ EXSQLSelect)`
- D. `Dim myConnection As New SqlConnection _ (mySqlConnectionString)`
`Dim EXCommand As New SqlCommand _ (EXSQLSelect, myConnection)`

Answer: B

Explanation:

For Microsoft SQL Server version 6.5 and earlier, you must use the OLE DB Provider for SQL Server. Furthermore, we specify both the CommandText and the OleDbConnection properties of the OleDbCommand.

Reference:

.NET Framework Developer's Guide, .NET Data Providers [Visual Basic] .NET Framework Class Library, OleDbCommand Members

Incorrect Answers

A: We create the OleDbCommand we must specify the OleDbConnection, not just the CommandText. **C, D:** Only SQL Server 7.0, SQL Server 2000 or later can use SqlConnection.

Question: 135

Your Microsoft SQL Server database has a stored procedure named GetXYZCustomer. getXYZCustomer accepts one parameter named @CustomerID and returns the appropriate company name.

You initiate a SqlCommand object named myCommand. You need to initialize myCommand to return the company name for @CustomerID with a value of "ALFKI".

Which code segment should you use?

- A. myCommand.CommandText = "XYZCustomer, ALFKI" myCommand.Parameters.Add("@CustomerID")
- B. myCommand.CommandText = "XYZCustomer" myCommand.Parameters.Add("XYZCustomer", "ALFKI")
- C. myCommand.CommandText = "@CustomerID" myCommand.Parameters.Add("XYZCustomer", "ALFKI")
- D. myCommand.CommandText = "XYZCustomer" myCommand.Parameters.Add("@CustomerID", "ALFKI")

Answer: D

Explanation:

The SqlCommand.CommandText Property gets or sets the SQL statement or stored procedure to execute at the data source. Here we should set it to the name of the stored procedure: XYZCustomer.

The Parameter should contain ParameterName (here @CustomerID) and the Value (here the string ALFKI).

Note:

A SqlCommand object represents a Transact-SQL statement or stored procedure to execute against a SQL Server database.

Reference:

.NET Framework Class Library, SqlCommand.CommandText Property [Visual Basic] .NET Framework Class Library, SqlParameter Members

Incorrect Answers A, C: The CommandText should be set to the named of the stored procedure. We should not specify any parameters in the CommandText.

B: The name of the parameter, not the name of the stored procedure, should be included in the parameter.

Question: 136

You are creating an XML Web service named A that is available only on your company's intranet. The service exposes a Web method named Close that updates the status of open orders to "closed". You configure ApproveService to use only Integrated Window authentication. You must ensure that access to specific functionality within the service is based on a user's membership in specific Windows groups. You want to accomplish this by using role based security. You want to allow all members of the Reviewers group and of the Admins group to be able to execute the Close method without creating a third group that contains members from both groups.

Which code segment should you use?

- A. (SecuerityAction.Demand, Role:="Reviewers, Admins")> Public Sub Close() 'Code for the Close method goes here. End Sub
- B. (SecurityAction.Demand, Role:="Reviwers", Role:=Admins"> Public Sub Close() 'Code for the Close method goes here. End Sub
- C. Public Sub Close() Dim myPermission1 As New PrincipalPermission(Nothing, "Reviwers") Dim myPermission2 ad New PrincipalPermission(Nothing, "Admins") myPermission1.Demand() myPermission2.Demand() 'Code for the Close method goes here. End Sub
- D. Public Sub Close() Dum myPermission As New PrincipalPermission(Nothing, "Reviwers", "Admins") myPermission.Demand() 'Code for the Close method goes here. End Sub

Answer: A

Question: 137

You are creating an XML Web service named ViewOrders that is available to customers over the Internet. ViewOrders exposes a Web method named ViewShippingDetail that requires additional security. You decide to use generic role-based security to secure ViewShippingDetail. You need to write code to ensure that once the caller is authenticated, a user identity named Generic is created. This user identity has membership in a group named Shipping to allow access to ViewShippingDetail. Which code segment should you use?

- A. `Dim myIdentity As IIdentity = New GenericIdentity("Generic", "Custom") Dim Roles As String() = {"Shipping"} Dim myPrincipal = New GenericPrincipal(myIdentity, Roles) myIdentity = WindowsIdentity.GetCurrent`
- B. `Dim myIdentity As GenericIdentity = New GenericIdentity("Generic", "Custom") Dim Roles As String() = {"Shipping"} Dim myPrincipal = New GenericPrincipal(myIdentity, Roles) Thread.CurrentPrincipal = myPrincipal`
- C. `Dim myIdentity As IIdentity = New Generic {"Shipping"} Dim myPrincipal As IPrincipal = New WindowsPrincipal(myIdentity) Thread.CurrentPrincipal = myPrincipal`
- D. `Dim myGenericIdent As IIdentity = New GenericIdentity("Generic", "Custom") Dim myId As WindowsIdentity = myGenericIdent Dim Roles As String() = {"Shipping"} Dim myPrincipal = New GenericPrincipal(myIdentity, Roles) Windows`

Answer: B

Question: 138

You are creating a serviced component named EmployeeLocations. This component will return a current list of employees in a given city. The list of employee locations changes nightly. EmployeeLocations must load an XML file named Emploc.xml nightly. EmployeeLocations contains one method named EmployeesInCity. EmployeesInCity takes a string city code and returns an array of Employee objects. EmployeeLocations will use the XML data to return lists of employees for a city throughout each day. EmployeeLocations must respond to EmployeesInCity method calls as quickly as possible.

What should you do?

- A. Each night, load Emploc.xml into a MemoryStream object. For each request, use an XmlTextReader to locate the requested city and then the employees within that city.
- B. Each night, load Emploc.xml into an XPathDocument object. For each request, use the XPathNavigator. Select method to create an XPathNodeIterator object. Use the XPathNodeIterator object to return the list of employees.
- C. Each night, load Emploc.xml into an XmlDocument object. For each request, use the XmlDocument.GetElementsByTagName method to create an XmlNodeList object, which will contain the appropriate employee list.
- D. Each night, load Emploc.xml into an XmlDataDocument object. For each request, use the XmlDataDocument.GetElementsByTagName method to create an XmlNodeList object, which will contain the appropriate employee list.

Answer: B

Question: 139

You write a serviced component named OrderProcessing that processes customer orders. You cache the product list and customer list within OrderProcessing to improve response time. OrderProcessing has a method named ValidateCache that validates the contents of the cache. ValidateCache includes the following method signature: `Public Sub ValidateCache(ByVal name as String)` You want to call ValidateCache during development and testing. You do not want to call ValidateCache when you release your component for deployment. You want to accomplish this task by writing the minimum amount of code. Which code segment should you use?

- A. `Public Sub ValidateCache(ByVal name as String) Debug.Assert(False) ' Method body goes here. End Sub`

- B. #If DEBUG Then Public Sub ValidateCache(ByVal name as String) ' Method body goes here. End Sub #End If
 C. <DebuggerHidden()> _ Public Sub ValidateCache(ByVal name as String) ' Method body goes here. End Sub
 D. <Conditional("DEBUG")> _ Public Sub ValidateCache(ByVal name as String) ' Method body goes here. End Sub

Answer: D

Question: 140

You have just created an ASP.Net application. You also need to configure the Web.config file. You ensure that Baker can access all of the application's resources, except for those resources that are located in the /Apps/ResumeApplication directory. Baker is a member of the HRDepartment group.

What should you do? (Select the best choice.)

- A. <system.web> <authorization> <allow roles="HRDepartment" /> <deny roles="HRExecutives" /> <deny users="*" /> </authorization> </system.web> <location path="/apps/resumeApplication"> <system.web> <authorization> <allow roles="HRExecutives"/> <deny users="?" /> </authorization> </system.web>
 B. <system.web> <authorization> <allow roles="HRDepartment" /> <deny roles="HRExecutives" /> <deny users="*" /> </authorization> </system.web>
 <system.web>
 <authorization>
 <allow roles="HRExecutives"/>
 <deny users="?" />
 </authorization>
 <system.web>
 <authorization>
 <allow roles="HRDepartment" />
 <deny roles="HRExecutives" />
 <deny users="*" />
 </authorization>
 </system.web>
 <location path="/apps/resumeApplication">
 </system.web>
 C. <system.web> <authorization> <allow roles="HRDepartment" /> <deny users="*" /> </authorization> </system.web> <location path="/apps/resumeApplication"> <system.web> <authorization> <allow roles="HRExecutives"/> <deny users="?" /> </authorization> </system.web>
 D. <location path="/apps/resumeApplication"> <system.web> <authorization> <allow roles="HRExecutives"/> <deny users="?" /> </authorization> </system.web>

Answer: A

Explanation:

Baker can access all of the application's resources, including the resources in the /Apps/ResumeApplication directory. The first <authorization> section beginning on line 120 grants the HRDepartment group access to the application; thus, by virtue of his membership in the HRDepartment group, Baker can access the application. The second <authorization> block beginning on line 200 revokes access to the resources in the /Apps/ResumeApplication directory from anonymous users, but it does not revoke this access from Baker. Therefore, Baker can access the entire application.

Question: 141

You have written a class named MyClass that should be accessed only from a user with a name of "JAMES."

Which of the following lines of code should you use to control access to your class? (Select the best choice.)

- A. <PrincipalPermissionAttribute(SecurityAction.Demand, Name := "JAMES")> Public Class MyClass
- B. <PrincipalPermissionAttribute(SecurityAction.Demand, Role := "JAMES")> Public Class MyClass
- C. <PublisherIdentityPermissionAttribute(SecurityAction.LinkDemand) Name := "JAMES"> Public Class MyClass
- D. <PublisherIdentityPermissionAttribute(SecurityAction.LinkDemand) Role := "JAMES"> Public Class MyClass

Answer: A

Explanation:

You should use the code <PrincipalPermissionAttribute(SecurityAction.Demand, Name := "JAMES")> Public Class MyClass to allow only a user with a name of "JAMES" to access the code in MyClass.

Question: 142

You have created the code whon below: (Line numbers are for reference purposes only.)

```
01 Dim ESRemotingApp As cRemoteObject 02 Dim sVal As String 03 Dim str As String 04 ESRemotingApp =  
CType(Activator.GetObject( _GetType(cRemoteObject), _ "tcp://ESServer:454/ObjectApplicationName" _ ), cRemoteObject) 05 sVal  
= ESRemotingApp.GetData()
```

Which line of code results in the object's creation on the server? (Select the best choice.)

- A. Line 03
- B. Line 04
- C. Line 02
- D. Line 01

Answer: B

Explanation:

The object will be created on the server when line 04ESRemotingApp = CType(Activator.GetObject(_GetType(cRemoteObject), _ "tcp://servername:8320/ObjectApplicationName" _), cRemoteObject) is executed. Client-activated objects are created on the server when New() or the **Activator.GetObject** method is called. This mechanism causes the same object on the server to be used by the proxy for all calls made to the object by the client.

Question: 143

You need to use the <keyref> element in an XML schema definition. One student is related to many subjects. You need to ensure that datasets created with the XML data will produce a foreign key constraint between two columns in two of the tables. Which other elements must you not use with the <keyref> element in order to properly build the constraint? (Select the best choice.)

- A. <key>
- B. <selector>
- C. <field>
- D. <union>
- E. <choice>

Answer: D, E

Explanation:

The <key> and <keyref> elements are used to place a foreign key constraint on two fields when a dataset is created from XML data. The <key> element identifies the key column of the parent table. The <keyref> element establishes the link between a parent column and a child column. When a dataset is created from the XML schema, a foreign key constraint will be created with the information supplied by the <keyref> element. When you use the <key> and <keyref> elements, you should use the <selector> and <field> elements to identify the tables and columns that are being constrained.

Question: 144

You are modifying the XSD schema for the FlightData data table. You want to add a primary key that consists of the fields FlightNo and IATAAirportCode.

Which of the following XML code segments should you use? (Select the best choice.)

- A. <xs:unique name="UniqueFlightData" msdata:PrimaryKey="true"> <xs:selector xpath="//FlightData" /> <xs:field xpath="FlightNo, IATAAirportCode" /> </xs:unique>
- B. <xs:primaryKey name="UniqueFlightData"> <xs:selector xpath="//FlightData" /> <xs:field xpath="FlightNo" /> <xs:field xpath="IATAAirportCode" /> </xs:primaryKey>
- C. <xs:unique name="UniqueFlightData" msdata:PrimaryKey="true"> <xs:selector xpath="//FlightData" /> <xs:field xpath="FlightNo" /> <xs:field xpath="IATAAirportCode" /> </xs:unique>
- D. <xs:primaryKey name="UniqueFlightData"> <xs:selector xpath="//FlightData" /> <xs:field xpath="FlightNo, IATAAirportCode" /> </xs:primaryKey>

Answer: C**Explanation:**

The <xs:unique> element defines a unique constraint. When combined with the **msdata:PrimaryKey="true"** attribute, the element defines a primary key. The **xpath** property of the <xs:selector> element points to the table element to which the constraint will be applied, and the **xpath** property of the <xs:field> element identifies the fields that make up the primary key.

Question: 145

You are querying an SQL server for customers with Gold status. To do this, you create a SqlDataReader object that contains data from the CustomerInfo table in a Microsoft SQL Server database. The SQL Server data type of one of the columns, CustomerStatus, is SmallInt. You want to store the value of the CustomerStatus column in a variable named currentIndex. You need to maintain the best performance.

What should you do? (Select the best choice.)

- A. GetValue
- B. GetInt16
- C. GetInt64
- D. GetInt32

Answer: B

Explanation: In order to read the data in a column of type **SmallInt** with the greatest performance, the **GetInt16** method of a **SqlDataReader** object should be used. For this reason, when the data type of a column is known, typed accessors should be used rather than the generic **GetValue** method. Once retrieved, column values should be stored in variables of the appropriate type.

Question: 146

You have created an ASP.Net application for BlueFliers Inc. The application must ensure that all flight bookings can be shared and

displayed quickly among all users of the application.

Which of the following storage methods should you choose? (Select the best choice.)

- A. an XML file on the Web server
- B. an array in the Session object
- C. a DataSet object stored in a Cache object
- D. an array in a hidden field

Answer: C

Explanation: You should create a **DataSet** object with the seismic data and store the dataset in a **Cache** object. By placing the dataset in a **Cache** object, the dataset resides in memory on the Web server and is available for all users of the application.

Question: 147

You have created an ASP.Net application for BlueFliers Inc. You need to ensure that each customer is given a unique OD.

Which schema segment will place the proper constraint on the CustomerID field? (Select the best choice.)

- A. `<xs:PrimaryKey msdata="CustomerID">`
- B. `<xs:unique msdata:IsDataSet="true">   <xs:selector xpath="Table1" />`
 `<xs:field="CustomerID" /> </xs:unique>`
- C. `<xs:element PrimaryKey="CustomerID">`
- D. `<xs:unique msdata:ConstraintName="UniqueKey">   <xs:selector xpath="Table1" />   <xs:field xpath="CustomerID" />`
 `</xs:unique>`

Answer: D

Explanation:

The unique element in an XML schema will create a unique constraint in a dataset so that no duplicate values are allowed. The msdata:ConstraintName property specifies the name of the constraint. The field element specifies the column that the constraint applies to. The selector element specifies the table that contains the column.

Question: 148

You are to perform maintenance programming on an existing ASP.net application used by BlueInc to update their customers' profile information. Your observation is shown below:

The existing code uses a SqlCommand object to execute thirty Update statements in succession.

Before each ExecuteNonQuery method, the code opens a connection to the database.

After each ExecuteNonQuery command, the code closes the connection. The code uses the SQL Server managed provider.

What should you do to improve the performance of the code? (Select the best choice.)

- A. Keep the SqlConnection object open during all Execute statements.
- B. Encompass the Update statements inside a transaction.
- C. Use a DataReader object to execute the command.
- D. Use OleDbConnection and OleDbCommand objects instead of SqlConnection and SqlCommand objects.

Answer: A

Explanation: You should keep the **SqlConnection** object open during all **Execute** statements in order to improve the performance of the code. Opening and closing connections takes considerable resources to perform and should only be performed when needed. You should explicitly close the connection when your code no longer needs to use it. You cannot use a transaction in this scenario unless you leave the connection open during each command. Transactions are committed when connections are closed.

Question: 149

You are standardising your application's exception handling for BlueFlier Inc. BlueFlier is promoting its frequently flier program. To do this, you have created a class named `ExceptionHandler` that inherits from `System.Exception`. `ExceptionHandler` is the base class for classes that define broad categories of exceptions, such as `LoyaltyPointsRulesException`. `LoyaltyPointsRulesException`, like all of the broad category classes, is the base class for more specific errors such as `TooLittlePoints`.

Which of the following code will implement these three custom classes as described? (Select the best choice.)

- A. `Public Class TooLittlePoints Inherits System.Exception End Class    Public Class BusinessRulesException Inherits TooLittlePoints End Class`
 `Public Class ExceptionHandler Inherits BusinessRulesException End Class`
- B. `Public Class ExceptionHandler Inherits System.Exception End Class    Public Class BusinessRulesException Inherits ExceptionHandler End Class`
 `Public Class TooLittlePoints Inherits ExceptionHandler End Class`
- C. `Public Class ExceptionHandler Inherits System.Exception End Class    Public Class BusinessRulesException Inherits System.Exception End Class`
 `Public Class TooLittlePoints Inherits System.Exception End Class`
- D. `Public Class ExceptionHandler End Class    Public Class BusinessRulesException Inherits ExceptionHandler End Class    Public Class TooLittlePoints Inherits ExceptionHandler End Class`

Answer: B

Explanation:

You should not base all of your custom classes on the `System.Exception` object because this will not build the hierarchical structure of exception classes described in the scenario.

Question: 150

You have created a Web services client that will communicate with a Web service to determine the quantity of each aircraft spare parts that AirSpares Inc offers. Your client application will use this information to order required spare parts. Your application must ensure that AirSpares has enough to meet your orders. You use the `ExecuteNonQuery` method of a `SqlCommand` object.

Which of the following values will be returned by the `ExecuteNonQuery` method? (Select the best choice.)

- A. an integer indicating the number of rows affected
- B. a Boolean value indicating that the command processed correctly
- C. a string with the name of the stored procedure or query string that executed
- D. a string with the description of any errors that may have occurred

Answer: A

Explanation:

The `ExecuteNonQuery` method returns an integer indicating the number of rows that were deleted, inserted or updated. The method is used to process Transact-SQL statements that perform Delete, Insert and Update functions. The `ExecuteNonQuery` method does not return any rows, but will populate any output parameters that are present in the Command object.

Question: 151

You are going to deploy your flight reservations application your client's server at Newark Airport. The application is to be installed a .NET assembly into the Global Assembly Cache (GAC). Which tool is not necessary? (Each choice presents a complete solution.) (Select all choices that are correct.)

- A. Windows Installer
- B. Tlbimp.exe
- C. Secutil.exe
- D. Gacutil.exe
- E. Regasm.exe
- F. Ngen.exe
- G. Disco.exe
- H. Tlbexp.exe

Answer: B, C, E, F, G, H

Explanation:

The Windows Installer and the Gacutil.exe utilities can be used to install .NET assemblies into the GAC. Secutil.exe is used to manage strong name public key information or Authenticode signatures. Regasm.exe is used to register assemblies so that they can be used by COM components. Ngen.exe is used to compile native images of .NET applications and assemblies. Tlbexp.exe and Tlbimp.exe are used to export and import, respectively, type library information from .NET assemblies and COM components. Disco.exe is used to discover the URLs of Web services that are running on a server.

Question: 152

You are creating an XML service for customers of HighWorld resort. The XML service will authenticate club users before accepting reservations. "A" customers may access all bookings application, while "B" customers must be given access to all booking applications except the golf course. What is the best method to authenticate users? (Select the best choice.)

- A. Authentication
- B. Impersonation
- C. SOAP Headers
- D. Authorization

Answer: D

Explanation:

The security mechanism that determines what rights a user who has submitted a valid username and password has in a Web service is Authorization. Authentication is the process of validating credentials obtained from a user against a trusted authority. Impersonation allows a Web service, or other Web application, to run using the credentials of the client. SOAP Headers are sometimes used to transfer a user's credentials for authentication, but cannot be used to determine the rights that a user has in the context of an application.

Question: 153

You are creating an XML service for customers of Company Test Center. The Web service expects that the user of your application should be authenticated with Windows before placing a booking for an exam.

You will pass this information to the Web service in a SOAP header named mySoapHeader. You have declared a WindowsIdentity object and a WindowsPrincipal object with the following code: Dim myIdentity As WindowsIdentity = WindowsIdentity.GetCurrent()
Dim myPrincipal As New WindowsPrincipal(myIdentity)

Which of the following lines of code will not work? (Select all choices that apply.)

- A. mySoapHeader.IsAuthenticated = myPrincipal.IsAuthenticated
- B. mySoapHeader.IsAuthenticated = myIdentity.IsInRole()
- C. mySoapHeader.IsAuthenticated = myIdentity.IsAuthenticated
- D. mySoapHeader.IsAuthenticated = myPrincipal.IsInRole()

Answer: A, B, D

Explanation:

You should use the code `mySoapHeader.IsAuthenticated = myIdentity.IsAuthenticated` to pass to the SOAP header if the current user has been authenticated by Windows. The property `IsAuthenticated` is exposed by the `WindowsIdentity` class. The `GetCurrent` method returns the identity of the current Windows user. The `WindowsPrincipal` class reveals information regarding Windows user groups.

Question: 154

You are creating an application to edit XML documents for BlueFliers Inc. Which property of the `XmlNode` class will be useful to you to allow users to examine the actual XML syntax? (Select the best choice.)

- A. `OuterText`
- B. `OuterXml`
- C. `InnerText`
- D. `InnerXml`

Answer: B

Explanation:

The property `OuterXml` of the `XmlNode` class allows you to examine the actual XML syntax of the current node and all child nodes. The `InnerXml` property returns the XML syntax of only child nodes. The `InnerText` property returns the concatenated values of the nodes. There is no `OuterText` property of the `XmlNode` class.

Question: 155

You are creating an XML service for customers of HighSpeed ISP to charge their customers' internet access. The XML service will transfer a user's credentials for authentication before directing them to their online control panel which they can charge their bill to their credit card? (Select the best choice.)

- A. Authentication
- B. Impersonation
- C. SOAP Headers
- D. Authorization

Answer: D

Explanation:

SOAP Headers are used to transfer a user's credentials for authentication, but cannot be used to determine the rights that a user has in the context of an application.

Question: 156

You have created a SOAP extension called `SoapApp` that should be compiled and placed in the Global Assembly Cache (GAC).

What action should you take after the assembly is compiled? (Select the best choice.)

- A. Use `gacutil.exe /I SoapApp.dll` and add the attribute `<AssemblyKeyFile("c:\project\key\mykey.snk")>`
- B. Use `gacutil.exe` and Xcopy the file `SoapApp.dll` to the GAC.
- C. Use `gacutil.exe` and `RegSvr.exe` utility to register the assembly.
- D. Add the attribute `<AssemblyKeyFile("c:\project\key\mykey.snk")>` and Xcopy the file `Mykey.snk` to the GAC.

Answer: A

Explanation:

You should use the Gacutil.exe utility to register the assembly and copy it to the GAC. Once the SOAP extension assembly is given a strong name and is compiled, the assembly must be registered on the computer if you have decided to place the assembly in the GAC. The command you should use would be similar to. None of the other actions should be taken.

Question: 157

Which command will sign an assembly named RegistrationAssm.dll with a key stored in the file ESStrongKey.snk? (Select the best choice.)

- A. sn ESStrongKey.snk RegistrationAssm.dll
- B. sn -R ESStrongKey.snk RegistrationAssm.dll
- C. gacutil.exe RegistrationAssm.dll ESStrongKey.snk
- D. sn -R RegistrationAssm.dll ESStrongKey.snk
- E. sn.exe RegistrationAssm.dll ESStrongKey.snk
- F. RegSvr - R RegistrationAssm.dll

Answer: D

Explanation:In order to sign an assembly with the strong name tool, **Sn.exe**, you should use the **-R** command switch followed by the name of the assembly's DLL file and the name of the file that contains your organization's public and private key pair.

Question: 158

You have created a method to calculate the speed of light. It involves some recursive functions. You need to convert it into a web method and ensure that it performs well. The function's name is CalcLight.

Which of the following changes should you make? (Select the best choice.)

- A. Add <WebMethod(EnableSession := True)> _.
- B. Add <WebMethod()>
- C. Add <WebMethod(EnableSession := False)> _.
- D. Add <WebMethod(MessageName := " CalcLight ", EnableSession := False)> _.

Answer: D

Explanation:

You should change line 01 to <WebMethod(MessageName := "Square", EnableSession := False)> _ . Unnecessarily enabling session state in Web services may result in a performance penalty. When a Web method does not make use of Session variables, it is best to set the EnableSession attribute to the default value of False. Changing the message name, the function name, or assigning the return value to the function name rather than using the Return statement will not affect execution speed.

Question: 159

You are required to write data to your log file when you run a debug version of your web service XMLServ. You want this technique to cause the body of the logging subroutine to be compiled only if the application is compiled in debug mode. Which will require the least effort? (Select the best choice.)

- A. Use the statement Debug.WriteLineIf(#Debug, strLogData) to write the data to the log file.
- B. Use the trace switch method
- C. Use Trace.WriteLine(strLogData) to write the data to the log file.
- D. Add the statement #If Debug Then just after the logging subroutine's declaration. Add the statement #End If just before the logging subroutine's End If statement.

Answer: D

Explanation:

You should add the statement `#If Debug Then` just after the logging subroutine's declaration. Add the statement `#End If` just before the logging subroutine's declaration. This technique will cause the body of the logging subroutine to be compiled only if the application is compiled in debug mode. The `#Debug` identifier is a compile-time variable.

Question: 160

You are developing a COM+ component for use for your multilevel marketing application. Only Level 1 members are allowed to use the class, `ViewAllDownLines`. Other members who are not on Level 1, may not see all methods in the class. Which attribute should you use? (Each choice presents a part of the solution.) (Select all choices that are correct.)

- A. Add the `ComVisible` attribute to the `ViewAllDownLines` class. Set the attribute's value to `False`.
- B. Declare the methods you want to hide from COM+ as `Private`.
- C. Declare the methods you want to hide from COM+ as `Static`.
- D. Add the `ComVisible` attribute to the twelve methods that you want to be visible by COM+. Set each attribute's value to `False`.
- E. Declare the methods you want to hide from COM+ as `Friend`.
- F. Declare the methods you want to hide from COM+ as `Public`.
- G. Declare the methods you want to hide from COM+ as `Protected`.
- H. Add the `ComVisible` attribute to the `ViewAllDownLines` class. Set the attribute's value to `True`.
- I. Add the `ComVisible` attribute to the methods that you want to be visible by COM+. Set each attribute's value to `True`.

Answer: A, I

Explanation:

You should add the `ComVisible` attribute with a value of `False` to the `ViewAllDownLines` class and add the `ComVisible` attribute to the methods that you want to be visible by COM+ with a value of `True`. Setting the `ComVisible` attribute of the class to `False` hides the class and all of its members from COM+. However, individual members of the class can be exposed to COM+ by setting the `ComVisible` attribute value to `True` for each member. Although a method that is to be exposed to COM+ must be declared as `Public`, in this scenario, the methods to be hidden from COM+ should be declared as required by the needs of the .NET assembly. Because the class itself is hidden from COM+, the methods are also hidden from COM+ unless explicitly overridden.

Question: 161

You have created an XML web service to find out whether a course is full or not. Which of the following methods should you use to query the database? (Select the best choice.)

- A. `SqlCommand.ExecuteNonQuery`
- B. `DataReader.Read`
- C. `SqlCommand.ExecuteScalar`
- D. `SqlCommand.ExecuteReader`

Answer: C

Explanation:

The `ExecuteScalar` method of the `SqlCommand` class returns the value of the first row and first column that is returned by the query. Because the method only returns a single value, it is appropriate for stored procedures and queries that return one value.

Question: 162

You are ready to deploy your XML Web Service to BuyPC Inc. The Web service consists of a file named `ShoppingCart.asmx` and an assembly named `BuyPC.dll`. You want to deploy your Web service to a production server. You create a virtual directory and associated subdirectories on the production server and copy `ShoppingCart.asmx` into the folder.

Which action must you take next? (Select the best choice.)

- A. Copy BuyPC.dll to the virtual directory on the production server.
- B. Run Regasm.exe to register ShoppingCart.asmx.
- C. Copy BuyPC.dll to the \BIN folder under the virtual directory.
- D. Run Sn.exe to give ShoppingCart.asmx a strong name.

Answer: C

Explanation:

After copying the Web service file ShoppingCart.asmx to the virtual directory, you should copy BuyPC.dll to the \BIN folder. If you use Visual Studio .NET to create your Web service, your Web service will be deployed to the development server when the application is compiled. To move the Web service to another server, you can copy the Web service .asmx file to a virtual directory and copy any assemblies used by the application to a \BIN folder under the virtual directory.

Question: 163

You work for a transportation broking company and you need to access the discovery document of the Web service by another company offering full truck load parcel transportation, FullParcel. You know their server and the application name. Which should you choose? (Select the best choice.)

- A. http://disco:CompanyServer/Parceltracking.asmx
- B. http://CompanyServer/disco
- C. http://CompanyServer/Parceltracking.asmx?DISCO
- D. http://CompanyServer/Parceltracking/disco

Answer: C

Explanation:

To obtain the discovery document of the Web service, your application should use the URL http://CompanyServer/Parceltracking.asmx?DISCO. Discovery documents provide information about an XML Web service. Clients can learn how to properly interact with the Web service from the information retrieved from the discovery document. The ?DISCO parameter causes the Web service to automatically generate the discovery document.

Question: 164

You are working for Textilekam. All of your sales personnel use their notebook computers to access your XML web service. They have windows accounts in your company.

Which of the following combinations should you use to most easily secure your Web service? (Select the best choice.)

- A. Basic Authentication and the CredentialCache object
- B. Windows Integrated Authentication and Impersonation
- C. Forms Authentication and Impersonation
- D. Digest Authentication and NT Domain roles

Answer: B

Explanation:

You should use Windows Integrated Authentication and Impersonation. Because the clients and server will both be using Windows-based operating systems, Windows Integrated security is a logical choice. Impersonation allows the Web service to use the credentials of the client to access the database. This allows the databasedefined users and roles to be utilized.

Question: 165

Manukam Inc manufactures household items. Its suppliers are now sending their products' information through XML files. These files may or may not have schemas. Which code segment should you use to load the datasets? (Select the best choice.)

- A. Dim dsData As DataSet dsData.ReadXml ("myinfo.xml", XmlReadMode.InferSchema)
- B. Dim fsMain As New System.IO.FileStream ("myinfo.xml", System.IO.FileMode.Create) Dim dsData As DataSet dsData.ReadXml(fsMain, XmlReadMode.IgnoreSchema)
- C. Dim dsData As DataSet = New dsData.ReadXml("myinfo.xml", XmlReadMode.IgnoreSchema)
- D. Dim dsData As DataSet dsData.ReadXml ("myinfo.xml", XmlReadMode.DiffGram)

Answer: A

Explanation:When **InferSchema** is used, elements and attributes in the XML help determine tables and columns.

Question: 166

Which of the following lines of code will cause an error? (Each choice presents a complete solution.) (Select all choices that are correct.)

- A. Cache.Session.Insert("myKey") = stringValue
- B. Cache("myKey") = stringValue
- C. Cache.Insert("myKey", stringValue)
- D. Cache.Item("myKey") = stringValue
- E. Cache.Get("myKey", stringValue)
- F. Cache.Session("myKey") = stringValue
- G. Cache.Add("myKey") = stringValue

Answer: A, D, E, F, G

Explanation:

You can add data to the Cache object in three ways: by specifying a key/value pair, by using the Add method or by using the Insert method.

Question: 167

You are developing a simple word ASP.NET XML Web service. When the Web service is run, you want it to initialize variables that will be used throughout the Web service code.

Which file should contain the code that will initialize the variables? (Select the best choice.)

- A. Global.asax
- B. Web.config
- C. Global.asa
- D. Machine.config

Answer: A

Explanation:

In order to initialize the variables when the Web service initially runs, you should place the initialization code in the Application_OnStart subroutine in the Global.asax file of the application. The Global.asax file is used by ASP.NET applications, including Web services, to define application events.

Question: 168

You need to fill a combo box with a list of cultures supported. The computer supports more than one culture. Which code segment will

allow you to fill the combo box with all the detected cultures?

- A. Dim ESCultureInfo As CultureInfo For Each ESCultureInfo In CultureInfo.GetCultures(CultureTypes.AllCultures) cboCulture.Items.Add(ESCultureInfo.ToString & " " & ESCultureInfo.NativeName & " (" & ESCultureInfo.EnglishName & ")") Next ESCultureInfo
- B. Dim ESCultureInfo As CultureInfo For Each ESCultureInfo In CultureInfo.GetCultures(CultureTypes.InstalledWin32Cultures) cboCulture.Items.Add(ESCultureInfo.ToString & " " & ESCultureInfo.NativeName & " (" & ESCultureInfo.EnglishName & ")") Next ESCultureInfo
- C. cboCulture.Items = CultureInfo.GetCultures(CultureTypes.InstalledWin32Cultures)
- D. cboCulture.Items = CultureInfo.GetCultures(CultureTypes.AllCultures) Original choice order: bdac

Answer: B

Explanation:

To populate the cboCulture combo box, you should iterate through the cultures returned by the GetCultures method using a parameter of CultureTypes.InstalledWin32Cultures. This will return all cultures recognized by the operating system. The AllCultures member of the CultureTypes enumeration will return all known cultures, even if they are not supported by the operating system. You cannot assign a collection directly to the Items collection of a ComboBox.

Question: 169

You have created a class that is derived from the ESServicedComponent class. You plan to create a public/private key pair by using the command sn.exe -k "ESmyKey.snk".

What action should you take before you compile the assembly? (Select the best choice.)

- A. Run the command regsvr32.exe
- B. Run the command sn.exe -r "ESmyKey.snk" "publickey.snk".
- C. Run the command sn.exe -p "ESmyKey.snk" "publickey.snk".
- D. Run the command al.exe -v "ESmyKey.snk".
- E. Add the attribute <assembly: AssemblyKeyFileAttribute("ESmyKey.snk")> to the class.
- F. Add the attribute <assembly: Transaction("ESmyKey.snk")> to the class.

Answer: E

Explanation:

You should add the attribute <assembly: AssemblyKeyFileAttribute("ESmyKey.snk")> to the class before you compile the assembly. Your class must identify the key pair through the AssemblyKeyFileAttribute property of the <assembly> attribute. Without specifying the name of the key pair in the class, the compiled assembly will not have a strong name. None of the other actions should be taken.

Question: 170

Your Web service needs to call a subroutine named ESMModule that resides in a standard DLL named Win32api.dll. You want to refer to this subroutine as MyRoutine in your Web service source code. The subroutine returns a Boolean value.

Which of the following declarations should you use? (Select the best choice.)

- A. <DllImport("Win32api.dll", EntryPoint := "MyRoutine", _ SetLastError := True, CharSet := CharSet.Unicode, _ ExactSpelling := True, _ CallingConvention := CallingConvention.StdCall)> _ Public Shared Function ESMModule() As Boolean
- B. <DllImport("ESModule", EntryPoint := "Win32api.dll", _ SetLastError := True, CharSet := CharSet.Unicode, _ ExactSpelling := True, _ CallingConvention := CallingConvention.StdCall)> _ Public Shared Function MyRoutine() As Boolean
- C. <DllImport("MyRoutine", EntryPoint := "Win32api.dll", _ SetLastError := True, CharSet := CharSet.Unicode, _ ExactSpelling := True, _ CallingConvention := CallingConvention.StdCall)> _

Public Shared Function ESModule() As Boolean
D. <DllImport("Win32api.dll", EntryPoint := "ESModule", _ SetLastError := True, CharSet := CharSet.Unicode, _ ExactSpelling := True, _ CallingConvention := CallingConvention.StdCall)> _ Public Shared Function MyRoutine() As Boolean

Answer: D

Explanation:

You should use the declaration: <DllImport("Win32api.dll", EntryPoint := "ESModule", _ SetLastError := True, CharSet := CharSet.Unicode, _ ExactSpelling := True, _ CallingConvention := CallingConvention.StdCall)> _ Public Shared Function MyRoutine() As Boolean

Question: 171

You have wrote a serviced component and now you want it to take advantage of the automatic transactions.

Which of the following lines of code properly defines the function? (Select the best choice.)

- A. Function MyFunction () As String <Automatic>
- B. Function MyFunction () As String <Auto>
- C. < autotrans > Function MyFunction () As String </autotrans>
- D. <AutoComplete> Function MyFunction () As String
- E. <AutoComplete()> Function MyFunction () As String
- F. Function MyFunction () As String <AutoComplete/>

Answer: E

Explanation:

The code <AutoComplete()> Function MyFunction () As String properly defines the MyFunction function so that it implements automatic transactions. Serviced components can take advantage of COM+ services, such as automatic transactions. A function within the component that is defined with the <AutoComplete()> attribute will start a transaction when the function is called and will end the transaction when the function ends. None of the other lines of code properly define the function.

Question: 172

You are trying to debug this erroneous XML discovery file. The file is shown below:

```
<?xml version="1.0"?><discovery xmlns="http://schemas.xmlsoap.org/disco/"> <discoveryRef  
ref="http://ESProductionSrv/Default.disco" /><contractRef ref="http://ESProductionSrv/StudyGuidesOrder.asmx?WSDL"  
docRef="Service.htm" xmlns="http://schemas.xmlsoap.org/disco/scl/" /><schemaRef ref="Schema.xsd" /> </discovery>
```

What action should you perform to correct the discovery document? (Select the best choice.)

- A. Change the <discovery> element to <disco:discover>.
- B. Change the <schemaRef> element to <schemaReference>.
- C. Change the <discovery> element to <disco:discovery>.
- D. Change the <schemaRef> element to <schema>.
- E. Add an xmlns property to the <schemaRef> element with the value of http://schemas.xmlsoap.org/disco/schema .
- F. Add an xmlns property to the <discoveryRef> element with the value of http://schemas.xmlsoap.org/disco/schema.
- G. Add an xmlns property to the <schema> element with the value of http://schemas.xmlsoap.org/disco/schema .

Answer: E

Explanation:

To correct the discovery document, you should add a xmlns property to the <schemaRef> element with the value of http://schemas.xmlsoap.org/disco/schema. Discovery documents provide information about an XML Web service. Clients can learn how to properly interact with the Web service from the information retrieved from the discovery document. Your discovery document must reference the namespace http://schemas.xmlsoap.org/disco/schema.

Question: 173

What will this code achieve?

```
<channels> <channel ref="http" /> <clientproviders> <formatter ref="binary" /></clientproviders> </channels>
```

- A. The Web service is using the HTTP protocol
- B. It uses binary-formatted messages
- C. There is low performance
- D. There is higher performance
- E. There is less security
- F. It is very secure
- G. We cannot utilize the security features of IIS
- H. We can utilize the security features of IIS
- I. Binary-formatted messages perform much slower than SOAP-formatted messages.

Answers: A, B, D, F, H

Explanation:

The Web service should use HTTP protocol and binary-formatted messages for the greatest performance and security. You must use the HTTP protocol in order to utilize the security features of IIS. Binary-formatted messages perform much faster than SOAP-formatted messages. The HTTPChannel class in the .NET Framework provides the mechanism to communicate with the HTTP protocol.

Question: 174

You are working for Bank of Company. Your application will allow client software to retrieve information from your e-banking Web service. The client will populate the structure with data and return the populated structure to the Web service. The unpopulated structure has this format:

```
<BankAccount>
<AccountInfo Name="UserID" Prompt="User Id:" /><AccountInfo Name="Password"
Prompt="Password:"><![CDATA[]]></AccountInfo><AccountInfo Name="Timeout" Default="5" /></BankAccount>
```

Which of the following sections of code will build this unpopulated structure? (Select the best choice.)

- A. Dim Params, Parm As Xml.XmlElement Params = dom.AppendChild(dom.CreateElement("BankAccount")) Parm = Params.AppendChild(dom.CreateElement("AccountInfo")) Parm.SetAttribute("Name", "UserID") Parm.SetAttribute("Prompt", "User Id:") Parm = Params.AppendChild(dom.CreateElement("AccountInfo")) Parm.SetAttribute("Name", "Password") Parm.SetAttribute("Prompt", "Password:") Parm.AppendChild(dom.CreateCDATASection(vbNullString)) Parm = Params.AppendChild(dom.CreateElement("AccountInfo")) Parm.SetAttribute("Name", "Timeout") Parm.SetAttribute("Default", "5")
- B. strXML = vbNullString strXML = strXML & "<BankAccount><AccountInfo Name=""UserID"" _ & " Prompt=""User Id:" />" strXML = strXML & "<AccountInfo Name=""Password"" _ & " Prompt=""Password:""><![CDATA[]]>" strXML = strXML & "</AccountInfo><AccountInfo Name=""Timeout"" _ & " Default=""5"" /></BankAccount>"

```

    dom.AppendChild(dom.CreateNode(Xml.XmlNodeType.DocumentFragment, strXML))
C. Dim Params, Parm As Xml.XmlElement Params = dom.AppendElement(dom.CreateElement("BankAccount")) Parm =
  Params.AppendElement(dom.CreateElement("AccountInfo")) Parm.SetAttribute("Name", "UserID") Parm.SetAttribute("Prompt",
  "User Id:") Parm = Params.AppendElement(dom.CreateElement("AccountInfo")) Parm.SetAttribute("Name", "Password")
  Parm.SetAttribute("Prompt", "Password:") Parm.AppendElement(dom.CreateCDataSection(vbNullString)) Parm =
  Params.AppendElement(dom.CreateElement("AccountInfo")) Parm.SetAttribute("Name", "Timeout") Parm.SetAttribute("Default",
  "5")
D. strXML = vbNullString strXML = strXML & "<BankAccount><AccountInfo Name=""UserID"" _ & " Prompt=""User Id:" />"
  strXML = strXML & "<AccountInfo Name=""Password"" _ & " Prompt=""Password:""><![CDATA[]]>" strXML = strXML &
  "</AccountInfo><AccountInfo Name=""Timeout"" _ & " Default=""5"" /></BankAccount>" dom.Load(strXML)

```

Answer: A

Explanation:

You can create the proposed XML structure by appending the nodes to the DOM Document object and setting the required attributes. The CreateNode method of the XmlDocument class cannot be used to build an XML structure from a document fragment contained in a string variable.

Question: 175

You write a line of code to retrieve student counts for a specific course. Which of the following code fragments should be used to retrieve the student count value from the stored procedure parameter? (Select the best choice.)

- A. myReader.Close Dim RecCount As Long = CLng(myReader.Parameters("@StudentCount").Value)
- B. myCommand.Cancel Dim RecCount As Long = CLng(myReader.Parameters("@StudentCount").Value)
- C. Dim RecCount As Long = myReader.GetString("@StudentCount") myCommand.Cancel
- D. Dim RecCount As Long = CLng(myReader.Parameters("@StudentCount").Value) myReader.Close

Answer: A

Explanation:

The Close method closes the DataReader object and supplies values to output parameters. Output parameters in a DataReader object have no value until the DataReader object is closed. The Close method should also be called before checking the RecordsAffected property of the DataReader object after issuing an Update or Delete statement. The Cancel method of the Command object is used to terminate the execution of a command. The GetString property of the DataReader object is used to retrieve a string value from a specified column.

Question: 176

Your ASP.Net application retrieves data from a Web service. You want to enable tracing on all but seven of the application's pages. It is important that only those pages that you select for tracing display trace information on the page. Which actions will not contribute to the solution? (Each choice presents a part of the solution.) (Select 2 choices.)

- A. Set the value of the @ Page directive's Trace attribute to true on each page that should display trace information.
- B. Configure the Web.config file in your application's root directory so that the Trace element's pageOutput attribute is set to false.
- C. Configure the Web.config file in your application's root directory so that the Trace element's pageOutput attribute is set to true.
- D. Set the value of the @ Page directive's Trace attribute to false on the two pages that should not display trace information.
- E. Configure the Web.config file in your application's root directory so that the Trace element's enabled attribute is set to true.

Answer: A, B

Explanation:

In order to display trace information on most pages in your application, you should configure your application's Web.config file so that the Trace element's enabled attribute is set to true and the pageOutput attribute is set to true. You should also set the value of the @ Page directive's Trace attribute to false on each page that should not display trace information. The application's Web.config file, which is found in the application's root directory, can enable tracing for all pages through a single setting.

Question: 177

Your colleague has implemented commands 220, 221 and 222 to be used in your ServiceBase based class. Which of the following events of the ServiceBase class should you use to process the request to execute a command defined by your colleague? (Select the best choice.)

- A. OnCustomCommand
- B. OnContinue
- C. OnStart
- D. OnPowerEvent

Answer: A**Explanation:**

You should process the request to purge old entries from the log file in the OnCustomCommand event handler of the ServiceBase class. The OnCustomCommand event handler is invoked when the Service Control Manager (SCM) sends a custom command to the service instance. In this scenario, you would define a custom command that would instruct the service to purge the old entries from the log file. The OnStart event handler is invoked when the SCM sends a start message to the service. The OnContinue event handler is invoked when the SCM sends a continue message to the service instance. The OnPowerEvent event is used on notebook computers to notify the service that the computer's electrical power state has changed.

Question: 178

To implement a secure class, you must ensure that objects are allowed to derive from select classes. How will you achieve this? (Select the best choice.)

- A. Inherits
- B. Me
- C. MyClass
- D. TypeOf

Answer: D**Explanation:**

The TypeOf keyword is used to determine whether an object is derived from a particular class or interface.

Question: 179

Which type of components will require these:

- Use the Sn.exe utility to sign the assembly with a strong name.
- Inherit the ServiceComponent class.
- Add the <Transaction(TransactionOption.Required)> attribute to the component.
- Import the System.EnterpriseServices namespace.
- Add the <AutoComplete(> attribute to all function definitions.
- A web method
- An XML service
- Queued component
- Service component

Answer: D

Explanation:

In order to create a serviced component that implements automatic transactions, you should import the System.EnterpriseServices namespace, inherit the ServicedComponent class, use the Sn.exe utility to sign the assembly with a strong name, add the <Transaction(TransactionOption.Required)> attribute to the component and add the <AutoComplete()> attribute to all function definitions. Serviced components can take advantage of COM+ services, such as automatic transactions. The ServicedComponent class is the base class of classes using COM+ services and is found in the System.EnterpriseServices namespace. The <Transaction> attribute determines how transactions are handled in the component. Functions within the component that are defined with the <AutoComplete()> attribute will start a transaction when the function is called and will end the transaction when the function ends. Serviced components must have a strong name, which is created by the Sn.exe utility.

Question: 180

You are creating a supplier chain management system which will integrate suppliers' data. Your XML service will read an XSD file that contains only schema data and will modify the relational structure of a DataSet object.

Which DataSet method should you use to modify the dataset's structure? (Select the best choice.)

- A. WriteXmlSchema
- B. ReadXmlSchema
- C. InferXmlSchema
- D. ReadXml

Answer: B

Explanation:

The ReadXmlSchema method of the DataSet class will modify the relational structure of a dataset based on the schema contained in an XML source. ReadXmlSchema should be used only when you update the schema of a dataset. To read XML data into a dataset, you should use the ReadXml method. The InferXmlSchema method will also update a dataset schema, but it is used when the XML document does not contain an in-line schema. The WriteXmlSchema method will create an XML schema document based on a dataset's schema.

Question: 181

You are developing an XML web service that will allow your suppliers to access your Web services. Your Web services will not be online until your company merges with another larger firm. Several suppliers are impatient and want to begin developing applications based on your specifications.

What should you do to allow these vendors to begin developing their applications? (Select the best choice.)

- A. Send to the vendors the application configuration files that are associated with the Web services.
- B. Use WSDL.exe to generate proxy classes for your exposed Web services. Send these proxies to your vendors.
- C. Allow the vendors to download the source code of your Web services.
- D. Open your corporate firewall to allow DCOM traffic to pass through.

Answer: B

Explanation:

To allow the vendors to begin developing their applications, you should use the Web Services Description Language Tool, or WSDL.exe, to generate proxy classes for your exposed Web services and send the proxies to your vendors. WSDL.exe can generate proxy classes that enable programmers to more easily code against your Web services.

Question: 182

You have developed an assembly that will be shared among the Web applications used by your company. How should you prepare the assembly for deployment? (Select the best choice.)

- A. You should use a merge module.
- B. You should use a Standard Setup.
- C. You should use a Web Setup.
- D. You should use Xcopy deployment.

Answer: A

Explanation:

Merge modules are installer packages that can only be installed from other installer packages. In this scenario, the assembly should be packaged into a merge module so that the same merge module can be deployed from the installer packages of any number of applications.

Question: 183

You are creating a stock broking application. You want the SearchStockPrice function to use the document SOAP format but you notice that SearchStockPrice method uses the incorrect format.

What are not the causes? (Select all that apply.)

- A. The SoapRpcServiceAttribute has been applied to the SearchStockPrice method.
- B. The document SOAP format cannot be used with the SoapDocumentServiceAttribute.
- C. The SoapRpcMethodAttribute has been applied to the SearchStockPrice method.
- D. The document SOAP format cannot be used with functions that return a String.

Answer: A, B, D

Explanation:

You should check to see if the SoapRpcMethodAttribute has been applied to the SearchStockPrice method. Four different attributes determine which SOAP format is used with Web service functions. The SoapDocumentServiceAttribute and SoapRpcServiceAttribute attributes are used to specify which SOAP format will be used by default for a Web service class.

Question: 184

You have created a Windows form application named PowerBillingApp for Powers Inc. You will be invoke a remote object through the application. You need to control its lifetime and its channel.

Where should you record the values? (Select the best choice.)

- A. in the PowerBillingApp.exe.config file located in the root folder of the application
- B. in the PowerBillingApp.config file located in the root folder of the application
- C. in the PowerBillingApp.config file located on the server that hosts the remote object
- D. in the Machine.config file located on the server that hosts the remote object

Answer: A

Explanation:

You should record the values that will affect the remoting process, such as lifetime and channel, in the PowerBillingApp.exe.config file in the root folder of the application. The application configuration file is the proper location of remoting values. The name of the

application configuration file is the name of the application, including .exe, with a .config extension. In this scenario, the proper name of the application configuration file is PowerBillingApp.exe.config. None of the other choices are valid.

Question: 185

How many connection pools would be created if connections were made to Microsoft SQL Server 2000 at the given times by using the following connection strings?

Integrated Security=SSPI;Initial Catalog=Nursing Integrated Security=SSPI;Initial Catalog=Administration
Provider=SQLOLEDB.1;User ID=plantw;Initial Catalog=Personnel Provider=SQLOLEDB.1;User ID=plantw;Initial Catalog=Accounting
Provider=SQLOLEDB.1;User ID=linkr;Initial Catalog=Nursing Provider=SQLOLEDB.1;User ID=plantw;Initial Catalog=Accounting
Integrated Security=SSPI;Initial Catalog=Nursing Integrated Security=SSPI;Initial Catalog=Nursing Provider=SQLOLEDB.1;User
ID=plantw;Initial Catalog=Nursing Provider=SQLOLEDB.1;User ID=linkr;Initial Catalog=Nursing Integrated Security=SSPI;Initial
Catalog=Administration Provider=SQLOLEDB.1;User ID=wheatc;Initial Catalog=Accounting

(Select the best choice.)

- A. 7
- B. 3
- C. 12
- D. 2
- E. 4

Answer: A

Explanation:

The specified connection strings will create seven connection pools. Only connections with identical connection strings are pooled. In this scenario, seven unique connection strings are used, which will create seven connection pools.

Question: 186

You are writing an assembly that will be used by an ASP.NET page for GetJobsES. The user will enter a filename containing their resume into a text box, and the Web page will use the component to locate, open, and save the file onto the server. Which type of security should be used by the component? (Select the best choice.)

- A. Role-Based Security
- B. Windows NT Security
- C. Imperative Security
- D. Declarative Security

Answer: C

Explanation:

You should use imperative security for this component. Because you do not know until run-time which file will be requested, you must use imperative security methods, which are evaluated at run-time. Declarative security measures could be used if the files to be edited were known at design time. Neither Windows NT security nor role-based security is appropriate for use in this scenario.

Question: 187

Which of the following elements are not used in XML Web services discovery documents? (Select 2 choices.)

- A. <contractRef>
- B. <discovery>
- C. <disco>
- D. <docRef>

E. <xmlns>

Answer: C, D, E, F

Explanation:

The elements <discovery> and <contractRef> are used in XML Web services discovery documents. Discovery documents provide information about an XML Web service. Clients can learn how to properly interact with the Web service from the information retrieved from the discovery document. The <discovery> element identifies the XML file as a discovery document. The <contractRef> element specifies service descriptions. None of the other choices represent elements used in discovery documents.

Question: 188

You need to allow your program to show different levels of debugging information. You examine the Web service's Web.config file: (Line numbers are for reference purposes only.)

```
01 <system.diagnostics> 02 <switches> 03 <add name="Tracing"
value="0" /> 04 </switches> 05 </system.diagnostics>
```

What change should you make in this section to enable the display of all error and warning messages by the Tracing trace switch? (Select the best choice.)

- A. Delete line 03 and change line 02 to <switches Tracing=4>
- B. Change line 02 to <switches value="on">
- C. Change line 03 to <add name="Tracing" value="verbose" />
- D. Change line 03 to <add name="Tracing" value="3" />
- E. Change line 03 to <add name="Tracing" value="2" />
- F. Change line 03 to <add name="Tracing" value="1" />
- G. Change line 03 to <add name="Tracing" value="4" />

Answer: G

Explanation:

To enable the display of all error and warning messages by the Tracing trace switch, you should change line 03 to <add name="Tracing" value="4" />. Trace switches allow you to start and stop tracing in an application. The value property determines the amount of tracing that is performed. A value of 0 turns tracing off; a value of 4 sets tracing to verbose mode. Your application will return the most information when tracing is set to verbose mode.

Question: 189

You are creating an XML Web service named TimeEntryService for LawyersES. You need to configure myWebService to meet these requirements from users of the law firm:

- Users cannot afford to forget passwords
- Login time is not an issue
- Client must have a trustworthy credential

Which type of authentication should you use?

- A. Basic
- B. Digest
- C. Anonymous
- D. Client Certificate

Answer: D

Explanation:

Client certificate authentication meets the requirements of this scenario:

would only allow specific users to gain access
no username or password would be required.

Question: 190

You create an XML Web service for your company. You successfully test the service. You have already created a new virtual directory on a production computer. Registration and configuration is preferred to be performed manually on the production computer since it is just a small application.

Which deployment mechanism should you use?

- A. FTP
- B. Xcopy command
- C. Web setup project
- D. Copy Project command

Answer: B

Explanation:

Just copying the files would require manual registration and configuration.

Question: 191

Your deployment process is plagued with many problems such as:

The wrong release version is being used
The application is not easily updated
It is not installed in the global assembly cache

You need to ensure that future upgrades will be applied correctly. Which action or actions should you take? (Choose all that apply)

- A. Sign ESComponent by using a strong name.
- B. Compile ESComponent as a satellite assembly.
- C. Include a publisher policy file that is registered in the global assembly cache on your customer's computers.
- D. Increment the assembly version for each update of ESComponent.
- E. Add an application configuration file to ESComponent that includes assembly binding information that redirects prior versions to the updated version.

Answer: A, C, D

Explanation:

We must use a strong name for ESComponent. Vendors of assemblies can state that applications should use a newer version of an assembly by including a publisher policy file with the upgraded assembly. In this scenario a publisher policy can be used since the newer versions of the component will be backward compatible. We must make sure that we increment the assembly version for each update of the component.

Question: 192

You have developed a serviced component called StockBrokingApp. You need to ensure that that StockBrokingApp does not execute if administrators turns off security for the COM+ application.

What should you do?

- A. To the project source code, add the following attribute: `<Assembly: ApplicationAccessControl(AccessChecksLevel:= AccessChecksLevelOption.ApplicationComponent)>`
- B. To all methods, add the following attribute: `<SecurityRole("Administrators", False)>`
- C. To the beginning of all methods, add the following code segment: `IfNot ConnectUtil.IsSecurityEnabled Then ContextUtil.DisableCommit() End If`
- D. To the beginning of all methods, add the following code segment: `IfNot ContextUtil.IsSecurityEnabled Then Throw New SecurityException(_ "Security must be enabled.") End If`

Answer: D

Explanation:

We use `ContextUtil.IsSecurityEnabled` property to decide whether role-based security is active in the current context. If it is not active we throw a `SecurityException`. This will prevent `StockBrokingApp` from executing if security is disabled.

Question: 193

You have created a class that is derived from the `ServicedComponent` class called `DistributionApp`. You need to install it into the Global Assembly Cache and create the key pair that will be used to give the compiled assembly a strong name. Which of the following commands will produce the key pair? (Select the best choice.)

- A. `Tlbimp`
- B. `Tlbexp`
- C. `sn -k "mykey.snk"`
- D. `sn -p "mykey.snk"`
- E. `al -k "mykey.snk"`
- F. `al -p "mykey.snk"`

Answer: A Explanation:

You should use the command `sn -k "mykey.snk"` to produce the key pair that will be used to give the compiled assembly a strong name. A public/private key pair is required to sign an assembly with a strong name. The `Sn.exe` utility produces the key pair. The `-k` parameter specifies that a new key pair file should be generated. The `-p` parameter copies the public key portion of a key pair and places it in a separate file. The `p` parameter is typically used when developers need to delay signing of an assembly. The `Al.exe` utility compiles an assembly, but does not produce the key pair.

Question: 194

You create a .net remoting class in Visual Studio .NET. You have not upgraded all COM components to .Net yet. You want to use the COM component in your Visual Studio .NET solution.

What should you do?

- A. Register the COM component by using `Regsvr32.exe`.
- B. Register the COM components into the GAC
- C. Run `installutil` on the .net remoting class
- D. Run the Type Library Exporter (`Tlbexp.exe`) and pass the COM component as the filename parameter.
- E. Add a web reference to the COM component.
- F. Use the GUID of the COM component to create an instance of it
- G. Add a reference to the COM component.
- H. Run the Assembly Registration tool (`Regasm.exe`) and pass the COM component as the filename Parameter

Answer: G

Explanation:

We simply need to add a reference to the COM component.

Question: 195

You are creating an XML Web service named ESRetrieveExamResults. The service contains a Web method named RetrieveSubjectsTaken. RetrieveSubjectsTaken takes as input a candidate ID and returns a DataSet object that contains information about all exams taken. You want to capture all incoming SOAP messages in RetrieveSubjectsTaken and write the messages to a file for future processing. You need to be able to capture and process SOAP messages.

What should you do?

- A. Enable sessions in RetrieveSubjectsTaken.
- B. Extend EnterpriseServices
- C. Apply a SoapHeader attribute to RetrieveSubjectsTaken.
- D. Apply a SoapRpcMethod attribute to RetrieveSubjectsTaken.
- E. Create a SOAP extension for RetrieveSubjectsTaken.

Answer: E

Explanation:

The ASP.NET SOAP extension architecture revolves around an extension that can inspect or modify a message at specific stages in message processing on either the client or the server. A SOAP extension would allow the capture and processing of SOAP messages.

Question: 196

You are creating an XML Web service named OrderFulfillmentSys. This service must be able to allow structured data to be stored, retrieved, and manipulated through a relational DataSet. In addition, you need to be able to load either relational data and XML data to manipulate data. You need to create the object that will provide this data access.

Which object should you use?

- A. XmlDataDocument
- B. XmlDocument
- C. XmlDocumentFragment
- D. XPathDocument

Answer: A

Explanation:

XmlDataDocuments allows structured data to be stored, retrieved, and manipulated through a relational DataSet. XmlDocument enables you to load either relational data or XML data and manipulate that data

Question: 197

You have a strongly types DataSet object named CompanyDataSet. This object contains three DataTable objects named Students, Subjects and SubjectTaken. Students and Subjects have a data column named StudentsID. Subjects and SubjectTaken have a data column named OrderID. Subjects have a foreign key constraint between Students and Subjects on StudentsID. SubjectTaken has a foreign key constraint between Subjects and SubjectTaken on OrderID.

You want to populate Students, Subjects and SubjectTaken with data from Microsoft SQL Server database. In which order should

you fill the Data table objects?

- A. Students, SubjectTaken, Subjects
- B. SubjectTaken, Subjects, Students
- C. Students, Subjects, SubjectTaken
- D. Subjects, SubjectTaken, Students

Answer: C

Explanation:

We most populate the tables that are references by the foreign-key constraints first, namely the Students and the Subjects table. We should populate the SubjectTaken table last.

Question: 198

You need to develop an application that checks emails every 15 minutes and sends all new emails to a customer response application. The application will run on computer that is used by several users who continuously log on and log off from the network to perform miscellaneous tasks.

Which type of .NET application should you use?

- A. Queued component
- B. Serviced component
- C. COM+ application
- D. Windows service
- E. XML Web service
- F. .NET Remoting object

Answer: D

Explanation:

A Windows service would still be running even though users logs on and off.

Question: 199

You are working on an XML web service for NerdBooks. You decide to output the XML data containing books published before 1998 and its declaration into a string for archive. The string will written to a file.

What should you do?

- A. Assign the ToString method of the Xml Document object to a string variable.
- B. Assign the OuterXml property of the Xml document element property of the Xml document object to a string variable.
- C. Use the WriteContentTo method of the XmlDocument object to write the document into a MemoryStream object. Use the GetXml method of the DataSet object to get a string version of the document.
- D. Assign the OuterXml property of the Xml document object to a string variable

Answer: D

Explanation:

The XmlNode.OuterXml property gets the markup representing this node and all its children.

Question: 200

You are creating an XML web service to manage the alumni of School of Religious Arts. You want to merge exStudents into existingStudents and preserve the original values in existingStudents.

Which code segment should you use?

- A. existingStudents.Merge (exStudents)
- B. exStudents.Merge (existingStudents)
- C. exStudents.Merge (existingStudents, True)
- D. existingStudents.Merge (exStudents, False)
- E. existingStudents.Merge (exStudents, True)

Answer: E

Explanation:

The DataSet.Merge method merges this DataSet with a specified DataSet. The data will be merged into the dataset on which the Merge method is applied. We want to merge into our DataSet, namely the loanCustomerDataSet. Furthermore, we want to preserve the original values in loanCustomerDataSet. The Boolean parameter is the preserveChanges. PreserveChanges indicates a value indicating whether changes made to the current DataSet should be maintained. It should be true, if changes should be maintained, like in this scenario. .

Question: 201

You are a software developer at Company.net. You are developing an application to maintain customer information in a Microsoft SQL Server database. You populate a DataSet object named customerDataSet. You bind this object to a DataGrid object. Your application invokes a Web method named CustomerUpdates in an XML Web service. This method accepts customerDataSet as a parameter and processes the updates made in the DataGrid object. You want to ensure that network traffic to the Web service is minimized.

Which code segment should you use?

- A. If myDataSet.HasChanges() Then Dim customerChanges As DataSet myDataSet.AcceptChanges() customerChanges = myDataSet.GetChanges() CustomerUpdates(customerChanges) End If
- B. If myDataSet.HasChanges() Then Dim customerChanges As DataSet customChanges = myDataSet.GetChanges()= CustomerUpdates(customerChanges) End If
- C. Dim customerChanges As DataSet myDataSet.AcceptChanges() customerChanges = myDataSet.GetChanges() CustomerUpdates(customerChanges)
- D. Dim customerChanges As DataSet customerChanges = myDataSet.GetChanges() CustomerUpdates(customerChanges)

Answer: A

Question: 202

You are a software developer at Company.net. You have a DataSet object named CompanyDataSet that is populated with data from a Microsoft SQL Server database. This object contains insertions, deletions, and updates to the data. You want to apply the data changes in CompanyDataSet to the database. You decide to use the SqlConnection data provider. You need to create a data object that you will use to update the database. Which code segment should you use?

- A. Dim myDataReader As SqlDataReader
- B. Dim mySqlDataAdapter As New SqlDataAdapter()
- C. Dim myDataObject As New DataObject()
- D. Dim myParameter As New SqlParameter()

Answer: B

Question: 203

You are a software developer at Company.net. You are creating a DataSet object that will be populated with information from a table named Products in a Microsoft SQL Server database. The object must include the ProductID, ProductName, and UnitsInStock columns in a DataTable object also named Products. You instantiate a SqlConnection object named myConnection. You need to write code to populate the DataSet object. Which code segment should you use?

- A. Dim CompanyProductsDataSet As New DataSet() Dim myDataAdapter As New SqlDataAdapter _ ("SELECT ProductId, ProductName, UnitsInStock FROM" _ & " Products", myConnection) myDataAdapter.Fill(CompanyProductsDataSet, "Products")
- B. Dim CompanyProductsDataSet As New DataSet() Dim myCommand As New SqlCommand Dim myDataAdapter As New SqlDataAdapter (myCommand) myCommand.CommandText = "SELECT ProductId, _ ProductsName, " & UnitsInStock FROM Products" MyDataAdapter.Fill(CompanyProductsDataSet, "Products");
- C. myConnection.Open() Dim CompanyProductsDataSet As New DataSet() Dim myDataAdapter As New SqlDataAdapter _ ("SELECT ProductId, ProductName, UnitsInStock FROM" _ & " Products", myConnection) myDataAdapter.Fill(CompanyProductsDataSet)
- D. myConnection.Open() Dim CompanyProductsDataSet As New DataSet() Dim myDataAdapter As New SqlDataAdapter _ ("SELECT ProductId, ProductName, UnitsInStock FROM" _ & " Products", myConnection) Dim Products As New DataTable(); myDataAdapter.Fill(CompanyProductsDataSet)

Answer: A

Question: 204

You are a software developer at Company.net. You create a strongly typed DataSet object named CompanyDataSet. This object contains a single DataTable object named Company. Company has a column named CompanyID that contains a unique identifier for each row in Company. You want to add a primary key to Company. Which code segment should you use?

- A. <xs:key name="CompanyKey" msdata:PrimaryKey="true"> <xs:selector xpath="//Company" /> <xs:field xpath="CompanyID" /> </xs:key>
- B. <xs:element name="CompanyID" type="xs:string" msdata:PrimaryKey="true"/>
- C. <xs:key name="CompanyKey"> <xs:selector xpath="//Company" /> <xs:field xpath="CompanyID" /> </xs:key>
- D. <xs:unique name="CompanyKey"> <xs:selector xpath="//Company" /> <xs:field xpath="CompanyID" /> </xs:unique>

Answer: A

Question: 205

You are a software developer at Company.net. You are creating an XML Web service named CompanyCustomer that provides bank customer information. You write code to keep track of error messages, warning messages, and informational messages while the service is running. You use the Trace class to write the message to a log file. On test computers, you want to see error messages and warning messages. On deployment computers, you want to see error messages, but no warning messages. Which two code segments should you use? (Each correct answer presents part of the solution. Choose two)

- A. Public Shared mySwitch as TraceSwitch Shared Sub New()
mySwitch = new TraceSwitch("tswitch", _ "a trace switch")
End Sub
- B. Public Shared level as TraceLevel Shared Sub New() level =
TraceLevel.Error End Sub
- C. Trace.WriteLineIf(mySwitch.TraceError, _ "An error occurred.")
Trace.WriteLineIf(mySwitch.TraceWarning, _ "Warning message")
- D. Trace.WriteLineIf(level = TraceLevel.Error , _ "The operation succeeded.") Trace.WriteLineIf(level =

```

TraceLevel.Warning, _ "Warning message")
E. Trace.WriteLineIf(Not mySwitch Is Nothing, _ "An error occurred.") Trace.WriteLineIf(Not mySwitch
Is Nothing, _ "Warning message")
F. Trace.WriteLineIf(level <> TraceLevel.Off, _ "An error occurred.") Trace.WriteLineIf(level <>
TraceLevel.Off, _ "Warning message">

```

Answer: A, C

Question: 206

Company is a software developer at Company.net. Exam creates an XML Web service named CompanyOp that converts street addresses to latitude and longitude coordinates. Company charges for this service and allows only existing customers to use the service. If a customer ID is not passed as part of a SOAP header, you want the service to refuse the request. You want these service refusal messages to be logged to an event log named CompanyOpLog. You anticipate that there will be a lot of these log entries over time. A String object named refusalMessage contains the message to log. Which code segment should Exam use?

- A. Dim log As New EventLog("CompanyOpLog") log.WriteEntry(refusalMessage, EventLogEntryType.Error)
- B. Dim log As New EventLog() log.Source = "CompanyOpLog" log.WriteEntry(refusalMessage, EventLogEntryType.Error)
- C. If Not EventLog.SourceExists("CompanyOpSource") Then EventLog.CreateEventSource("CompanyOpSource", _ "CompanyOpLog") End If EventLog.WriteEntry("CompanyOpSource", refusalMessage, EventLogEntryType.Error)
- D. If Not EventLog.SourceExists("CompanyOpSource") Then EventLog.CreateEventSource("CompanyOpSource", _ "CompanyOpLog") End If Dim log As New EventLog("CompanyOpLog") log.WriteEntry(refusalMessage, EventLogEntryType.Error)

Answer: C

Question: 207

You create a serviced component named Trader that processes stock trades. Trader uses multiple transactional data sources to verify and execute a stock trade. The Trader class includes the following code segment: Public Class Trader Inherits ServicedComponent Public Sub PurchaseStock(ByVal c as Customer, _ ByVal o as Order) ' Method implementation goes here. End Sub End Class You want to ensure that the PurchaseStock method either successfully completes the trade or reliably aborts the trade. Which two actions should you take? (Each correct answer presents part of the solution. Choose two.)

- A. Implement the ITransaction interface in the Trader class.
- B. To the PurchaseStock method, add the following attribute: <AutoComplete(>>
- C. To the Trader class, add the following attribute: <Transaction(TransactionOption.Required)>
- D. To the Trader class, add the following attribute: <JustInTimeActivation(False)>
- E. To the PurchaseStock method, add the following code segment: If (ContextUtil.IsInTransaction) Then ContextUtil.SetComplete() End If

Answer: B, C

Question: 208

Dr Sheet is a software developer at Company.net. She is creating a .NET Remoting object named CompanyDeal for an automobile dealership. CompanyDeal exposes a method named SaveSales that saves sales information for the dealership. CompanyDeal is configured to use Integrated Windows authentication to authenticate its callers. You must ensure that all users of SaveSales are members of the Manager group before allowing the code within SaveSales to run. Which code segment should Dr Sheet use?

- A. <PrincipalPermissionAttribute(SecurityAction.Demand, _ Role:="Manager")> _ Public Function SaveSales(sales As DataSet) As DataSet ' Code to save sales data goes here. End Function

- B. <PrincipalPermissionAttribute(SecurityAction.LinkDemand, Role:="Manager")> _ Public Function SaveSales(sales As DataSet) As DataSet ' Code to save sales data goes here. End Function
- C. <PrincipalPermissionAttribute(SecurityAction.InheritanceDemand, Role:="Manager")> - Public Function Save(sales As DataSet) As DataSet ' Code to save sales data goes here. End Function
- D. Public Function SaveSales(sales As DataSet) As DataSet Dim role As String = "Manager" Dim principalPerm As New PrincipalPermission(Nothing, _ Role) ' Code to save sales data goes here. End function

Answer: A Question: 209

You are a software developer at Company.net. You create a .NET Remoting object named CompanyChatServer. CompanyChatServer is the central server for a group of chat client applications. Client applications send string chat messages to CompanyChatServer. CompanyChatServer then broadcasts each message to all registered chat client applications. CompanyChatServer uses an HTTP remoting channel to communicate with the client applications. The CompanyChatServer class includes the following code segment.

```
' The event class code follows. <Serializable()> _ Public Class SubmissionEventArgs Inherits EventArgs Public Property User() As String ' Property code goes here.End Property Public Property Message() As String ' Property code goes here.End Property ' Remaining implementation goes here. End Class ' The delegate code follow.Public Delegate Sub SubmissionEventHandler(_ ByVal submissionArgs As SubmissionEventArgs) ' The event code follows and ' appears within the CompanyChatServer class. Public Event SubmissionEventHandler(_ ByVal sender As Object, _ ByVal submissionArgs As SubmissionEventArgs)
```

You need to write a client application that includes a class named CompanyChatClient to communicate with CompanyChatServer. You want CompanyChatClient to send and display chat messages. What should you do?

- A. Implement the IDeserializationCallback interface on CompanyChatClient. Implement an event handler for the Submission event.
- B. Derive CompanyChatClient from System.Object. Implement the ISerializable interface. Implement an event handler for the Submission event.
- C. Implement the ISerializable interface in CompanyChatClient. Implement an event handler for the Submission event. Host CompanyChatClient in Internet Information Services (IIS) by using a Web.config file.
- D. Derive CompanyChatClient from MarshalByRefObject. Implement an event handler for the Submission event. Configure CompanyChatClient to listen on an HttpChannel.

Answer: D

Explanation:

All we want to do is to implement the event handler for the submission event and configure theCompanyClient to listen to a Http channel. We also need to assure that this client is an MBR.

Incorrect answers :

- A- is wrong for IDeserializationCallback is no good in this scenario. B-The client in this very scenario must be derived from MBR.
- C- ISerializable is no good in this scenario, besides the client is not hosted.

Question: 210

You are a software developer at Company.net. You are preparing to deploy a serviced component named CompanyProdsAvailability. This component will be used by multiple client applications to look up the current availability of products. Some of these client applications were written by other developers and are installed on computers at other locations. You need to maximize the security on the deployment computer. You want to configure the component's COM+ application to run under a restricted user account named OutsideUser. What should you do?

- A. Implement the ISecurityColl interface in ProductAvilability.
- B. Use the Component Services tool to manually set the Identity property of the COM+ application to OutsideUser.

- C. To the CompanyProdsAvailability assembly, add the following attributes:
 <Assembly:ApplicationAccessControl(ImpersonationLevel:= _ ImpersonationLevelOption.Impersonate)>
 <Assembly:SecurityRole("OutsideUser")>
- D. To the CompanyProdsAvailability assembly, add the following attributes:
 <Assembly:ApplicationAccessControl(ImpersonationLevel:= _ ImpersonationLevelOption.Identify)>
 <Assembly:ApplicationName("OutsideUser")>

Answer: B

Question: 211

You create a .NET Remoting object named Time. The Time class is in the Utils namespace and is in an assembly file named Fabrikam.dll. The Time class is hosted in an Internet Information Services (IIS) virtual directory named UtilsSvr. The Time class is configured to be a server-activated object and uses a URI named Time.rem. You use a client application named Test.exe to test the Time object. Test.exe creates instances of the Time object by using the following method signature: Public Function CreateInstance() As Time RemotingConfiguration.Configure("Test.exe.config")Return new Time() End Function You want Test.exe to create instances of the Time class on a computer named Hosting. What should you do?

- A. Create a Test.exe.config file that includes the following code segment: <configuration> <system.runtime.remoting> <application> <client> <wellknown type="Utils.Time, Fabrikam" url="tcp://Hosting:80/UtilsSvr/Time.rem"/> </client> </application> </system.runtime.remoting> </configuration>
- B. Create a Test.exe.config file that includes the following code segment: <configuration> <system.runtime.remoting> <application> <client> <wellknown type="Utils.Time, Fabrikam" url="http://Hosting/UtilsSvr/Time.rem"/> </client> </application> </system.runtime.remoting> </configuration>
- C. Create a Test.exe.config file that includes the following code segment: <configuration> <system.runtime.remoting> <application> <client url="http://Hosting/UtilsSvr/Time.rem"> <activated type="Utils.Time, Fabrikam"/> </client> </application> </system.runtime.remoting> </configuration>
- D. Create a Test.exe.config file that includes the following code segment: <configuration> <system.runtime.remoting> <application> <client url="tcp://Hosting:80/UtilsSvr/Time.rem"> <activated type="Utils.Time, Fabrikam"/> </client> </application> </system.runtime.remoting> </configuration>

Answer: B

Question: 212

You are a software developer at Company.net. You are creating an XML Web service named CompanyService that processes stock transactions. CompanyService exposes a Web method named BuyStock that takes as input a stock symbol and the number of shares to buy. You know that callers who consume this service will require that SOAP messages be formatted as document-literal SOAP messages or RPC-encoded SOAP messages. You need to create a solution that will return both types of SOAP messages. You want to accomplish this task by writing the minimum amount of code. Which code segment should you use?

- A. <WebMethod()> Public Function BuyStock(ByVal symbol As String, _ ByVal shares As Integer) As String
- B. <SoapDocumentMethod(), WebMethod()> _ Public Function BuyStock(ByVal symbol As String, _ ByVal shares As Integer) As String
- C. <SoapRpcMethod(), WebMethod()> _ Public Function BuyStock(ByVal symbol As String, _ ByVal shares As Integer) As String
- D. <SoapRpcMethod(), WebMethod()> _ Public Function BuyStockRpc(ByVal symbol As String, _ ByVal shares As Integer) As String <SoapDocumentMethod(), WebMethod()> _ Public Function BuyStockDoc(ByVal symbol As String, _ ByVal shares As Integer) As String

Answer: Pending

Question: 213

You create a .NET Remoting object named MyRemoteObject in an XML Web service named MyWebService. All method calls made on MyRemoteObject are routed to a single instance of this object. The state of MyRemoteObject must be maintained between method calls. You need to register MyRemoteObject as a well-known object provided by MyWebService. You want to accomplish this goal by adding code to the Web.config file of MyWebService. Which code segment should you use?

- A. <wellknown mode="Singleton" type="MyRemoteObject, MyWebService" objectUri="MyWebService.rem" />
- B. <wellknown mode="Singleton" type="MyWebService.MyRemoteObject, MyWebService" objectUri="MyRemoteObject.rem" />
- C. <wellknown mode="SingleCall" type="MyRemoteObject, MyWebService" objectUri="MyWebService.rem" />
- D. <wellknown mode="SingleCall" type="MyWebService.MyRemoteObject, MyWebService" objectUri="MyRemoteObject.rem" />

Answer: B

Question: 214

You create an XML Web service named AutoPartsService that processes automobile part orders. This service exposes a Web method named PlaceOrder, which is shown in the following codesegment:

```
<WebMethod(TransactionOption.RequiresNew)> _ Public Function PlaceOrder(ByVal orderData As _ DataSet) As DataSet Dim
brakes As New Server1.BrakesService() Dim parts As New Server2.PartsService() ' Call OrderBrakes to order only brakes.
brakes.OrderBrakes(orderData.Tables("Brakes")) ' Call OrderParts to order all other auto parts.
parts.OrderParts(orderData.Tables("Parts")) End Function
```

BrakesService and PartsService are XML Web services. The TransactionOption property of OrderBrakes and OrderParts is set to TransactionOption.Required. You develop a Windows Forms application named MyPartOrderApp that consumes AutoPartsService. You run MyPartOrderApp and place an order for three sets of brakes and four wheels. While PlaceOrder is placing the order for the wheels, you close MyPartOrderApp. What is the most likely result?

- A. OrderParts stops processing the order, and all orders are cancelled.
- B. OrderParts continues processing the order, and all orders are placed.
- C. OrderParts stops processing the order; the brakes are ordered, but the wheels are not ordered.
- D. OrderParts stops processing the order; the brakes are not ordered, but the wheels are ordered.

Answer: B

Question: 215

You are a software developer at Company.net. You are creating a strongly named assembly. This assembly requires a unique name so it can be identified for security purposes. Run the following command-line tools:

```
sn -k myKey.snk
```

gacutil.exe /i myDll.dll Gacutil.exe terminates, and you receive the following error message: "Failure adding assembly to the cache: Attempt to install an assembly without a strong name." You need to correct this problem. What should you do?

Run Al.exe with the /delay+ option.

Run sn -i to load the key file into the Cryptographic Service Provider.

Insert an AssemblyKeyFile attribute into the assembly to reference myKey.snk.

Insert an AssemblyKeyName attribute into the assembly to reference the assembly name.

Answer: C

Question: 216

You are a software developer at Company.net. You create an XML Web service named PhoneService that returns telephone information to its customers. You configure the Web.config file and Internet Information Services (IIS) to use Basic authentication to authenticate calls to the Web service. You are now creating a Windows-based application named CompanyApp to test PhoneService. To CompanyApp, you add a Web reference to PhoneService. You add a Windows Forms named Form1 to CompanyApp. You write

the following code segment in the Form1.Load event. (Line numbers are included for reference only. 01 Dim phoneService As New MyService.PhoneService() 02 Dim phoneNumber As String 03 ' Insert new code beginning here. 04 phoneNumber = phoneService.GetPhoneNumber("Alex")

You run CompanyApp. However, when line 04 executes, an exception is thrown indicating that access is denied. You need to add code beginning on line 03 to ensure that CompanyApp runs without exceptions. Which code segment should you use?

- A. Dim credCache As New CredentialCache() phoneService.Credentials = credCache
- B. Dim credCache As New CredentialCache() credCache.Add(New Uri(phoneService.Url), "Basic", New _ NetworkCredential(myUser, userPassword)) phoneService.Credentials = credCache
- C. Dim credCache As New CredentialCache() Dim creds As New NetworkCredential() credCache.Add(New Uri(phoneService.Url), userPassword, _ creds) phoneService.Credentials = creds
- D. Dim credCache As New CredentialCache() Dim creds As New NetworkCredential() credCache.Add(New Uri(phoneService.Url), "Basic", creds) phoneService.Credentials = credCache

Answer: B

Question: 217

You create a serviced component named TransferUtil to transfer money between bank accounts. TransferUtil logs information for failed transfers by using the Trace class. You want TransferUtil to save these log messages. Which code segment should you use?

- A. Shared Sub New() Trace.Flush() End Sub
- B. Shared Sub New() Trace.Listeners.Clear() End Sub
- C. Shared Sub New() Trace.Listeners.Add(_ new TextWriterListener("transfer.log")) End Sub
- D. Protected Overloads Overrides Sub Finalize() Trace.Flush() End Sub
- E. Protected Overloads Overrides Sub Finalize() Trace.Listeners.Clear() End Sub
- F. Protected Overloads Overrides Sub Finalize() Trace.Listeners.Add(_ new TextWriterListener("transfer.log")) End Sub

Answer: C

Question: 218

You are creating data access components for an XML Web service that retrieves data from a Microsoft SQL Server database. The components use the SqlConnection data provider. You estimate that an average of 10 users will use the service concurrently. Therefore, you want to maintain at least 15 database connections at all times. What should you do?

- A. Set the Packet Size property of the connectionString to 15.
- B. Set the Max Pool Size property of the connectionString to 15.
- C. Set the Min Pool Size property of the connectionString to 15.
- D. Set the Connection Lifetime property of the connectionString to 15.

Answer: C

Question: 219

You are a software developer at Company.net. You are developing a maintenance application to retrieve data from two tables in a Microsoft SQL Server database. The tables are named Products and Categories. You want to populate two DataSet objects named productsDataSet and categoriesDataSet, which will be used in the application. You instantiate a SqlConnection object named

myConnection and a SqlDataAdapter object named myDataAdapter. You write and run the following code segment. (Line numbers are included for reference only.)

```
01 'Code to initialize myDataAdapter goes here. 02 myDataAdapter.SelectCommand.CommandText = "SELECT" _03 &
"CategoryName, Description FROM Categories" 04 myConnection.Open() 05 myDataAdapter.Fill(categoriesDataSet, "Categories")
06 myConnection.Close() 07 myConnection.Close() 08 "SELECT ProductID, ProductName FROM Products" 09
myConnection.Open() 10 myDataAdapter.Fill(productsDataSet, "Products") 11 myConnection.Close()
```

The code gives you the desired results. You need to revise the code to ensure that it processes the data as quickly as possible. What should you do?

- A. After Lines 06 and 11, add the following line of code:
 myConnection.Dispose(9)
- B. After only line 11, add the following line of code: myConnection.Dispose()
- C. Delete only lines 06 and 09.
- D. Delete lines 04, 06, 09, and 11.

Answer: C

Explanation:

We still need to open the connection.

Question: 220

You are a software developer at Company.net. You are troubleshooting a Visual Studio .NET application that was developed by a former colleague. You find the following code segment within a large assembly: Dim theElement As XmlElement Dim anotherElement As XmlElement Dim doc As New XmlDocument() Dim theDecl As XmlDeclaration theDecl = doc.CreateXmlDeclaration("1.0", Nothing, Nothing) doc.AppendChild(theDecl) theElement = doc.CreateElement("Library") doc.AppendChild(theElement) theElement = doc.CreateElement("Book") theElement.SetAttribute("type", "Mystery") anotherElement = doc.CreateElement("Title") anotherElement.InnerText = "Book Title" anotherElement.AppendChild(theElement) doc.DocumentElement.AppendChild(theElement)

Which XML output is produced by this code segment?

- A. <?xml version="1.0"?> <Library />
- B. <?xml version="1.0"?> <Library> <Book type="Mystery" /> </Library>
- C. <?xml version="1.0"?> <library> <Book type="Mystery"> <Title>Book Title</Title> </Book> </Library>
- D. <?xml version="1.0"?> <Library> <Title>Book Title<Book type="Mystery" /></Title> </Library>

Answer: B

Question: 221

Company.net receives product information from manufacturers in the form of XML documents. The product information is stored in a Microsoft SQL Server database. The format of each XML document varies. Each one is located in a MemoryStream object named newProds. You create a merge procedure that reads data and schema information in a DataSet object and merges the information into your database. You now need to write code to transfer the XML document and its schema into a DataSet object. Which code segment should you use?

- A. Dim products As New DataSet("prodInfo") Dim reader As New XmlTextReader(newProds) Dim validReader As New XmlValidatingReader(reader) While validReader.Read() products.WriteXml(validReader.Value) End While
- B. Dim products As New DataSet("prodInfo") products.ReadXml(newProds)
- C. Dim products As New DataSet("prodInfo") Dim document As New XmlDocument(products) document.DataSet.ReadXmlSchema(newProds)

D. Dim products As New DataSet("prodInfo") Dim myXmlData As String = -
Encoding.UTF8.GetString(newProds.ToArray()) Dim adapter As New
SqlDataAdapter _ ("LoadSchemaType=XML",myXmlData)
adapater.Fill(products)

Answer: B

Question: 222

You are troubleshooting a Visual Studio .NET application that was developed by a former colleague. The application contains a NextToken function. This function reads product names from a file. You find the following code segment within a large assembly: Dim xwriter As New XmlTextWriter("productNames.xml", _ System.Text.Encoding.UTF8) xwriter.WriteStartDocument(True) xwriter.WriteStartElement("data", "www.contoso.com") Dim val As String = NextToken() While val <> "" xwriter.WriteString("item", _ "www.contoso.com", val) val = NextToken ()End While xwriter.WriteEndElement()xwriter.WriteEndDocument() xwriter.Close()

You find that productNames.xml contains only two entries: prod0 and prod1.

Which XML output is produced by this code segment?

- A. <xml version="1.0"> <data xmlns="www.contoso.com"> <item = "prod0" /> <item = "prod1" /> </data>
- B. <xml version="1.0" encoding="utf-8" standalone="yes"> <data>
 <item xmlns="www.contoso.com">prod0</item><item xmlns="www.contoso.com">prod1</item></data>
- C. <xml version="1.0"> <data> <item>prod0</item>
 <item>prod1</item> </data>
- D. <xml version="1.0" encoding="utf-8" standalone="yes"> <data xmlns="www.contoso.com"> <item>prod0</item>
 <item>prod1</item> </data>

Answer: D

Question: 223

You have a strongly typed DataSet object named myDataSet. This object contains two DataTable objects named Categories and Products. Categories has a data column named CategoryID. Products has two data columns named CategoryID and ProductID. Categories has a primary key named CategoryKey on CategoryID. Products has a primary key named ProductKey on ProductID.

You want to add a foreign key constraint on the CategoryID column between Categories and Products. Which code segment should you use?

- A. <xs:keyref name="CategoriesProducts" refer="CategoryKey"> <xs:selector xpath="//Products" /> <xs:field xpath="CategoryID" />
 </xs:keyref>
- B. <xs:keyref name="CategoriesProducts" refer="ProductKey"> <xs:selector xpath="//Products" /> <xs:field xpath="CategoryID" />
 </xs:keyref>
- C. <xs:keyref name="CategoriesProducts" refer="CategoryKey"> <xs:selector xpath="//Products" /> <xs:field xpath="ProductID" />
 </xs:keyref>
- D. <xs:keyref name="CategoriesProducts" refer="ProductKey"> <xs:selector xpath="//Categories" /> <xs:field xpath="CategoryID" />
 </xs:keyref>

Answer: A