



Exam: 070-320

**Title : XML Web Services & Server Components
With C.Net**

Ver : 11.01.03

Note:

**Section A contains 130 questions. Section B contains 101 questions.
The total number of questions is 231.**

Section A

QUESTION 1 You are creating a .NET Remoting object. You want to add code to the object to log error messages and warning messages. You want the log messages written to both a log file and to the Windows application log. Which code segment should you use?

- A. EventLog eventLog = new EventLog("CertKobj");
File Stream file Log = File.Create("CertKobj.log");
Trace.WriteLine(eventLog, "sample message");
Trace.WriteLine(fileLog, "sample message");
- B. EventLog eventLog = new EventLog("CertKobj");
FileStream fileLog = File.Create("CertKobj.log");
Trace.Write(eventLog);
Trace.Write(fileLog);
Trace.WriteLine("sample message");
- C. Trace.Listeners.Add(new
EventLogTraceListener("CertKobj"));
Trace.Listeners.Add(
new TextFileTraceListener("CertKobj.log"));
Trace.WriteLine("sample message");
- D. Trace.Listeners.Add(new EventLogTraceListener());
Trace.Listeners.Add(
new TextFileTraceListener("CertKobj.log"));
Trace.WriteLine("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 Text Writer 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 [C#]

Incorrect Answers

A: The EventLog object provides interaction with Windows event logs and file streams 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 2 You create a serviced component named Session Dispenser. This computer is in the Certkiller.Utilities assembly and is registered in a COM+ server application. Session Dispenser 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 Session Dispenser solution.

Set a breakpoint on the Create New Session 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 Certkiller.Utilites.exe process.

Set a breakpoint on the Create New Session method.

D. Attach the debugger to a Dllhost.exe process.

Set a breakpoint on the Create New Session 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 Certkiller.Utilities.exe process.

QUESTION 3 You create an XML Web service named LatLong that converts street addresses to latitude and longitude coordinates. Certkiller Inc. 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 LatLong Log. You anticipate that there will be a lot of these log entries over time. A string object named refusal Message contains the message to log. Which code segment should you use?

A. Event log = new EventLog("LatLong Log"); log.WriteEntry(refusal Message, EventLogEntryType.Error);

B. EventLog log = new EventLog(); log.Source = "LatLong Log"; log.WriteEntry(refusal Message, EventLogEntryType.Error);

C. if (!EventLog.SourceExists("LatLongSource")) {

EventLog.CreateEventSource("LatLongSource", "LatLongLog");}

EventLog.WriteEntry("LatLongSource", refusal Message, EventLogEntryType.Error);

D. if (!EventLog.SourceExists("LatLongSource"))

{EventLog.CreateEventSource("LatLongSource", "LatLongLog"); }EventLog log = new EventLog("LatLong Log"); log.WriteEntry(refusal Message, EventLogEntryType.Error);

Answer: C

Explanation: First we use the Sources Exists method to search the registry for an existing event source. If it does

not exists we create a new.

Note: The `EventLog.CreateEventSource` method establishes an application, using the specified Source, as a valid event source for writing entries to a log on the local computer. This method can also create a new custom log on the local computer.

Reference: .NET Framework Class Library, `EventLog` Members

Incorrect Answers A, B, D: We should only create a new event source only if it does not exist.

QUESTION 4 You create a serviced component named `CertkillerOrderProcessor`. `Order Processor` implements the `IOrderinit` interface. The component and the interface contain the following code segments:

```
[Guid("0B6ABB29-43D6-40a6-B5F2-83A457D062AC")]
```

```
[Interface Type(ComInterfaceType.InterfaceIsDual)] public interface IOrderInit { // IOrderInit methods go here.  
}
```

```
public class Order Processor: Serviced Component, IOrderInit { // Order Processor methods go here. }
```

You discover that every time you rebuild `CertkillerOrderProcessor`, 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 `CertkillerOrderProcessor` class.
- B. Add a COM Import attribute to the `IOrderInit` interface.
- C. To the `CertkillerOrderProcessor` class, add the following attribute:

```
[Class Interface(ClassInterfaceType.AutoDual)]
```

- D. To the end of every method, add the following line of code:

```
Marshal.ReleaseComObject(this);
```

Answer: A

Explanation: You can identify an existing COM+ target application by name or GUID. We can register the Certkiller Order Processor class by adding a GUID attribute to it.

Reference: .NET Framework Developer's Guide, Registering Serviced Components [C#]

Incorrect Answers

B: When placed on a class, the COM Import attribute marks the class as an externally implemented Com class. However, the class must also be decorated with the Guid attribute, which specifies the CLSID for the COM class being imported.

C: The `ClassInterfaceType.AutoDual` method indicates that the class only supports late binding for COM clients.

D: The `Marshal.ReleaseComObject` method decrements the reference count of the supplied runtime callable wrapper (RCW). It is not of any use in this scenario.

QUESTION 5 You create an XML Web service named Postal Code. Your project source includes a code-behind file and a file named `PostalCode.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 Postal Code to a production computer. You do not want any of the debugging code 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 Postal Code class to set the Auto Flash property of the Debug class to false.
- E. Add code to the constructor of the Postal Code 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 6 You create an XML Web service named Time CKService. Each time CKService is started, it checks for the existence of an event log named Time CKServiceLog. If TimeServiceLog does not exist, Time CKService creates it. You discover that when Time CKService creates Time CKServiceLog, 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 Time CKService, 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: A

Explanation: ASP.NET applications run under inetinfo.exe (the IIS process) or the ASP worker process aspnet_wp.exe, depending on security settings. Running as the local administrator account the IIS process would be able to create TimeServiceLog.

Reference: Visual Studio, Error: Unable to Start Debugging on the Web Server

Incorrect Answers

B: This would not allow registry access.

C: This does not work.

D: For anonymous access the IUSR_computername user account is used.

QUESTION 7 You are creating an XML Web service named CertkillerCustomer that provides 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 messages 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 not warning messages.

Which two code segments should you use? (Each correct answer presents part of the solution. Choose two)

- A. private static Trace Switch mySwitch;

static Bank Customer {my Switch = new Trace Switch("tswitch","a trace switch");}
 B. public static Trace Level; static Bank Customer { level = TraceLevel.Error; }
 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(mySwitch != null, "An error occurred."); Trace.WriteLineIf(mySwitch != null, "Warning Message");
 F. Trace.WriteLineIf(level != TraceLevel.Off, "An error occurred."); Trace.WriteLineIf(level != TraceLevel.Off, "Warning message");

Answer: A, C

Explanation: Trace switches allow you to enable, disable, and filter tracing output. Typically, a deployed application is executed with its switches disabled.

A: To use a switch you must first create a switch object

C: We then use the WriteLineIf statement and test the switch to see if we should trace errors or warnings.

Reference: Visual Basic and Visual C# Concepts, Trace Switches .NET Framework Class

Library, Trace.WriteLineIf Method [C#]

QUESTION 8 You create a serviced component named CertK Scheduler. CertK Scheduler is registered in a library application. The Scheduler methods parse String objects into Date Time objects. You write a console application named Coverage.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 Culture Info object for each culture locale before calling the CertK Scheduler methods.
- B. Create a Region Info object for each culture locale before calling the CertK Scheduler methods.
- C. Set the current thread's Current Culture property to each culture locale before calling the CertK Scheduler methods.
- D. Create a Coverage.exe.config file and add a <location> element to the configuration file for each culture locale.

Answer: C

Explanation: We set the Current Culture property to a local culture, then we call the CertK Scheduler method. We repeat this step for each local culture.

Reference: Visual Studio, Globalization Testing

Incorrect Answers

- A: Culture Info objects would not by themselves be tested.
 - B: Region Info objects would not by themselves be tested.
 - D: This is not how to set up this.
-

QUESTION 9 You have an ASP.NET application named CK WebApp. This application uses a private assembly named Employee to store and retrieve employee data. Employee is located in the bin directory of CK WebApp. You develop a new ASP.NET application named CKWebApp2 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 compile CKWebApp2 against version 1.0.0.0. You do not recompile My WebApp. You then run CK WebApp.

What is the most likely result?

- A. A Version Not Found Exception 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 Version Not Found Except to represents the exception that is thrown when attempting to return a version of a Data Row that has been deleted. B, C: The Publisher Policy Assembly will be used.

QUESTION 10 You are creating a Windows-based application named CK WinApp. To the application, you add a Windows Form named CK Form and a reference to a Single Call .NET Remoting object named Their Object. You need to ensure that CK Form creates an instance of Their Object to make the necessary remote object calls.

Which code segment should you use?

- A. Remoting Configuration .Register Activated Client Type (type of (Their Object), "http://CertkillerServer/TheirAppPath/TheirObject.rem"); Their Object their Object = new Their Object();
- B. RemotingConfiguration.RegisterWellKnownClientType(type of(CertkillerObject); "http://CertkillerServer/TheirAppPath/TheirObject.rem"); Their Object their Object = new Their Object();
- C. RemotingConfiguration.RegisterActivatedServiceType(type of(Their Object)); Their Object their Object = new Their Object();
- D. RemotingConfiguration.RegisterWellKnownServiceType(type of(Their Object), "http://CertkillerServer/TheirAppPath/TheirObject.rem", WellKnownObjectMode.Singleton); TheirObject = new TheirObject();

Answer: B

Explanation: The Remoting Configuration Class provides various static methods for configuring the remoting infrastructure. The Register Well Known Client Type method registers an object Type on the client end as a well known type (single call or singleton).

Reference: .NET Framework Class Library, Remoting Configuration Members

Incorrect Answers

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

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

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

QUESTION 11 You create an XML Web service project that consists of three services named Bronze Service, Silver Service, and Gold Service. All three services are located in the same virtual directory on a production

computer. When customers subscribe to your service, they select only one of the three available services. A new customer subscribes to Silver Service. You need to create a discovery document that enables this customer to use only Silver Service.

Which discovery document should you create?

A. <disco:discovery

```
xmlns:disco="http://schemas.xmlsoap.org/disco/"
xmlns:scl="http://schemas.xmlsoap.org/disco/scl/"
<scl:contractRef ref="SilverService.asmx?wsdl" />
</disco:discovery>
```

B. <disco:discovery

```
xmlns:disco="http://schemas.xmlsoap.org/disco/"
xmlns:scl="http://schemas.xmlsoap.org/disco/scl/">
<scl:contractRef ref="SilverService.asmx" />
</disco:discovery>
```

C. <dynamic Discovery 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 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 Web Service behavior.

C, D: We should create a static discovery file, not a dynamic discovery file.

QUESTION 12 You create version 1.0.0.0 of an assembly named CertKiAssembly. You register the assembly in the global assembly cache.

CertKiAssembly consists of two .NET Remoting objects named CKRemoteObject1 and CKRempoteObject2. These objects are configured in the App.config file of CertKiAssembly as shown in the following code segment:

```
<system.runtime.remoting>
<application>
<service>
<activated type="CertKiAssembly.CKRemoteObject1,
CertKiAssembly, Version=1.0.0.0, Culture=neutral,
PublicKeyToken=28dckd83491duj" /><wellKnown mode="Single Call"
objectUri="CKRemoteObject2.rem" type="CertKiAssembly.CKRemoteObject2, CertKiAssembly,
Version=1.0.0.0, Culture=neutral,
PublicKeyToken=28dckd83491duj" />
<channels>
<channel ref="http" />
</channels>
</service></application></system.runtime.remoting>
```

You create an application named CKApp that resides on a different computer than CertKiAssembly. CKApp references version 1.0.0.0 of CertKiAssembly. CKApp contains code that activates instances of CKRemoteObject1 and CKRemoteObject2 to use their services. Due to changes in business needs, you must update CertKiAssembly. You create version 2.0.0.0 of CertKiAssembly, which is backward compatible, but you do not update any information in the App.config file of CertKiAssembly. You register version 2.0.0.0 of CertKiAssembly in the global assembly cache. You then rebuild CKApp.

Which version of the remote object will MyApp activate?

- A. Version 1.0.0.0 of CKRemoteObject1; version 1.0.0.0 of CKRemoteObject2.
- B. Version 1.0.0.0 of CKRemoteObject1; version 2.0.0.0 of CKRemoteObject2.
- C. Version 2.0.0.0 of CKRemoteObject1; version 1.0.0.0 of CKRemoteObject2.
- D. Version 2.0.0.0 of CKRemoteObject1; version 2.0.0.0 of CKRemoteObject2.

Answer: B

Explanation:

Version 1.0.0.0 of MyRemoteObject1 is used since the following client-activated configuration is used:

<activated type="CertKiAssembly.CKRemoteObject1, Version=1.0.0.0..."

The <wellknown> element Contains information about server-activated objects the application exposes to clients.

CKRemoteObject2 is therefore server-activated. The server controls what version is activated when a client connects to a server-activated object. Therefore Version 2.0.0.0 will be used for CKRemoteObject2.

Note 1:

When a client activates a client-activated (that is, an <activated>) 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 the client directs the activation of the object, the client also chooses the version of the object to be activated.

Note 2: For Web applications, the source controlled configuration file is called Web.config. For non-Web applications, the source controlled file is called app.config.

Reference: .NET Framework Developer's Guide, Versioning

Incorrect Answers

A: CKRemoteObject2 is server-activated (or <wellknown>) so the latest available version (2.0.0.0) will be used. C, D: Client-Side activation is used (see note 1). The version specified (1.0.0.0) is used.

QUESTION 13 You are creating an XML Web service named Inventory Service for a Certkiller Ltd. Each branch of Certkiller Ltd. 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 14 You are preparing to deploy an XML Web service named CertkillerInventoryService. This service queries a Microsoft SQL Server database and returns information to the caller.

You use Visual Studio .NET to create a setup project. You need to install InventoryService. 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 passed 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 saved State 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. 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.

C: The saved State Gets property gets an IDictionary that represents the current state of the installation.

QUESTION 15 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.

D:

QUESTION 16 You create a .NET Remoting object named Time. The Time is in the Utils namespace and is in an assembly file named Certkiller.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 CertK.exe to test the Time object. CertK.exe creates instances of the Time object by using the following method signature:

```
public Time CreateInstance() { RemotingConfiguration.Configure("CertK.exe.config"); return new Time(); }
```

You want Certkiller.exe to create instances of the Time class on a compute named Hosting.

What should you do?

A. Create a CertK.exe.config file that includes the following code segment:

```
<configuration> <system.runtime.remoting>
<application> <client>
<wellKnown type="Utils.Time, Certkiller" url="tcp://Hosting:80/UtilsSvr/Time.rem"/>
</client> </application>
</system.runtime.remoting> </configuration>
```

B. Create a CertK.exe.config file that includes the following code segment:

```
<configuration> <system.runtime.remoting>
<application> <client>
<wellKnown type="Utils.Time, Certkiller" url="http://Hosting/UtilsSvr/Time.rem"/>
</client> </application>
</system.runtime.remoting> </configuration>
```

C. Create a CertK.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, Certkiller"/>
</client> </application>
</system.runtime.remoting> </configuration>
```

D. Create a CertK.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, Certkiller"/>
</client> </application>
</system.runtime.remoting> </configuration>
```

Answer: B

Explanation: We use the <wellknown> markup to indicate that it is server-activated object. Then we specify the http protocol in the url. A http channel should be used.

Reference: .NET Framework Developer's Guide, Versioning

Incorrect Answers

A: We should use a http channel, not a tcp channel.

C, D: We should use the <wellknown> markup to specify that the object should be server-activated.

QUESTION 17 You are creating an XML Web service that processes highly confidential messages. The service exposed a Web method named Retrieve Message that takes as input a code name and returns an encrypted message. You create a SOAP extension and override the extension's Process Message 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 Encrypt Message 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 Encrypt Message?

- A. Before Serialize
- B. After Serialize
- C. Before Deserialize
- D. After Deserialize

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 After Serialize stage and decrypting in the

Before Deserialize stage.

Note: The After Serialize stage occurs just after a Soap Message 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 Before Serialize stage occurs just prior to a Soap Message being serialized.
- C: The Before Deserialize stage occurs just before a Soap Message is deserialized from the SOAP message sent across the network into an object.
- D: The After Deserialize stage occurs just after a Soap Message is deserialized from a SOAP message into an object.

QUESTION 18 You are developing an application named CertKApp by using Visual C# .NET and Visual Basic .NET. The application will use functions form 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 [C#]

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

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

QUESTION 19 You are using Visual Studio .NET to develop an application to replace a COM-based application. 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. [Class Interface()]

```
public Class CKClassToExpose {
    public int Calc() { // Implementation code goes here.}
}
```

B. [Guid("9ED54F84-A89D-4fcd-A854-44251E925F09")]
 public interface ICKClassToExpose { public int Calc(); }
 [Class Interface[ClassInterfaceType.None]]
 public int Calc() { // Implementation code goes here. }

C. [Guid("9ED54F84-A89D-4fcd-A854-44251E925F09")]
 [COM Visible(true)] public class CKClassToExpose { public int Calc() { // Implementation code goes here.}}

D. [Class Interface(ClassInterfaceType.AutoDispatch)] public class CKClassToExpose { public int Calc() { // Implementation code goes here.}}

Answer: D

Explanation: The ClassInterfaceType.AutoDispatch indicates that the class only supports late binding for COM clients.

A dispinterface for the class is automatically exposed to COM clients on request. The dispinterface does not exhibit

versioning problems because of the late bindings.

Reference: .NET Framework Class Library, ClassInterfaceType Enumeration

Incorrect Answers

A: ClassInterface() is not correct usage.

B: The ClassInterfaceType.None indicates that no class interface is generated for the class. If no interfaces are implemented explicitly, the class will only provide late bound access through IDispatch. Users are expected to expose functionality through interfaces that are explicitly implemented by the class.

C: COM Visible does not achieve much. Public classes are visible by default.

QUESTION 20 You are creating an ASP.NET application named CertK WebApp. To CertK WebApp, you add a Web reference to an XML Web service named User Service. User Service 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 CertK WebApp, you write a try/catch block to capture any exceptions that are thrown by User Service. 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 Soap Exception 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, Soap Exception Class

Incorrect Answers

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

B: The Argument 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 21 You are developing a Windows-based application that requires the use of a calculation function named Calculate Value. This function includes the following signature: int Calculate Value(int x); Calculate Value is located in an unmanaged DLL named Certkiller Functions.dll, and is not part of a COM interface.

You need to be able to use Calculate Value in your application.

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

A. Use Regsvr32.exe to register CertkillerFunctions.dll.

B. Use Visual Studio .NET to add a reference to CertkillerFunctions.dll.

C. To your application, add the following code segment: using CertkillerFunctions;

D. To your application, add the following code segment: [DllImport("CertkillerFunctions.dll")] public static extern int Calculate Value(int x);

Answer: D

Explanation:

We must identify the function we want to use in the unmanaged dll. The only necessary step is add the code in D.

Reference: .NET Framework Developer's Guide, Consuming Unmanaged DLL Functions .NET Framework Developer's Guide, A Closer Look at Platform Invoke

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:: Calculate Value is in an unmanaged DLL which is not part of a COM interface. So, you don't have to add any reference to CertkillerFunctions.dll. Note: In Visual Studio .NET IDE you make references to .NET Components, COM components and to other projects, not to Windows native DLLs.

C: We are not using the NameSpace of the unmanaged dll.

QUESTION 22 You are creating a .NET Remoting object named Dealer for automobile dealership. Dealer exposes a method named SaveCertkillerSales that saves sales information for the dealership. Dealer is configured to use Integrated Windows authentication to authenticate its callers. You must ensure that all users of SaveCertkillerSales are members of the Manager group before allowing the code within SaveCertkillerSales

to run.

Which code segment should you use?

- A. [PrincipalPermission(SecurityAction.Demand, Role="Manager")]

public DataSet SaveCertkillerSales(DataSet sales) { // Code to save sales data goes here.}

- B. [PrincipalPermission(SecurityAction.LinkDemand,

Role=Manager")] public DataSet SaveCertkillerSales(DataSet sales) { // Code to save sales data goes here.}

- C. [PrincipalPermission(SecurityAction.InheritanceDemand, Role="Manager")] public DataSet

SaveCertkillerSales(DataSet sales) { // Code to save sales data goes here.}

- D. public DataSet SaveCertkillerSales(DataSet sales) { string role = "Manager"; PrincipalPermission perm = new PrincipalPermission(null, role); // Code to save sales data goes here. }

Answer: A

Explanation: The code - Principal Permission Security Action. Demand, Role="Manager" checks if the active principal is a member of the Manager group. If this is the case the code will run, if not an exception will be thrown.

Note 1: A demand causes the runtime to perform a security check to enforce restrictions on calling code.

Note 2: The Principal Permission class represents the identity or role that the principal must match and is compatible with both declarative and imperative security checks.

Reference: .NET Framework Developer's Guide, Security Demands

Incorrect Answers

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

C: You can place inheritance demands at the class level to ensure that only code with the specified permission can inherit from your class. However, we want to specify who can run the code, not who can inherit from the class.

D: This code is not addressing the problem.

QUESTION 23 You create three Windows services named CK1, CK2, and CK3. You want to install all three services on a computer named CertkillerA by using the Installer tool (Installutil.exe).

On the command line of CertkillerA, you enter and run the following command: Install util CK1 CK2 CK3

During the installation process, CK3 throws an installation error. The installation process completes.

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

- 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 CK3 fails and the installation of CK2 and CK1 is rolled back.

QUESTION 24 You create two serviced components named Order Pipeline and OrderAdmin. Each component is registered in a separate COM+ server application.

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

You want to ensure that Order Pipeline 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 Hash table object within OrderAdmin. Expose the Hash table 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 Hash table 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 hast table would be more efficient.

QUESTION 25 You have a .NET Remoting object named Utils. The Utils class is a client-activated .NET Remoting object. You want to write a client application that creates and uses a Utils object. You want the client application to hold onto a reference to a Utils object for the duration of its execution.

What should you do?

- A. Construct the Utils object, and hold the object in a member variable.
- B. Construct the Utils 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 ISponsor 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 [C#]

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

The User Manager class includes the following code segment:

[Transaction(TransactionOption.Required)]

[Security Role("Admin")]

```
public class User Manager : Serviced Component {public void AddUser(string CertKname, string CertKpassword) { // Code to add the user to data sources goes here. }}
```

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 User Manager, 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: C

Explanation: The TransactionOption.Required shares a transaction, if one exists, and creates a new transaction, if necessary. We should commit this transaction at the end of AddUser with ContextUtil.EnableCommit () statement.

Reference: .NET Framework Class Library, ContextUtil Methods

Incorrect Answers

A: Auto complete is out of context here.

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.

D: Not useful.

QUESTION 27 You create a serviced component named Tracker that uses attributes to dynamically register itself for COM+ services. Tracker is in an assembly file named Certkiller.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 an 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 Certkiller.dll file. Instruct the administrator to copy Certkiller.dll to all production computers and to install it in the global assembly cache.
- C. Provide to the administrator the Certkiller.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 Certkiller.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 28 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 GetCertkillerQuotes takes a languageID as input. GetCertkillerQuotes 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 Buffer Response property of the WebMethod attribute to false.
- D. Set the Cache Duration 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 \[C#\]](#)

[.NET Framework Class Library, WebMethodAttribute.BufferResponse Property](#)

[.NET Framework Class Library, WebMethodAttribute.CacheDuration Property \[C#\]](#)

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 Buffer Response 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 Buffer Response 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 29 You are creating a .NET Remoting object named Property Cache. Property Cache will hold a Hash table object or name/value pairs.

A variety of remote client applications will communicate with Property Cache 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 Property Cache to be a client-activated object.
- B. Configure Property Cache to be a server-activated Singleton object.
- C. Configure Property Cache to be a server-activated SingleCall object.
- D. Derive the Property Cache class from MarshalByRefObject and override InitializeLifetimeService() to return null.
- E. Mark the Property Cache class with the Serializable attribute.

Implement the ISponsor interface in the Property Cache class.

F. Implement the ISerializable and ILease interfaces in the Property Cache class.

Implement ILease.CurrentLeaseTime to return Int32.MaxValue.

Answer: B, E

Explanation:

B: Singleton types never have more than one instance at any one time. If an instance exists, all client requests are serviced by that instance. If one does not exist, the server creates an instance and all subsequent client requests will be serviced by that instance.

E: The ISponsor interface can be used to renew the lease of the object.

Reference:

[.NET Framework Developer's Guide, Server Activation \[C#\]](#) [.NET Framework Developer's Guide, Initializing Leases \[C#\]](#) [.NET Framework Developer's Guide,](#)

[Client Activation \[C#\]](#)

Incorrect Answers

A: Client-activated objects are objects whose lifetimes are controlled by the calling application domain, just as they would be if the object were local to the client.

C: SingleCall types always have one instance per client request.

D: No lease is created if the lease time is 0 (zero) or a null lease is returned from InitializeLifetimeService().

F: The ILease.CurrentLeaseTime is a read-only property of the ILease interface. We cannot configure this property.

QUESTION 30 You create a .NET Remoting object named Patient info 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 Patient info 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 Tcp Channel and Binary Formatter.

B. Create your own host application and use an Http Channel and a Soap Formatter.

C. Install Patient info in an Internet Information Services (IIS) virtual directory.

Configure Patient info to use a Tcp Channel and a Binary Formatter.

Configure IIS to use SSL.

D. Install Patient info in an Internet Information Services (IIS) virtual directory.

Configure Patient info to use an Http Channel and a Soap Formatter.

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 Win HTTP

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

C: SSL encrypts HTTP traffic, not TCP traffic.

QUESTION 31 You create an XML Web service named AutoPartsService that processes automobile part orders. This service exposes a Web method named PlaceCertKOrder, which is shown in the following code segment:

```
[WebMethod(TransactionOption.RequiresNew)] public DataSet PlaceCertKOrder(DataSetorderData) {
    Server1.BrakesService brakes = new Server1.BrakesService();
    Server2.PartsService parts = 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"]);
}
```

BrakesService and PartsService are XML services. The TransactionOption property of OrderBrakes and OrderParts is set to TransactionOption.Required.

You develop a Windows Forms application named CKPartOrderApp that consumes AutoPartsService. You run CKPartOrderApp and place and order for three sets of brakes and four wheels. While PlaceCertKOrder is placing the order for the wheels, you close CKPartOrderApp.

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: C

Explanation: XML Web Services can only participate in a transaction as the root of a new transaction. The calls to brakes.OrderBrakes and parts.OrderParts will generate two new different transactions, even if these two XML Web Services are marked only for TransactionOption.Required! So, if the question says the CKPartOrderApp is being closed during the order for the wheels, we'll have the brakes order committed in brakes.OrderBrakes transaction and wheels order aborted in parts.OrderParts.

Reference: .NET Framework Developer's Guide, Participating in Transactions in XML Web Services Created Using ASP.NET

Note: XML Web service methods can only participate in a transaction as the root of a new transaction. As the root of a new transaction, all interactions with resource managers, such as servers running Microsoft SQL Server, MSMQ, Oracle, and SNA maintain the ACID properties required to run robust distributed applications. XML Web service methods that call other XML Web service methods participate in different transactions, as transactions do not flow across XML Web service methods.

QUESTION 32 You create a serviced component named Stock Quote that implements the IStockQuote interface. The Stock Quote class includes the following code segment:

```
public class Stock Quote : Serviced Component, IStockQuote { public Price Get Quote (Ticker stock) { // Code for the method goes here. }}
```

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

- A. To the Stock Quote 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, ad the following attributes:

[SecurityRole("Customers", false)]

[SecurityRole("Managers", false)]

- E. To the beginning of the Get Quote method, add the following code segment:

```
if (!ContextUtil.IsCallerInRole("Managers,Customers")) { throw new Security Exception("Access is denied."); }
```

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 33 You are creating an XML Web service named myService. This service has a function named WriteMessage that writes messages to a flat file in the C:\CertkillerLogs\myServiceLog directory. You want to implement security for WriteMessage so that WriteMessage and all the code it calls can write messages only to the myServiceLog directory.

Which code segment should you use?

- A. FileIOPermission filePermission = new FileIOPermission(FileIOPermissionAccess.Write, "C:\\CertkillerLogs\\myServiceLog"); filePermission.Demand();
- B. FileIOPermission filePermission = new FileIOPermission(FileIOPermissionAccess.Write, "C:\\CertkillerLogs\\myServiceLog"); filePermission.Deny();
- C. FileIOPermission filePermission = new FileIOPermission(FileIOPermissionAccess.Write, "C:\\CertkillerLogs\\myServiceLog"); filePermission.PermitOnly();
- D. FileIOPermission filePermission = new FileIOPermission(FileIOPermissionAccess.Write, "C:\\CertkillerLogs\\myServiceLog"); 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, Permit Only .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 Security Exception 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 34 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: Application Activation(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 35 You have a DataSet object named customersDataSet that contains a DataTable object named CertKCustomers. CertKCustomers retrieves information from a Microsoft SQL Server database.

CertKCustomers 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. DataView customersDataView = new DataView(customersDataSet.Tables["CertKCustomers"]);

customersDataView.FindRows("Region =France");

B. DataView customersDataView = new DataView(customersDataSet.Tables["CertKCustomers"]);

customersDataView.FindRows("Region = 'France'");

C. DataView customersDataView = new DataView(customersDataSet.Tables["CertKCustomers"]);

customersDataView.RowFilter = ("Region = France");

D. DataView customersDataView = new DataView(customersDataSet.Tables["CertKCustomers"]);

customersDataView.RowFilter= ("Region = 'France'");

Answer: D

Explanation: We use the Row Filter property to set the filter of the DataView. We also take care to use quotes for the value France.

Note 1: The DataView. Row Filter 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 Data Rows method does not update the DataView it just produces a result. Furthermore, the search string is incorrect.

B: The Data Rows method does not update the DataView it just produces a result.

C: The search string is incorrect. The value must be in quotes.

QUESTION 36 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:

XmlElement theElement;

XmlElement anotherElement;

XmlDocument doc = new XmlDocument();

XmlDeclaration theDecl =

doc.CreateXmlDeclaration("1.0",null,null); doc.AppendChild(theDecl);

```

the Element = doc.CreateElement("Library");
doc.AppendChild(the Element);
the Element = doc.CreateElement("Book");
theElement.SetAttribute("type", " Certification");
another Element = doc.CreateElement("Certkiller 70-216 Q&A");
anotherElement.InnerText = "Book Title";
anotherElement.AppendChild(the Element);
doc.DocumentElement.AppendChild(the Element);

```

Which XML output is produced by this code segment?

- A. <?xml version="1.0"?>
- <Library />
- B. <?xml version="1.0"?>
- <Library>
- <Book type=" Certification" />
- C.
- </Library>
- <?xml version="1.0"?>
- <Library>
- <Book type=" Certification">
- <Title> Certkiller 70-216 Q&A </Title>
- </Book>
- </Library>
- D. <?xml version="1.0"?>
- <Library>
- <Title> Certkiller 70-216 Q&A <Book type="Certification" /></Title> <Library>

Answer: B

Explanation:

Step 1: First the XmlDeclaration is created.

```
doc.CreateXmlDeclaration("1.0",null,null);
```

Step 2: Then the Library element is created and appended to doc.

Step 3: The Book element is created. The attribute type="Mystery" is added. This element is appended to doc.

Incorrect Answers

A: The book element is added to doc.

C: The Title element is never appended to doc.

D: The Book element, not the Title element is appended to doc.

QUESTION 37 You have a DataSet object named loanCustomersDataSet that contains customers serviced by the loan department of CertKlink Inc. You receive a second DataSet object named assetCustomersDataSet that contains customers serviced by the asset management department of your company. 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 preserve Changes. Preserve Changes 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 C#]

Incorrect Answers

A The Preserve Changes parameter must be set to true.

C, D: We must merge into loanCustomerDataSet, not into the Dataset that we have received.

QUESTION 38 You are developing an application that queries a table named Products in a Microsoft SQL Server database named CertkillerData. The query will be stored in a string variable named sqlQuery. 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 sqlQuery. 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 sqlQuery. 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 CommandText to sqlQuery. 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 CommandText to sqlQuery. Use the ExecuteXmlReader method of the SqlCommand object to create an 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 row sets. 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 produced 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 Dataset 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 39 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 CKConnection 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. SqlDataAdapter CKDataAdapter = new SqlDataAdapter(); CKDataAdapter.SelectCommand.Connection = CKConnection; CKDataAdapter.SelectCommand.CommandText = regionSQL;
- B. SqlDataAdapter CKDataAdapter = new SqlDataAdapter(regionSQL, CKConnection);
- C. SqlCommand SqlCmd = new SqlCommand(regionSQL); SqlDataAdapter CKDataAdapter = new SqlDataAdapter(); CKDataAdapter.SelectCommand.Connection= CKConnection; CKDataAdapter.SelectCommand = SqlCmd;
- D. SqlCommand SqlCmd = new SqlCommand(); SqlDataAdapter CKDataAdapter = new SqlDataAdapter(); SqlCmd.CommandText = regionSQL; CKDataAdapter.SelectCommand.Connection= CKConnection; CKDataAdapter.SelectCommand = SqlCmd;

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 SQL DataAdapter 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) [C#]

Incorrect Answers

A: This is also a plausible solution. B) is more straightforward.

C, D: First we set the Adapter.SelectCommand.Connection to CKConnection. But then we reset this property by setting the Adapter.SelectCommand to SqlCmd.

QUESTION 40 Your Microsoft SQL Server 6.5 database contains a table named CertKPurchaseOrders that consists of more than 1 million rows. You are developing an application to populate a Data Reader object with data from CertKPurchaseOrders. 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 CK_SQLSelect. You need to instantiate a SqlConnection object and a SqlCommand object that you will use to populate the Data Reader object.

Which code segment should you use?

- A. OleDbConnection myConnection = new OleDbConnection (myOleDbConnectionString); OleDbCommand CKCommand = new OleDbCommand (CKSQLSelect);
- B. OleDbConnection CKConnection = new OleDbConnection (CKOleDbConnectionString); OleDbCommand CKCommand = new OleDbCommand (CKSQLSelect, CKConnection);
- C. SqlConnection CKConnection = new SqlConnection (CKSqlConnectionString); SqlCommand CKCommand = new SqlCommand (CKSQLSelect);
- D. SqlConnection CKConnection = new SqlConnection (CKSqlConnectionString); SqlCommand CKCommand

```
= new SqlCommand (CKSQLSelect, CKConnection);
```

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 Command Text and the OleDBConnection properties of the OleDbCommand.

Reference: .NET Framework Developer's Guide, .NET Data Providers [C#] .NET Framework Class Library, OleDbCommand Members

Incorrect Answers

A: We create the OleDbCommand we must specify the OleDBConnection, not just the Command Text. C, D: Only SQL Server 7.0, SQL Server 2000 or later can use SqlConnection.

QUESTION 41 You have a Dataset object that contains a single Data Table object named CertKEmployees. CertKEmployees 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 Data Row object for the specified EmployeeID. You want to use the Find method of the rows collection in Employees to return the requested Data Row 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 CertKEmployees.
- B. Ensure that EmployeeID is unique for each row in CertKEmployees.
- C. Ensure that CertKEmployees has a primary key on EmployeeID.
- D. Ensure that CertKEmployees is sorted in ascending order on EmployeeID.

Answer: C

Explanation: To use the Find method, the Data Table 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. CertKEmployees must have a primary key column.

D: Sorting will not help.

QUESTION 42 You have a SqlDataReader object named CKproductsDataReader. The products DataReader object contains three columns in the following order:

- ProductID as Integer
- ProductName as nvarchar(40)
- UnitsInStock as Integer

You want to use CKproductsDataReader to create an inventory management report. You define the following three variables:

- int myProductID;
- string myProductName;
- int myUnits;

You need to ensure that the report runs as quickly as possible.

Which code segment should you use?

- A. myProductID = (int) CKproductsDataReader[1];
myProductName = (string) CKproductsDataReader[2];

B. myUnits = (int) CKproductsDataReader[3];
 myProductID = (int) CKproductsDataReader[0];
 myProductName = (string) CKproductsDataReader[1];
 myUnits = (int) CKproductsDataReader[2];
 C. myProductID = (int) CKproductsDataReader["ProductID"]; myProductName = (string)
 CKproductsDataReader["ProductName"]; myUnits = (int) CKproductsDataReader["UnitsInStock"];
 D. myProductID = (int)
 CKproductsDataReader.GetOrdinal("ProductID");
 myProductName = (string)
 CKproductsDataReader.GetOrdinal("ProductName");
 myUnits = (int)CKproductsDataReader.GetOrdinal("UnitsInStock");

Answer: B

Explanation: We should use ordinal-based lookups since they are more efficient than named lookups. Column ordinals are zero-based: ProductId has ordinal number 0, myProductName has ordinal number 1, and myUnits has ordinal number 2.

Reference: .NET Framework Class Library, SqlDataReader.GetOrdinal Method [C#]

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 43 Certkiller Ltd. receives product information from manufacturers in the form of an 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. Dataset products = new Dataset("prodInfo");
 XmlTextReader reader = new XmlTextReader(newProds);
 XmlValidatingReader validReader = new
 XmlValidatingReader(reader);
 while (validReader.Read()) { products.WriteXml(validReader.Value);};
 B. Dataset products = new Dataset("prodInfo");
 products.ReadXml(newProds);
 C. Dataset products = new Dataset("prodInfo");
 XmlDocument document = new XmlDocument(products);
 D. document.DataSet.ReadXmlSchema(newProds);
 Dataset products = new Dataset("prodInfo");
 string myXmlData = Encoding.UTF8.GetString(newProds.ToArray());
 SqlDataAdapter adapter = new SqlDataAdapter("LoadSchemaType=XML",myXmlData); adapter.
 Fill(products)

Answer: B

Explanation: The ReadXml method can be used to read an XML document that includes both schema and data.

Note: If no in-line schema is specified (as in this scenario), the relational structure is extended through

inference, as necessary, according to the structure of the XML document.

Reference: .NET Framework Class Library, DataSet.ReadXml Method (Stream) [C#]

Incorrect Answers

A: The WriteXml method writes XML data, and optionally the schema, from the Dataset. We want to read data into the Dataset however.

C: The ReadXmlSchema method is used to just read the schema from an XML document, not the data.

D: We want to read the XML data and schema from a stream not from a SQL Server database. We should not use a SqlDataAdapter.

QUESTION 44 Your Microsoft SQL Server database has a stored procedure named Get CompanyName. It accepts one parameter named @CustomerID and returns the appropriate company name. You instantiate a SqlCommand object named CKCommand. You need to initialize CKCommand to return the company name for @CustomerID with a value of "ALFKI".

Which code segment should you use?

- A. CKCommand.CommandText = "GetCompanyName, ALFKI";
CKCommand.Parameters.Add("@CustomerID");
- B. CKCommand.CommandText = "GetCompanyName";
CKCommand.Parameters.Add("GetCompanyName", "ALFKI");
- C. CKCommand.CommandText = "@CustomerID";
CKCommand.Parameters.Add("GetCompanyName", "ALFKI");
- D. CKCommand.CommandText = "GetCompanyName";
CKCommand.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: GetCompanyName. The Parameter should contain ParameterName (here @CustomerID) and the Value (here the string ALFKI).

Note: An 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 [C#] .NET Framework Class Library, SqlParameter Members

Incorrect Answers A, C: The CommandText should be set to the name 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 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) [C#] .NET Framework Class Library, XmlWriteMode Enumeration [C#]

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 have a Dataset object named CK DataSet 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 CK DataSet to the database. You decide to use the Sulligent data provider. You need to create a data object that you will use to update the database. Which code segment should you use?

- A. SqlDataReader myDataReader;
- B. SqlDataAdapter mySqlDataAdapter = new SqlDataAdapter();
- C. DataObject myDataObject = new DataObject();
- D. SqlParameter myParameter = new SqlParameter();

Answer: B

Explanation: A SqlDataAdapter represents a set of data commands and a database connection that are used to fill the Dataset and update the data source.

Reference: .NET Framework Class Library, Data Adapter Class [C#]

Incorrect Answers

- A: The SqlDataReader class provides a means of reading a forward-only stream of rows from a SQL Server database. However, we want to write the updates back to the SQL Server database.
- C: The DataObject class represents the object element of an XML signature that holds the data to be signed. It would not be useful here.
- D: Defining parameters for a SqlCommand would not be useful.

QUESTION 47 You are planning to create a Dataset object named CK DataSet to be used in a bond-trading application. Several developers will need to write code to manipulate myDataSet, and you want to ensure that CK DataSet is easy for them to use. You decide to create CK DataSet 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 CK DataSet.
- B. Create an XDR schema that defines CK DataSet.
- C. Create a class for CK DataSet that is based on the schema and that inherits from the Dataset class.
- D. Create a class for CK DataSet that is based on the schema and that inherits from the XmlSchema class.

E. Create a key pair for CK DataSet 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 [C#] .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 48 You develop an ADO.NET application that uses a Microsoft SQL Server database and a SqlConnection data provider. Your application includes the following four code segments, which are each called once:

```

SqlConnection myConnection1 = new SqlConnection();
myConnection1.ConnectionString = "Data
Source=CertK Server;" + "Initial Catalog=Billing; Integrated Security=true";
myConnection1.Open();

SqlConnection myConnection2 = new SqlConnection();
myConnection2.ConnectionString = "Data Source=CertK Server;" +
+ "Initial Catalog=Billing; Integrated Security=True";
myConnection2.Open();

SqlConnection myConnection3 = new SqlConnection();
myConnection3.ConnectionString = "Data
Source=CertkillerServerB;" +
+ "Initial Catalog=Search; Integrated Security=true";
myConnection3.Open();

SqlConnection myConnection4 = new SqlConnection();
myConnection4.ConnectionString = "Data
Source=CertK Server;" +
+ "Initial Catalog=OrderEntry; Integrated Security=true";
myConnection4.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: MyConnection1 and MyConnection2 use exactly the same connection string, while MyConnection3 and MyConnection4 use separate connection strings. The three separate connection strings will create three connection 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 49 You have a SqlDataReader object named orders DataReader. This object contains a column named OrderQuantity that has 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 orders DataReader and pass OrderQuantity to a function named myFunction.

Which code segment should you use?

- A. long weeklyOrderQuantity = 0;
 while (ordersDataReader.Read()) {
 myFunction((int)ordersDataReader["OrderQuantity"]); }
- B. long weeklyOrderQuantity = 0;
 while (ordersDataReader.NextResult()) { myFunction((int)ordersDataReader["OrderQuantity"]); }
- C. long weeklyOrderQuantity = 0; int orderCount = 0; while (orderCount < ordersDataReader.FieldCount) {myFunction((int)ordersDataReader["OrderQuantity"]);
 orderCount++; ordersDataReader.Read(); }
- D. long weeklyOrderQuantity = 0;
 int orderCount = 0;
 while (orderCount < ordersDataReader.FieldCount) {
 myFunction((int)ordersDataReader["OrderQuantity"]);
 orderCount++;
 ordersDataReader.NextResult();}

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 [C#]

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 50 You are creating an XML Web service named ApproveService that is available only on your Certkiller's intranet. The service exposes a Web method named Close that updates the status of open work orders to "closed". You configure ApproveService to use only Integrated Windows 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. [PrincipalPermissionAttribute
 (SecurityAction.Demand,Role="Reviewers, Admins")]
 private void Close() { // Code to process the Close method goes here. }

B. [PrincipalPermissionAttribute
(SecurityAction.Demand, Role="Reviewers")]
 [PrincipalPermissionAttribute
(SecurityAction.Demand, Role="Admins")]
 private void Close() { // Code to process the Close method goes here. }
 C. private void Close() { PrincipalPermission myPermission1 = new PrincipalPermission("Nothing", "Reviewers");
 PrincipalPermission myPermission2 = new PrincipalPermission("Nothing", "Admins");
 myPermission1.Demand();
 myPermission2.Demand();
 // Code to process the Close method goes here. }
 D. private void Close() { PrincipalPermission myPermisssion3 = new PrincipalPermission("Nothing", "Reviewers, Admins"); myPermission3.Demand();
 // Code to process the Close method goes here. }

Answer: B

Explanation: The user must either be a member of the Reviewers group or the Admins groups. We are not allowed to make a third group, and no solution allows us to use the Union operator to combine security permissions.

Reference: PrincipalPermission constructor (String, String) initializes a new instance of the PrincipalPermission class for the specified name and role.

Incorrect Answers

- A: The syntax Role="Reviewers, Admins" is incorrect. Only one role name can be supplied.
- C: This code would perform two separate security tests. It would only allow users that are members of both the Reviewers and the Admins group. Note: PrincipalPermission.Demand method determines at run time whether the current principal matches that specified by the current permission.
- D: The syntax of PrincipalPermission("Nothing", "Reviewers, Admins") is incorrect. Only one role name can be supplied.

QUESTION 51 Certkiller 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 pass 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 XML Web Services

Incorrect Answers

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

C: Serviced components cannot be run on heterogeneous systems. Note: 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 52 You are creating a .NET Remoting object named Payroll. The Payroll 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 Tcp Channel and a Binary Formatter for the Payroll class.
- B. Use an Http Channel and a Soap Formatter for the Payroll class.
- C. Host the Payroll class in Internet Information Services (IIS) and implement Basic authentication.
- D. Host the Payroll 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. Note: A Tcp Channel provides an implementation for a sender-receiver channel that uses the TCP protocol to transmit messages. The Binary Formatter 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. Note: A Http channel provides an implementation for a sender-receiver channel that uses the HTTP protocol to transmit messages. The Soap Formatter serializes and deserializes an object, or an entire graph of connected objects, in SOAP format.

C: Basic authentication is not secure.

QUESTION 53 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 datas.
- B. Store each Dataset object by using the Session object.
- C. Set the Buffer Response property of the Web Method attribute to false.
- D. Set the Cache Duration property of the Web Method attribute to an interval greater than zero.

Answer: D

Explanation: The Buffer Response 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 [C#] .NET Framework Class Library, `WebMethodAttribute.BufferResponse` Property [C#]

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 54 You are creating an XML Web service named View CertKOrders that is available to customers over the Internet. View CertKOrders exposes a Web method named View ShippingDetail that requires additional security. You decide to use generic role-based security to secure View ShippingDetail. 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 View ShippingDetail,

Which code segment should you use?

- A. System.Security.Principal.IIdentity myIdentity = new GenericIdentity("Generic", "Custom");
string[] Roles = {"Shipping"};
GenericPrincipal myPrincipal = new GenericPrincipal(myIdentity, Roles);
myIdentity = WindowsIdentity.GetCurrent();
- B. GenericIdentity myIdentity = new GenericIdentity("Generic", "Custom");
string[] Roles = {"Shipping"};
GenericPrincipal myPrincipal = new GenericPrincipal(myIdentity, Roles);
- C. Thread.CurrentPrincipal = myPrincipal;
IIdentity myIdentity = new GenericIdentity("Generic", "Shipping"); IPrincipal myPrincipal = new WindowsPrincipal((WindowsIdentity) myIdentity); Thread.CurrentPrincipal = myPrincipal;
- D. IIdentity myGenericIdent = new GenericIdentity("Generic", "Custom");

```

WindowsIdentity myIdentity = (WindowsIdentity)
myGenericIdent;
string[] Roles = {"Shipping"};
GenericPrincipal myPrincipal = new
GenericPrincipal(myIdentity, Roles);
WindowsIdentity.Impersonate(myIdentity.Token);

```

Answer: B

Explanation:

The GenericIdentity (name type) constructor initializes a new instance of the GenericIdentity class representing the user with the specified name and authentication type.

Parameters: name The name of the user on whose behalf the code is running. We should use Generic type The type of authentication used to identify the user. We should use Custom.

Reference:

Incorrect Answers A, D: The IIdentity interface defines the basic functionality of an identity object. However, we should use the GenericIdentity object, not the IIdentity interface.

C: The following constructor is incorrect:

GenericIdentity("Generic", "Shipping") The second parameter should define the authentication type, not a name of a group.

QUESTION 55 You develop an ASP.NET application that consumes a third-party XML Web service named Credit Service. Credit Service contains a Web method named Charge Card. Charge Card takes as input a credit card number, a billing address, and a monetary amount and returns a Boolean variable that indicates whether or not the card was charged. Calls to Charge Card take one minute to complete. You do not want users to have to wait while Charge Card executes. You want users to be taken automatically to the next Web page of the application.

Which code segment should you use to call Credit Service?

- 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(CCResponse), null);
Server.Transfer("process.aspx");private void CCResponse(IAsyncResult aRes) {
CreditService.EndChargeCard(aRes);}
- D. IAsyncResult AsyncResult = CreditService.BeginChargeCard(ccNumb, billAddress, amount, null, null);
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 [C#] .NET

Framework Class Library, AsyncCallback Delegate [C#]

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

D: We must use the AsyncCallback delegate.

QUESTION 56 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 myData. 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 Crypto Stream object to write the value of the hash code to an encrypted stream. Convert the output stream to a string.
- B. Create a Unicode Encoding object and use it to encode the value of myData into a byte array. Use the Compute Hash method of the Cryptography Service Provider to create a hash from the encoded byte array. Convert the output of Compute Hash from a byte array to a string.
- C. Create a Unicode Encoding object and use it to encode the value of myData 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 Crypto Stream object that passes in an output stream and the Encryptor object as parameters. Convert myData to a stream and use the Crypto Stream object to write the value of myData 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 Crypto Stream. 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 [C#]

.NET Framework Class Library, CryptoStream Class [C#]

.NET Framework Class Library, SymmetricAlgorithm.CreateEncryptor Method [C#]

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 57 You have a .NET Remoting object named CK ProductLoader. The CK ProductLoader class is a server-activated Singleton object.

The CK ProductLoader class loads product data into a Microsoft SQL Server database. The Load method of the CK ProductLoader class is a time-consuming method to call. You are developing a client application that uses the CK ProductLoader class. You want to ensure that the client application can continue to respond to user input while the Load method of the CK ProductLoader class is called.

What should you do?

- A. Use an AsyncCallback instance to call the Load method.
- B. Modify the CK ProductLoader class to be derived from IAsyncResult.
- C. Configure the CK ProductLoader 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 58 Certkiller 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 has Refrigerator. 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 has Refrigerator to True. Otherwise, set has Refrigerator 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 has Refrigerator to True. Otherwise, set has Refrigerator to False.
- C. Create an XmlTextReader object on usedList. Loop through usedList by using the Move To Content method of the XmlTextReader object and comparing for the saleList/refrigerators node. If this node is found, set has Refrigerator to True. Otherwise, set has Refrigerator 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 has Refrigerator to True. Otherwise, set has Refrigerator 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 [C#]

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 Move To Content method can be used on a XmlReader stream to provide a possible solution in this scenario. However, it would be fastest solution. Note: The Move To Content method checks whether the current node is a content (nonwhite space text, CDATA, Element, End Element, Entity Reference, or End Entity) 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 59 You create an XML web service that retrieves data from Microsoft SQL Server database. You instantiate a SqlConnection object named CKConnection and set the Max Pool Size property of the connection String 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 60 You have a strongly typed Dataset object named CK DataSet. 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 must 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.

Certkiller Illustrative Diagram



Incorrect Answers A B: There would be no corresponding rows in the Orders table if we populate the OrderDetails table before the Orders table.

D: There would be no corresponding rows in the Customers table if we populate the OrderDetails table before the Customers table.

QUESTION 61 You have a Dataset object named CK DataSet. 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 Get ChildRows method of the Data Row 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 CK DataSet 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 Get ChildRows Method uses a Data Relation to retrieve the child rows of this Data Row using the specified Data Relation. In this scenario we would be required to add a data relation between the two tables.
 Note: A Data relation represents a parent/child relationship between two DataTable objects.

Certkiller Illustrative Diagram



Reference: .NET Framework Class Library, DataRow.GetChildRows Method (DataRelation) [C#]

.NET Framework Class Library, DataRelation Class [C#]

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 62 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 [C#]

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 63 You are debugging a visual studio .Net application named CertkillerApp. CertkillerApp 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 `outer Xml` property of the `Xml document` object to a string variable
- C. Assign the `outer Xml` property of the `Xml document element` property of the `Xml document` object to a string variable.
- D. Use the `write content To` method of the `XmlElement` object to write the document into a `MemoryStream` object. Use the `Get Xml` 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 [C#]

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 `Get Xml` method of the `Dataset` object cannot be used on a stream..

QUESTION 64 You are developing a order-processing application that retrieves data from a Microsoft SQL Server database named CertkillerData that contains a table named Customers 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 orders Dataset to capture customer and order information before it applied to the database. The orders Dataset 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 Constraint Orders that has Orders. CustomersID as the parent column and Customers. CustomerID as the child column.
- B. Create a foreign key constraint named Constraint Customers that has Customers. CustomerID as the parent column and Orders. CustomerID as the child column.
- C. Create a unique constraint named Unique Customers by using the Customers. CustomerID
- D. Add Constraint Orders to the Orders Data Table.
- E. Add Constraint Orders to the Customer Data Table.
- F. Add Constraint Customers to the Orders Data Table.
- G. Add Constraint Customers to the Customers Data Table.
- H. Add Unique Customers 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 Constraints Customers constraints.

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

Certkiller Illustrative Diagram



Incorrect Answers

- A: This is incorrect. The parent column must be CustomerID in the Customers table.
- B, D: The Constraint Customers constraint must be used, not Constraint Orders.
- C, F: A unique constraint only applies to one single table.
- E: The constraint must be added to the Orders table.

QUESTION 65 You have Dataset object named Loan Customers DataSet that contains customers serviced by the loan department of your company. You receive a second Dataset that contains customers serviced by the asset management department of your company. Both objects have the same structure. You want to merge asset CustomersDataSet into loan Customers DataSet and preserve the original values in loan Customer DataSet. Which code segment should you use?

- A. loan Customers Dataset. Merge (asset CustomersDataSet);
- 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 preserve Changes. Preserve Changes 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) [C#]

Incorrect Answers

- A The Preserve Changes parameter must be set to true.
- C, D: We must merge into loanCustomerDataSet, not into the Dataset that we have received.

QUESTION 66 You create an XML Web service named CK Service. You must ensure that this service meets the following URL authorization requirements.

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

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 67 You are creating an XML Web service that tracks employee information. The service contains a Web method named Retrieve Employees. The service also contains a base class named Employee and two classes named Manager and Engineer, which are derived from Employee. Retrieve Employees takes a roleId as input that specifies the type of employee to retrieve, either Manager or Engineer. Retrieve Employees 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 Retrieve Employees.

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 Retrieve Employees, one of type Manager and one of type Engineer.
- C. Apply an XmlRoot attribute to the Employee class Apply anXmlAttribute attribute to the Manager and Engineer classes.
- D. Apply an XmlRoot attribute to the Employee class Apply anXmlElement attribute to the Manager and Engineer classes.

Answer: B

Explanation: The XmlIncludeInclue allows the XmlSerializer to recognize a type when it serializes or deserializes an object. We specify the two types as XmlInclude attributes to our serialzer Retrieve CerCKillerEmployees.

Reference: .NET Framework Class Library, XmlIncludeAttribute Class .NET Framework Class Library, XmlRootAttribute Class

Incorrect Answers

- A: The `XmlAttribute.XmlType` property gets or sets an object that specifies how the `XmlSerializer` serializes a class to which the `XmlAttributeAttribute` has been applied.
- C: The `XMLRoot` attribute is not useful here. Note: The `XmlAttributeAttribute` identifies a class, structure, enumeration, or interface as the root (or top-level) element of an XML-document instance.* The `XmlAttribute.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. Note: The `XmlAttribute` Indicates that a public field or property represents an XML element when the `XmlSerializer` serializes or deserializes the containing object.

QUESTION 68 Your Microsoft SQL Server database contains a table named CertK Orders. CertK Orders 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 CertK Orders 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 69 You are using Visual Studio .NET to develop a new application to replace an older COM-based application. 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 CertkillerCOM.dll. The Visual Studio .NET assembly for CerCKiller COM.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 CertkillerCOM.dll from Visual Studio .NET.
Change the assembly name in Solution Explorer.
Change the namespace name by editing the assembly.
- B. Reference CertkillerCOM.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 70 You create a serviced component named Bank Transfer. Bank Transfer is in a COM+ application named Certkiller Bank. Bank Transfer is secured by using the Security Role attribute for the Tellers and Managers roles. You want members of the CertkillerBankTellers group to be assigned to the Tellers role. What should you do?

- A. Add another Security Role attribute to the Bank Transfer class for the CertkillerBankTellers group.
 B. Modify the Tellers Security Role attribute on the Bank Transfer class to include the CertkillerBankTellers group.
 C. Use the Component Services tool to add a new role named CertkillerBankTellers.
 D. Use the Component Services tool to add the CertkillerBankTellers group to the existing Tellers role.

Answer: D

QUESTION 71 As a developer at Certkiller 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 72 You have a .NET Remoting object named CKBatchOrder. The CKBatchOrder class allows remote client applications to submit orders in batches. Each CKBatchOrder object holds state information that is specific to each remote client application. The CKBatchOrder class has overloaded constructors for initializing an object. You want to develop a server application to host CKBatchOrder objects. What should you do?

- A. Create a Windows service, and register CKBatchOrder as a client-activated object.
- B. Create a Windows service, and register CKBatchOrder as a server-activated Singleton object.
- C. Host CKBatchOrder in Internet Information Services (IIS) and create a Web.config file to register CKBatchOrder as a server-activated Single Call object.
- D. Host CKBatchOrder in Internet Information Services (IIS) and create a Web.config file to register CKBatchOrder 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 73 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 Certkiller.dll. You have an Internet Information Services (IIS) virtual directory named PromotionsObject. The Certkiller.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="Certkiller, 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="Certkiller, 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,Certkiller"/> </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,Certkiller"/> </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 74 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 75 As a software developer at Certkiller Inc. you are creating an XML Web service named Housing Service that exposes two Web methods named Search House and Buy Houses. 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 Housing Service project. The Web Form needs to override the default template when a request is made. You need to ensure that customers who request Housing Service 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 Web Service attribute to the location of HousingServiceDescription.aspx.

C. In the Web.config file, enable tracing and set Trace Mode 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 76 You are creating an XML Web service named Legal Service. This service exposes two Web methods named Send Message and Receive Message.

Send Message is used to send highly confidential messages to its customers. Receive Message 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 Legal Service and the customers who access Legal Service.

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 77 You are creating an XML Web service named CK WebService. 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 CK WebService. 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 decided at runtime.

Reference: .NET Framework Developer's Guide, Creating GenericPrincipal and GenericIdentity Objects [Visual C#]

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 decided at runtime.

QUESTION 78 You create an XML Web service named Certkiller1. You use the Debug.Assert method in your code to verify parameter values and ranges.

You find that Service1 does not display assertion failure messages. Instead, Certkiller1 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 Certkiller1, set the Debug.AutoFlush property to false.
- D. In the constructor for Certkiller1, 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 Trace Listener.

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 Trace Listener to, or removing one from, the Listeners collection.

Reference: .NET Framework Class Library, Debug.Assert Method (Boolean, String) [C#]

Incorrect Answers

A: We still want to view assert on 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 79 You are creating a serviced component named ItemCKInventory. An online catalog application will use ItemCKInventory to display the availability of products in inventory. Additional serviced components written by other developers will continuously update the inventory data as orders are placed.

The ItemCKInventory class includes the following code segment:

<Transaction(TransactionOption.Required)> _

Public Class ItemCKInventory

Inherits Serviced Component

' Method code goes here. End Class

Item Inventory is configured to require transactions. You want Item Inventory 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 ItemCKInventory class, add the following attribute:

<ObjectPooling(True)>

- B. To all methods of the ItemCKInventory class, add the following attribute:

<AutoComplete(False)>

- C. Modify the Transaction attribute of the ItemCKInventory class to be the following attribute:

<Transaction(TransactionOption.Required, Timeout:=1)>

- D. Modify the Transaction attribute of the ItemCKInventory class to be the following attribute:

<Transaction(TransactionOption.Required, _

IsolationLevel:=

TransactionIsolationLevel.ReadUncommitted)>

Answer: D

Explanation: The Read Uncommitted 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 read committed. 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: Auto complete does not apply here.

C: Timeout configuration would not address performance issue.

QUESTION 80 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 Certkiller, Inc. You want only callers from Certkiller, 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 CertkillerAssociate and CertkillerManager. 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 81 You create an XML Web service named ReportService for an application on your Certkiller'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-based 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 Field Agent 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 82 Your Microsoft SQL Server database CertkillerBackOrders 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. Data Reader
- D. Data Adapter

Answer: C

Explanation: The ADO.NET Data Reader is used to retrieve a read-only, forward-only stream of data from a database. Using the Data Reader can increase application performance and reduce system overhead because only one row at a time is ever in memory. Data Reader would meets the requirements of this scenario.

Reference: .NET Framework Developer's Guide, Retrieving Data Using the Data Reader [C#]

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 Data Adapter serves as a bridge between a DataSet and a data source for retrieving and saving data.

QUESTION 83 Your Microsoft SQL Server database contains a table named Customers. Customers contains three columns named FamilyName, PersonalName, and Address. You instantiate a SqlCommand object named CKCommand that you will use to populate a Data Reader object named customers DataReader. You need to initialize CKCommand to load customers DataReader to include FamilyName and PersonalName for all rows in Customers. Which code segment should you use?

- A. CKCommand.CommandText = "SELECT FamilyName," + "PersonalName FROM Customers";
- B. CKCommand.CommandType = "SELECT FamilyName," + "PersonalName FROM Customers");
- C. CKCommand.Parameters.Add("SELECT FamilyName," + "PersonalName FROM Customers");
- D. CKCommand.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 Command Type 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 84 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 CertkillerCustomers.

Which query should you use?

A. SELECT * FROM CertkillerCustomers FOR XML AUTO

B. SELECT * FROM XML FROM CertkillerCustomers

C. SELECT * FROM CertkillerCustomers as XMLDATA

D. SELECT * FROM OPENXML('<CertkillerCustomers'./Root/Customer', 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 row sets. 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 85 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. 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 Validation Type property of the XmlValidatingReader object to Schema.

B. Set the Can Resolve Entity property of the XmlValidatingReader object to True.

C. Create and register a Validation EventHandler 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 Validation Event Handler 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 [C#]

Incorrect Answers

A: The Validation Type 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: Can Resolve Entity 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 86 As a software developer at Certkiller you are creating an XML Web service named Distribution Service. This service must be able to access and manipulate data in a table named Inventory in a Microsoft SQL Server database. Some functions within Distribution Service need the inventory data to be exposed as XML data. Other functions within Distribution Service 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, XmlDocument Class [C#]

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 87 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 Trace Switch object to filter the trace output. The Display Name property of the Trace Switch object is "CertkillerSwitch". 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="CertkillerSwitch" value="1" /> </switches>
</system.diagnostics>
```

- B. To the Web.config file, add the following code segment:

```
<system.diagnostics> <switches> <add name="CertkillerSwitch" 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="CertkillerSwitch" /> </switches>
</system.diagnostics>
```

Answer: A

Explanation: In the Web.config file we should specify the name of the switch (CertkillerSwitch) and the appropriate Trace level through the value attribute.- Trace level correspond to the values 1 through 4. Trace level 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 [C#] Visual Basic and Visual C# Concepts, Trace Switches

Incorrect Answers

B: Incorrectly the value attribute is set to "TraceSwitch". Valid Trace level 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 CertkillerSwitch, not TraceSwitch.

QUESTION 88 You create an XML Web service named Certkiller1 that exposes your company's inventory data. This data is used by other companies to place orders. Certkiller1 must conform to existing formatting standards for inventory data. You deploy Certkiller1. 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 Soap Header attribute to map all SOAP headers to a member variable for the Certkiller1 class. Then use the Trace. Write Line method to log the headers to a log file.

Answer: C

Explanation: The After Serialize stage occurs after a Soap Message 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 [C#]

QUESTION 89 You create an XML Web service that provides stock information to the customers of Certkiller Inc. 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 90 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 [C#]

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 91 You create an XML Web service named CK Service. This service exposes a Web method named MyMethod. You need to register CK Service in UDDI. First, you add a new business name and a new tModel. You now need to list a valid access point to CK Service. Which URL should you use?

- A. <http://CertkillerSrv/AppPath/myService>
- B. <http://CertkillerSrv/AppPath/myService=wsdl>
- C. <http://CertkillerSrv/AppPath/myService.asmx>
- D. <http://CertkillerSrv/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 [C#]

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 92 You are creating a serviced component named CK Component 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 CK Component that you will provide to your customers. All updates to CK Component will be backward compatible. You will create similar setup projects for each update of CK Component that will register the updated assembly in the global assembly cache. You need to ensure that any applications on your customers' computer that reference CK Component use the most recent version of the component. Which action or actions should you take? (Choose all that apply)

- A. Sign CK Component by using a strong name.
- B. Compile CK Component 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 CK Component.
- E. Add an application configuration file to CK Component 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 CK Component. 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: A 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 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 93 You have an application named MyApp that contains a reference to version 1.0.0.0 of a strongly named serviced component named CertkillerComponent. This component is located in the bin directory of MyApp. You receive version 2.0.0.0 of CertkillerComponent, 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 CertkillerComponent, which you install in the global assembly cache. You do not reconfigure the application configuration file. You then run MyApp. Which version of CertkillerComponent 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. 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. 2. Checks whether the assembly name has been bound to before and, if so, uses the previously loaded assembly.
3. 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. 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 94 You are using Visual Studio .NET to develop an application named CertkillerApp. 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 unregistered 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 95 You are creating an XML Web service named Stock Service. The service contains a Web method named Retrieve Stock Info. Retrieve Stock Info 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 Retrieve

Stock Info 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 Soap Header 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, Soap Extension Class

Incorrect Answers

A: Would not help.

C: Soap Header 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 96 You are creating an XML Web service named Inventory Service for a nationwide clothing retailer company Certkiller Inc. The service provides near real-time inventory information to individual store managers by using a virtual private network (VPN). Inventory Service exposes a Web method named Retrieve Inventory that returns inventory information to the caller. You configure Internet Information Services (IIS) and Inventory Service to use Integrated Windows authentication. You need to write code in Inventory Service to ensure that only members of the Manager group can access Retrieve Inventory.

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 Retrieve Inventory, add the following code segment:

If (User.Identity.Name.Equals("Manager"))

' Code to retrieve inventory data goes here.

D. In Retrieve Inventory, add the following code segment:

If (User.Identity.AuthenticationType.Equals("Manager")) ' Code to retrieve inventory data goes here.

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 Authentication Type cannot be equal to "Manager".

QUESTION 97 You develop an application named CertkillerApp 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. 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 Public Key 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 Public Key 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 Request Minimum security action is used to request for the minimum permissions required for code to run. We use the Public Key property and the public key of our software certificate to protect the assembly.

Reference: .NET Framework Class Library, Security Action 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 98 You are creating a .NET Remoting object named Bank Ops. Bank Ops exposes methods for creating, finding, and modifying objects in a class named Bank Customer. Bank Customer has a large number of read/write properties. You expect a large number of remote client applications to frequently connect to Bank Ops. You expect these remote client applications to use many of the Bank Customer properties. You want to ensure that network traffic is minimized.

What should you do?

- A. Add the Serializable attribute to the Bank Customer class.
- B. Implement the IDisposable interface in the Bank Customer class.
- C. Derive the Bank Customer class from ContextBoundObject.
- D. Derive the Bank Customer 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 MarshalByRefObjec enables access to objects across application domain boundaries in applications that

support remoting. The Initialize Lifetime Service method obtains a lifetime service object to control the lifetime policy for this instance.

QUESTION 99 You are using Visual Studio .NET to develop an application that uses a non-COM DLL named CertKFunctions.dll. This DLL is written in unmanaged code. One function in the DLL performs encryption. This function takes two arguments. One argument is the string to be encrypted. The other argument is the resulting

encrypted string. The function returns an integer that is an error code. You must ensure that your application uses this function correctly.

Which code segment should you use?

A. [DllImport("CertKFunctions.dll")]

public static extern int encrypt(string input,

StringBuilder output);

string input = "Stuff to encrypt";

StringBuilder output = new StringBuilder(500);

int errCode = encrypt(input, output);

B. [DllImport("CertKFunctions.dll")] public static extern int encrypt(string input, string output); string input = "stuff to encrypt"; StringBuilder output = new StringBuilder(500); int errCode = encrypt(input, output.ToString());

C. [DllImport("CertKFunctions.dll")] public static extern int encrypt(string input, string output); string input = "stuff to encrypt"; string output = " "; int errCode = encrypt(input, output);

D. [DllImport("CertKFunctions.dll")] public static extern int encrypt(string input, ref string output); string input = "stuff to encrypt"; string output = null; int errCode = encrypt(input, ref output);

Answer: D

The only way to get the resulting encrypted string is to pass the second parameter by reference.

QUESTION 100 You are creating an XML Web service named CertkillerService that processes stock transactions. CertkillerService exposed a Web method named Buy Stock 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 must 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. [Web Method()] public string Buy Stock(string symbol, int shares)

B. [SoapDocumentMethod()][WebMethod()] public string BuyStock(string symbol, int shares)

C. [SoapRpcMethod()][WebMethod()] public string BuyStock(string symbol, int shares)

D. [SoapDocumentMethod()][WebMethod()] public string BuyStockDoc(string symbol, int shares)

[SoapRpcMethod()][WebMethod()] public string BuyStockRpc(string symbol, int shares)

Answer: D

QUESTION 101 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 myCommand and initialize all appropriate parameters. Which myCommand method should you use?

- A. ExecuteReader
- B. ExecuteNonQuery
- C. ExecuteScalar
- D. ExecuteXMLReader

Answer: C

QUESTION 102 Your Microsoft SQL Server database contains a table named Orders. Due to a recent increase in product sales, Orders 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. OleDbConnection myOleDbConnection = new OleDbConnection ("Data Source=(local); " + "Initial Catalog=Certkiller;" + "Integrated Security=true"); OleDbCommand myOleDbCommand = new OleDbCommand ("SELECT * FROM Orders", myOleDbConnection);
 OleDbDataReader ordersDataReader;
 myOleDbConnection.Open();
 ordersDataReader= myOleDbCommand.ExecuteReader();
- B. OleDbConnection myOleDbConnection = new OleDbConnection ("Provider=SqlOleDb; Data Source=(local); "
 + "Initial Catalog=Certkiller;" + "Integrated Security=true"); OleDbCommand myOleDbCommand = new OleDbCommand ("SELECT * FROM Orders", myOleDbConnection); OleDbDataReader ordersDataReader;
 myOleDbConnection.Open(); ordersDataReader = myOleDbCommand.ExecuteReader();
- C. SqlConnection myConnection = new SqlConnection ("Data Source=(local);Initial Catalog=Certkiller;" + "Integrated Security=true"); SqlCommand myCommand = new SqlCommand ("SELECT * FROM Orders"; myConnection); SqlDataReader ordersDataReader; myConnection.Open(); ordersDataReader =
 myCommand.ExecuteReader();
- D. SqlConnection myConnection = new SqlConnection ("Data Source=(local);Initial Catalog=Certkiller;" + "Integrated Security=true"); SqlCommand myCommand = new SqlCommand ("SELECT * FROM Orders"); SqlDataReader ordersDataReader; myConnection.Open(); ordersDataReader = myCommand.ExecuteReader();

Answer: C

QUESTION 103 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 CKDataAdapter. This object uses a single SQL SELECT statement to populate the regions Dataset. You bind regions Dataset to a Data Grid object named regions DataGrid to display the contents of Regions. You now want to use the same regions Dataset, CKDataAdapter, and regions DataGrid 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 Sql CommandBuilder object that has CKDataAdapter as a constructor argument. Add an Update button to the form and add code to the Click event to update regions Dataset by using CKDataAdapter.
- B. Instantiate a Sql CommandBuilder object that has CKDataAdapter as a constructor argument. Create one

stored procedure for each of the insert, update, and delete functions and associate the stored procedures with the Insert Command, Update Command, and Delete Command properties of CKDataAdapter. Add an Update button

to the form and add code to the Click event to update regions Dataset by using CKDataAdapter.

C. Create one stored procedure for each of the insert, update, and delete functions and associate the stored procedures with the Insert Command, Update Command, and Delete Command properties of CKDataAdapter. Add an Update button to the form and add code to the Click event to update regions Dataset by using CKDataAdapter.

D. Create one SQL string for each of the insert, update, and delete functions and associate the SQL strings with the Insert Command, Update Command, and Delete Command properties of CKDataAdapter. Add an Update button to the form and add code to the Click event to update regions Dataset by using CKDataAdapter.

Answer: A

QUESTION 104 You have a DataSet object named orders Dataset. 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 order Relation between Orders and OrderDetails on OrderID. Order is the parent table. OrderDetails is the child table. You add order Relation to the orders Dataset relation collection by using the following line of code: ordersDataSet.Relations.Add(order Relation);

You verify that prior to adding order Relation, 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 105 You are developing an application to maintain customer information in a Microsoft SQL Server database. You populate a DataSet object named CK DataSet. You bind this object to a Data Grid object. Your application invokes a Web method named Customer Updates in an XML Web service. This method accepts CK DataSet as a parameter and processes the updates made in the Data Grid object. You want to ensure that network traffic to the Web service is minimized.

Which code segment should you use?

- A. if (CKDataSet.HasChanges())


```
{ DataSet customerChanges = new DataSet();
CKDataSet.AcceptChanges();
customerChanges = CKDataSet.GetChanges(),
CustomerUpdates(customerChanges); }
```
- B. if (CKDataSet.HasChanges()) { DataSet customerChanges = new DataSet(); customerChanges =


```
CKDataSet.GetChanges(); CustomerUpdates(customerChanges); }
```
- C. DataSet customerChanges = new DataSet();


```
CKDataSet.AcceptChanges();
customerChanges = CKDataSet.GetChanges();
CustomerUpdates(customerChanges);
```
- D. DataSet customerChanges = new DataSet();

```
customerChanges = CKDataSet.GetChanges();
CustomerUpdates(customerChanges);
Answer: B
```

QUESTION 106 You are troubleshooting a Visual Studio .NET application that was developed by a former colleague. The application contains a Next Token function. This function reads product names from a file. You find the following code segment with a large assembly:

```
XmlTextWriter xwriter = new XmlTextWriter("productNames.xml",
System.Text.Encoding.UTF8);
xwriter.WriteStartDocument(true);
xwriter.WriteStartElement("data","www.Certkiller.com");
string val = NextToken();
while(val != ""){
xwriter.WriteLineString("item",
"www.Certkiller.com", val);
val = NextToken(); }
xwriter.WriteLine();
xwriter.WriteEndDocument();
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.Certkiller.com"> <item = "prod0" /> <item = "prod1" /> </data>
- B. <?xml version="1.0" encoding="utf-8" standalone="yes"?> <data> <item
xmlns="www.Certkiller.com">prod0</item> <item xmlns="www.Certkiller.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.Certkiller.com">
<item>prod0</item> <item>prod1</item> </data>

Answer: D

QUESTION 107 You create an XML Web service that calculates taxes. You deploy the service to a production computer named CertkillerProduction. The URL of the production XML Web service is <http://CertkillerProduction/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 then 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 page Output 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 TaxCalc() {
InitializeComponent(); Trace.AutoFlush = true; }
- D. To the constructor of the TaxCalc class, add the following code segment: public TaxCalc() {
InitializeComponent(); Trace.Flush(); }
- E. View the page at <http://CertkillerProduction/WS/TaxCalc.asmx>.

F. View the page at <http://CertkillerProduction/WS/Trace.axd>.

Answer: B, F

QUESTION 108 You are creating an XML Web service named CK Tracker to track orders for your company. Tracker includes a Web method named Order Status for tracking the status of individual orders. You anticipate that many client applications will use the service. You want administrators of CertK Tracker to be able to monitor the requests per second for Order Status.

Which code segment should you use?

- A. PerformanceCounter counter = new PerformanceCounter("CertK Tracker", "Order Status req/sec", false);
- B. PerformanceCounterCategory.Create("CertK Tracker", "category", "Order Status req/sec", "req/sec");
- C. CounterCreationData[] counterData = { new CounterCreationData("OrderStatus req/sec", "help", PerformanceCounterType.RateOfCountsPerSecond32) }; CounterCreationDataCollection collection = new CounterCreationDataCollection(counterData); PerformanceCounterCategory.Create("CertKTracker", "Tracker performance counters", collection);
- D. CounterCreationData[] counterData = { new CounterCreationData("Int32", "second", PerformanceCounterType.AverageTimer32) }; CounterCreationDataCollection collection = new CounterCreationDataCollection(counterData); PerformanceCounterCategory.Create("OrderStatus", "requests per second", collection);

Answer: C

QUESTION 109 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 110 You create a .NET Remoting object named Admin Service, which is hosted in Internet Information Services (IIS). The object uses an Http Channel and a Binary Formatter. Admin Service is in an assembly named AdminService.dll. The URL for Admin Service is <http://localhost/AdminService/AS.REM>.

You write a test console application named CertKTester.exe to test the Admin Service interface. CertKTester.exe includes the following code segment:

```
public class CertKTester { public static void Main(string[] Args) { AdminService service = new AdminService(); //  
Code to exercise the service object. } }
```

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

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

You run CertKTester.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 CertKTester.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 CertKTester.exe with the following code segment: AdminService service = (AdminService)Activator.CreateInstance(type of(AdminService));

C. At the beginning of the Main method in CertKTester.exe, add the following line of code: RemotingConfiguration.Configure("CertKTester.exe.config");

D. Rename the configuration file from CertKTester.exe.config to CertKTester.config.

Answer: C

QUESTION 111 You create a strongly named serviced component. The component uses a third-party .NET assembly named Certkiller.Encryptor.dll to perform encryption and decryption. Certkiller.Encryptor.dll is registered in the global assembly cache. You deploy the services component and Certkiller.Encryptor.dll to a production computer. A new version of Certkiller.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 Certkiller.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 Certkiller.Encryptor.dll.

D. Create a publisher policy assembly for Certkiller.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. 2. Create a publisher policy assembly.

3. 3. Add the publisher policy assembly to the global assembly cache.

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

QUESTION 112 You develop an application named CKApp. This application needs to run on the same computer as a Windows service named CKService. You want to ensure that CKService starts from CKApp if CKService is not already running. Which code segment should you use?

- A. Service Controller CKServiceController = new ServiceController("CKService"); if (CKServiceController.Status == ServiceControllerStatus.Stopped) { CKServiceController.Start(); }
- B. ServiceController CKServiceController = new ServiceController("CKService"); CKServiceController.Start();
- C. String[] CKArgs = new string [1]; CKArgs[0] = "CKService"; ServiceController CKServiceController = new ServiceController(); if (CKServiceController.Status == ServiceControllerStatus.Stopped) { CKServiceController.Start(CKArgs); }
- D. String[] CKArgs = new string[1]; CKArgs[0] = "CKService"; ServiceController CKServiceController = new ServiceController(); myServiceController.Start(CKArgs);

Answer: A

QUESTION 113 You create a Windows service named CKService that queries a table named Orders in a Microsoft SQL Server database. You want CKService to check every 30 seconds for new rows in Orders. You create the following method in CKService:

private void Process Orders(object source, ElapsedEventArgs eventArgs) { // Logic to process Orders table goes here. }

You need to add additional code to CKService to invoke the Process Orders method.

What should you do?

- A. To the OnStart method, add the following code segment:

```
Timer CKTimer = new Timer();
CKTimer.Elapsed += new ElapsedEventHandler(ProcessOrders);
CKTimer.Interval = 30000;
CkTimer.Enabled = true;
```

- B. To the OnCustomCommand method, add the following code segment:

```
Timer CKTimer = new Timer();
CkTimer.Elapsed += new ElapsedEventHandler(ProcessOrders);
CKTimer.Interval = 30000;
CKTimer.Enabled = true;
```

- C. To the OnStart method, add the following code segment:

```
Timer CKTimer = new Timer();
CKTimer.Elapsed += new ElapsedEventHandler(ProcessOrders);
CKTimer.Interval 30000;
CKTimer.AutoReset = true;
```

- D. To the OnCustomCommand method, add the following code segment:

```
Timer CKTimer = new Timer();
CKTimer.Elapsed += new ElapsedEventHandler(ProcessOrders);
CKTimer.Interval = 30000;
```

CKTimer.AutoReset = true;

Answer: A

QUESTION 114 You are developing a Windows-based application that requires the use of a calculation function named CalculateValue. This function includes the following signature:

int CalculateValue(int);

CalculateValue is located in an unmanaged DLL named CertkillerFunctions.dll, and is not part of a COM interface. You need to be able to use Calculate Value in your application. Your project directory contains a copy of CertkillerFunctions.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 named. You also verify that the code in the DLL exposes Calculate Value. 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 CertkillerFunctions.dll to your project's bin directory.
- B. Move CertkillerFunctions.dll to your project's Debug directory.

C. Immediately before the declaration of Calculate Value, add the following code segment:

[SuppressUnmanagedCodeSecurityAttribute()]

D. Immediately before the call to Calculate Value, add the following code segment:

```
SecurityPermission perm = new SecurityPermission( SecurityPermissionFlag.UnmanagedCode);
perm.Assert();
```

Answer: B

QUESTION 115 You are using a Visual Studio .NET to develop an application that uses a non-COM DLL named CertkillerFunctions.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 = null numbers = null 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. [DllImport("CertkillerFunctions.dll")] public static extern void Parse(string input, string[] words, int[] numbers);
- B. [DllImport("CertkillerFunctions.dll")] public static extern void Parse(string input, ref string[] words, ref int[] numbers);
- C. [DllImport("CertkillerFunctions.dll")] public static extern void Parse(String inout, params string[] words, params int[] numbers);
- D. [DllImport("CertkillerFunctions.dll")] public extern void Parse(string input, [out] string[] words, [out] int[] numbers);

Answer: B

QUESTION 116 You create a services component named OrderStatus that is in an assembly named CertkillerOrders. OrderStatus is in its own COM+ application named Certkiller App. 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 Certkiller App to be a library application.
- C. Add the AutoComplete attribute to all methods in OrderStatus.
- D. Configure CertkillerOrders to be a shared assembly, and install it in the global assembly cache.

Answer: B

QUESTION 117 You are preparing to deploy a serviced component named Product Availability. 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 Outside User.

What should you do?

- A. Implement the ISecurityIdentityColl interface in Product Availability.
- B. Use the Component Services tool to manually set the Identity property of the COM+ application to Outside User.
- C. To the Product Availability assembly, add the following attributes: [assembly: ApplicationAccessControl(ImpersonationLevel = ImpersonationLevelOption.Impersonate)][assembly: SecurityRole("Outside User")]
- D. To the ProductAvailability assembly, add the following attributes: [assembly: ApplicationAccessControl(ImpersonationLevel = ImpersonationLevelOption.Identify)][assembly: Application Name("OutsideUser")]

Answer: B

QUESTION 118 You create a serviced component named CertKItem that implements an interface named ICertKItem. You want to ensure that calls to the serviced component through ICertKItem are queued. What should you do?

- A. To CertKItem, add the following attribute:
[InterfaceQueuing(true, Interface="ICertKItem")]
- B. To CertKItem, add the following attribute:
[Transaction(TransactionOption.Disabled,
Isolation=TransactionIsolationLevel.Serializable)]
- C. To the CertKItem assembly, add the following attribute:
[assembly: ApplicationQueueing(Enabled=true, queueListenerEnabled=true)]
- D. In the CertKItem implementation, override the Activate method from the Serviced Component class. In the Activate method, add the following code segment: queue q = new queue();
Q.Enqueue (this);

Answer: C

Explanation: In addition to enabling queued component support at the application level, you must mark your interfaces as capable of receiving queued calls. You do that by using setting the Queue Listener Enabled attribute to True.

Note: The COM+ Queued Components (QC) service provides an easy way to invoke and execute components

asynchronously. Processing can occur without regard to the availability or accessibility of either the sender or receiver.

Reference: .NET Framework Developer's Guide, Queued Components [C#]

Incorrect Answers

A: The signature for the InterfaceQueuing attribute as shown in Answer A is wrong.

B: Transactions are not helpful for interface queuing configuration.

D: Creating a new queue in the Active method is not correct in this scenario.

QUESTION 119 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 included the following code segment:

```
[Com Visible(false)] public class CKClass { public CKClass() { // Implementation code goes here. }
[COM Visible(true)] public int CKMethod(string param) { return 0; }
[COM Visible(true)] protected bool CKOtherMethod() { return true; }
[COM Visible(true)] public int CKProperty { get { return 0; } }
// Other implementation code goes here.}
```

When this code runs, it will expose one or more methods to the client application through COM. Which member or members will be exposed? (Choose all that apply)

- A. CKMethod
- B. CKOtherMethod
- C. CKProperty
- D. CKClass constructor

Answer: A, C

QUESTION 120 You create a .NET Remoting object named Chat Server. Chat Server is the central server for a group of chat client applications. Client applications send string chat messages to Chat Server. Chat Server then broadcast each message to all registered chat client applications. Chat Server uses an HTTP remoting channel to communicate with the client applications. The Chat Server class includes the following code segment:

```
// The event class code follows. [Serializable] public class SubmissionEventArgs : EventArgs { public string User { // Implementation code goes here. } public string Message { // Implementation code goes here. // Remaining implementation code goes here. } // The delegate code follows. public delegate void Sub mission Event Handler (object sender, Submission Event Args submission Args); // The event code follows and // appears within the Chat Server class. public event SubmissionEventHandler Submission; You need to write a client application that includes a class named Chat Client to communicate with Chat Server. You want Chat Server to send and display chat messages. What should you do?
```

- A. Implement the IDeserializationCallback interface in Chat Client. Implement an event handler for the Submission event.
- B. Derive Chat Client from System.Object. Implement the ISerializable interface. Implement an event handler for the Submission event.
- C. Implement the ISerializable interface in Chat Client. Implement an event handler for the Submission event. Host Chat Client in Internet Information Services (IIS) by using a Web.config file.
- D. Derive Chat Client from MarshalByRefObject. Implement an event handler for the Submission event.

Configure Chat Client to listen on an Http Channel.

Answer: D

QUESTION 121 You have a .NET Remoting object named Scheduler. The Scheduler class is in an assembly file named TaskScheduler.dll. The Scheduler 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 Scheduler class to be a client activated object by using a Tcp Channel and a Binary Formatter. You want to deploy the Scheduler object to a computer named Certkiller1 so that client applications can begin to use it. You copy TaskScheduler.dll, SchedulerServer.exe, and SchedulerServer.exe.config to a directory on Certkiller1. What should you do next?

- A. Install TaskScheduler.dll in the global assembly cache.
- B. Use the Assembly Registration tool (Regasm.exe) on Certkiller1 to register SchedulerServer.exe.
- C. Use the Assembly Registration tool (Regasm.exe) on Certkiller1 to register TaskScheduler.dll.
- D. Configure Certkiller1 to execute SchedulerServer.exe each time Certkiller1 is restarted. Then manually execute SchedulerServer.exe on Certkiller1.

Answer: D

QUESTION 122 You create a class named User 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 written changes back to a data source.

The User class includes the following code segment:

```
[Serializable] public class User { public User(string connectionString) { this.connectionString =
connectionString; // Additional construction code goes here. } internal string ConnectionString { get { return
connectionString; } } private string connectionString; // Other methods and properties go here. Once a User
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 content 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

QUESTION 123 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 124 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 HTTPGET against WeatherService.

Which URL should you use?

- A. <http://CertkillerSrv/AppPath/WeatherService.asmx/cityname=somecity>
- B. <http://CertkillerSrv/AppPath/WeatherService.asmx/RetrieveWeather?cityname=somecity>
- C. <http://CertkillerSrv/AppPath/WeatherService/RetreveWeather.asmx?cityname=some city>
- D. <http://CertkillerSrv/AppPath/WeatherService/RetrieveWeather?cityname=somecity>

Answer: B

QUESTION 125 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 CKPhoneBook 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 (Soap Exception ex) { // Handle the exception. }
- B. try { // Code to call PhoneNumberService method goes here. } catch (SoapHeaderException ex) { // Handle the exception. }
- C. try { // Code to call PhoneNumberService method goes here. } catch (Exception ex) { // Handle the exception. }
- D. try { // Code to call PhoneNumberService method goes here. } catch (ApplicationException ex) { // Handle the exception. }

Answer: A, C.

Explanation:

A: XML Web service methods can generate a Soap Exception 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 Soap Exception. 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, Soap Exception 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 126 You are creating an XML Web service named Accounting Information for Certkiller.

Account Information exposed 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 : Soap Header { public string Username; public string Password; } // In the AccountInformation class add this code: public AuthenticateUser authenticateUserHeader; [WebMethod, Soap Header("authenticateUserHeader")] public string GetAccountBalance() { if (authenticateUserHeader == null) return "Please supply credentials. "; else // Code to authenticate user and return // the account balance goes here. }

B. public class AuthenticateUser { public string Username; public string Password; } // In the AccountInformation class add this code: public AuthenticateUser authenticateUserHeader; [WebMethod, Soap Header("authenticateUserHeader")] public string GetAccountBalance() { if (authenticateUserHeader == null) return "Please supply credentials. ";else // Code to authenticate the user and return // the account balance goes here. }

C. Public class AuthenticateUser : Soap Header { public string Username; public string Password; } // In the AccountInformation class add this code: public AuthenticateUser authenticateUserHeader; [WebMethod] public string GetAccountBalance() { if (authenticateUserHeader == null) return "Please supply credentials. "; else // Code to authenticate the user and return // the account balance goes here. }

D. Public class AuthenticateUser { public string Username; public string Password; } // In the AccountInformation class add this code: public AuthenticateUser authenticateUserHeader; [WebMethod] public string GetAccountBalance() { if (authenticateUserHeader == null) return "Please supply credentials. "; else // Code to authenticate the user and return // the account balance goes here. }

Answer: A

QUESTION 127 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 Certkiller. 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 (Signco.exe).

D. First sign the assembly by using File Signing tool (Signcode.exe). Then sign the assembly by using a strong name.

Answer: C

QUESTION 128 You develop a Windows-based application named CertK WinApp that contains a Windows Form named Form1. To CertK WinApp, you add a Web reference to an XML Web service named Service1. Service1 exposes two Web methods named Authenticate and RetrieveData. Both methods have sessions enabled. Authenticate authenticates a caller. If the caller is authenticated, Authenticate generates 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 inout 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 Load event handler of Form1. (Line numbers are included for reference only)

```

01 localhost.Service1 service1 = new localhost.Service1();
02 string key = "";
03 DataSet userData;
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 throws 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. System.Net.Cookie = new System.Net.Cookie("Key", key);

Answer: C

QUESTION 129 You are developing an ASP.NET application that consumes an XML Web service named AccountInformation. AccountInformation exposes a Web method named GetAccountBalance that requires 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 variables named encrypted Username and encrypted Password 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. AccountInformation CKAccountInformation = new AccountInformation(); AuthenticateUser CKAuthenticateUser = new AuthenticateUser(); CKAuthenticateUser.Username = encrypted Username; CKAuthenticateUser.Password = encrypted Password; CKAccountInformation.AuthenticateUserValue = CKAuthenticateUser; string account Balance; account Balance = CKAccountInformation.GetAccountBalance();
- B. AccountInformation CKAccountInformation = new AccountInformation(); AuthenticateUser CKAuthenticateUser = new AuthenticateUser(); CKAuthenticateUser.Username = encrypted Username; CKAuthenticateUser.Password = encrypted Password; string account Balance; account Balance =

```

CKAccountInformation.GetAccountBalance();
C. AccountInformation CKAccountInformation = new AccountInformation(); AuthenticateUser
CKAuthenticateUser = new AuthenticateUser(); SoapHeaderAttribute Username = new
SoapHeaderAttribute("Username"); Username.MemberName = encrypted Username; SoapHeaderAttribute
Password = new SoapHeaderAttribute("Password"); Password.MemberName= encrypted Password; string
account Balance; account Balance = CKAccountInformation.GetAccountBalance();
D. AccountInformation CKAccountInformation = new AccountInformation(); AuthenticateUser
CKAuthenticateUser = new AuthenticateUser(); CKAuthenticateUser.Username = encrypted Username;
CKAuthenticateUser.Password = encrypted Password; SoapHeaderCollection CKSoapHeader collection = new
SoapHeaderCollection(); CKSoapHeaderCollection.Add(CKAuthenticateUser); string account Balance; account
Balance = CKAccountInformation.GetAccountBalance();

```

Answer: A

QUESTION 130 You are creating a serviced component named Employee Locations. This component will return a current list of employees in a given city. The list of employee locations changes nightly. Employee Locations must load an XML file named Emploc.xml nightly. Employee Locations contains one method named EmployeesInCity. EmployeesInCity takes a string city code and returns an array of Employee objects. Employee Locations will use the XML data to return lists of employees for a city throughout each day. Employee Locations 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 Emploxml 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
-

Section B- Practice Questions

QUESTION 1 You have just created an ASP.Net application using C#. You also need to config 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

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 2 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

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 3 You have created the code shown below: (Line numbers are for reference purposes only.)

```

01 cRemoteObject CKRemotingApp
02 String sVal
03 String str
04 CKRemotingApp = CType(Activator.GetObject( _ GetType(cRemoteObject), _
"tcp://CKServer:454/ObjectApplicationName" _ ), cRemoteObject)
05 sVal = CKRemotingApp.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

The object will be created on the server when line 04

```

CKRemotingApp = 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 4 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

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 5 You are modifying the XSD schema for the FlightData data table. You want to add a primary key that consists of the fields Flight No and IATA AirportCode. 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, IATA AirportCode" />
</xs:unique>

```

- B. <xs:primaryKey name="UniqueFlightData" >
 <xs:selector xpath=".//FlightData" />
 <xs:field xpath="FlightNo" />
 <xs:field xpath="IATA AirportCode" />
 </xs:primaryKey>
- C. <xs:unique name="UniqueFlightData" msdata:PrimaryKey="true"> <xs:selector xpath=".//FlightData" />
 <xs:field xpath="FlightNo" /> <xs:field xpath="IATA AirportCode" /> </xs:unique>
- D. <xs:primaryKey name="UniqueFlightData"> <xs:selector xpath=".//FlightData" />
 <xs:field xpath="FlightNo, IATA AirportCode" /> </xs:primaryKey >

Answer: C

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 6 You are querying an SQL server for customers with Gold status. To do this, you create a SqlDataReader object that contains data from the Customer Info table in a Microsoft SQL Server database. The SQL Server data type of one of the columns, Customer Status, is SmallInt. You want to store the value of the Customer Status column in a variable named current Index. 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

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 7 You have created an ASP.NET application using C# 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

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 8 You have created an ASP.Net application for BlueFliers Inc. You need to ensure that each customer is given a unique ID. 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

The unique element in an XML schema will create a unique constraint in a dataset so that no duplicate values are allowed. The msdata: Constraint Name 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 9 You are to perform maintenance programming on an existing ASP.net application used by Blue Inc 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 Data Reader object to execute the command.
- D. Use OleDbConnection and OleDbCommand objects instead of SqlConnection and SqlCommand objects.

Answer: A

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 10 You are standardizing your application using C#'s exception handling for BlueFlier Inc. BlueFlier is promoting its frequently flier program. To do this, you have created a class named Exception Handler 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 }

- Public Class BusinessRulesException: Inherits TooLittlePoints{ }
- A. Public Class ExceptionHandler:BusinessRulesException{}
- B. Public Class ExceptionHandler:System.Exception{ }
- C. Public Class BusinessRulesException :ExceptionHandler{ }
- D. Public Class TooLittlePoints:ExceptionHandler{ }
- E. Public Class ExceptionHandler{ Inherits System.Exception }Public Class BusinessRulesException{ Inherits System.Exception }Public Class TooLittlePoints{ Inherits System.Exception }
- F. Public Class ExceptionHandler{ }Public Class BusinessRulesException :ExceptionHandler{ }Public Class TooLittlePoints Inherits ExceptionHandler }

Answer: B

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 11 You have created a Web services client that will communicate with a Web service to determine the quantity of each aircraft spare parts that Air Spares 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

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 12 You are going to deploy your flight reservations application to 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

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 13 You are creating an XML service for customers of High World 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

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 14 You are creating an XML service for customers of Certkiller Test Center. The Web service expects that the user of your application using C# 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

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 Is Authenticated 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 15 You are creating an application using C# 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

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 16 You are creating an XML service for customers of High Speed 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

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 17 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

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 18 Which command will sign an assembly named RegistrationAssm.dll with a key stored in the file CKStrongKey.snk? (Select the best choice.)

- A. sn CKStrongKey.snk RegistrationAssm.dll
- B. sn -R CKStrongKey.snk RegistrationAssm.dll
- C. gacutil.exe RegistrationAssm.dll CKStrongKey.snk
- D. sn -R RegistrationAssm.dll CKStrongKey.snk
- E. sn.exe RegistrationAssm.dll CKStrongKey.snk
- F. RegSvr - R RegistrationAssm.dll

Answer: D

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 19 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

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 Enable Session 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 20 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

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 21 You are developing a COM+ component for use for your multilevel marketing application using C#. 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

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 22 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

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 23 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

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 24 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:CertkillerServer/Parceltracking.asmx>

- B. <http://CertkillerServer/disco>
- C. <http://CertkillerServer/Parceltracking.asmx?DISCO>
- D. <http://CertkillerServer/Parceltracking/disco>

Answer: C

To obtain the discovery document of the Web service, your application should use the URL <http://CertkillerServer/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 25 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 Credential Cache object
- B. Windows Integrated Authentication and Impersonation
- C. Forms Authentication and Impersonation
- D. Digest Authentication and NT Domain roles

Answer: B

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 database-defined users and roles to be utilized.

QUESTION 26 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. `DataSet dsData = DataSet.ReadXml ("myinfo.xml", XmlReadMode.InferSchema)`
- B. `System.IO.FileStream fsMain = New System.IO.FileStream ("myinfo.xml", System.IO.FileMode.Create)`
- Dim dsData As DataSet
`dsData = DataSet.ReadXml(fsMain, XmlReadMode.IgnoreSchema)`
- C. `DataSet dsData = New DataSet. ReadXml("myinfo.xml", XmlReadMode.IgnoreSchema)`
- D. `DataSet dsData = DataSet.ReadXml ("myinfo.xml", XmlReadMode.DiffGram)`

Answer: A

When Infer Schema is used, elements and attributes in the XML help determine tables and columns.

QUESTION 27 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

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 28 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

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 29 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 CKCultureInfo As CultureInfo For Each CKCultureInfo In
CultureInfo.GetCultures(CultureTypes.AllCultures)
cboCulture.Items.Add(CKCultureInfo.ToString & " " & CKCultureInfo.NativeName & "(" &
CKCultureInfo.EnglishName & ")")
Next CKCultureInfo
- B. Dim CKCultureInfo As CultureInfo For Each CKCultureInfo In
CultureInfo.GetCultures(CultureTypes.InstalledWin32Cultures)
cboCulture.Items.Add(CKCultureInfo.ToString & " " & CKCultureInfo.NativeName & "(" &
CKCultureInfo.EnglishName & ")")
Next CKCultureInfo
- C. cboCulture.Items = CultureInfo.GetCultures(CultureTypes.InstalledWin32Cultures)
- D. cboCulture.Items = CultureInfo.GetCultures(CultureTypes.AllCultures)

Answer: B

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 All Cultures 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 30 You have created a class that is derived from the CKServicedComponent class. You plan to create a public/private key pair by using the command sn.exe -k "CKmyKey.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 "CKmyKey.snk" "publickey.snk".

- C. Run the command sn.exe -p "CKmyKey.snk" "publickey.snk".
- D. Run the command al.exe -v "CKmyKey.snk".
- E. Add the attribute <assembly: AssemblyKeyFileAttribute("CKmyKey.snk")> to the class.
- F. Add the attribute <assembly: Transaction("CKmyKey.snk")> to the class.

Answer: E

You should add the attribute <assembly: AssemblyKeyFileAttribute("CKmyKey.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 31 Your Web service needs to call a subroutine named CKModule 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 Boolean CKModule()
- B. <DllImport("CKModule", EntryPoint := "Win32api.dll", _
SetLastError := True, CharSet := CharSet.Unicode, _
ExactSpelling := True, _
 CallingConvention := CallingConvention.StdCall)> _
Public Shared Boolean MyRoutine()
- C. <DllImport("MyRoutine", EntryPoint := "Win32api.dll", _
SetLastError := True, CharSet := CharSet.Unicode, _
ExactSpelling := True, _
 CallingConvention := CallingConvention.StdCall)> _
Public Shared Boolean CKModule()
- D. <DllImport("Win32api.dll", EntryPoint := "CKModule", _
SetLastError := True, CharSet := CharSet.Unicode, _
ExactSpelling := True, _
 CallingConvention := CallingConvention.StdCall)> _
Public Shared Boolean MyRoutine()

Answer: D

You should use the declaration:

```
<DllImport("Win32api.dll", EntryPoint := "CKModule", _  
SetLastError := True, CharSet := CharSet.Unicode, _  
ExactSpelling := True, _  
 CallingConvention := CallingConvention.StdCall)> _  
Public Shared Function MyRoutine() As Boolean
```

QUESTION 32 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. String MyFunction ()<Automatic>
- B. String MyFunction ()<Auto>
- C. < autotrans > MyFunction () As String </autotrans>
- D. <AutoComplete> String MyFunction ()
- E. <AutoComplete()>String MyFunction ()
- F. String MyFunction ()<AutoComplete/>

Answer: E

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 33 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://CKProductionSrv/Default.disco" />
<contractRef
ref="http://CKProductionSrv/StudyGuidesOrder.asmx?WSDL"
docRef="Service.htm"
xmlns="http://schemas.xmlsoap.org/disco/scl/" />
<schemaRef ref="Schema
A. 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

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

- A. 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 34 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

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 HTTP Channel class in the .NET Framework provides the mechanism to communicate with the HTTP protocol.

QUESTION 35 You are working for Bank of Certkiller. Your application using C# 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. Xml.XmlElement parms, parm;
- ```
parms = dom.AppendChild(dom.CreateElement("BankAccount"));
parm = parms.AppendChild(dom.CreateElement("AccountInfo"))
parm.SetAttribute("Name", "UserID");
parm.SetAttribute("Prompt", "User Id:");
parm = parms.AppendChild(dom.CreateElement("AccountInfo"));
parm.SetAttribute("Name", "Password");
parm.SetAttribute("Prompt", "Password:");
parm.AppendChild(dom.CreateCDataSection(vbNullString));
parm = parms.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. Xml.XmlElement parms, Parm;
parms = dom.AppendElement(dom.CreateElement("BankAccount"));
Parm = parms.AppendElement(dom.CreateElement("AccountInfo"));
Parm.SetAttribute("Name", "UserID");
Parm.SetAttribute("Prompt", "User Id:");
Parm = parms.AppendElement(dom.CreateElement("AccountInfo"));
Parm.SetAttribute("Name", "Password");
Parm.SetAttribute("Prompt", "Password:");
Parm.AppendElement(dom.CreateCDataSection(vbNullString));
Parm = parms.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

You can create the proposed XML structure by appending the nodes to the DOM Document object and setting the required attributes. The Create Node method of the XmlDocument class cannot be used to build an XML structure from a document fragment contained in a string variable.

**QUESTION 36** 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;
- Long RecCount =  
CLng(myReader.Parameters("@StudentCount").Value);
- B. myCommand.Cancel;
- Long RecCount =  
CLng(myReader.Parameters("@StudentCount").Value);
- C. Long RecCount = myReader.GetString("@StudentCount"); myCommand.Cancel;
- D. Long RecCount = CLng(myReader.Parameters("@StudentCount").Value); myReader.Close;

Answer: A

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 37** Your ASP.NET application using C# 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 page Output attribute is set to false.
- C. Configure the Web.config file in your application's root directory so that the Trace element's page Output 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

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 page Output 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 38** Your colleague has implemented commands 220, 221 and 222 to be used in your Service Base based class.

Which of the following events of the Service Base class should you use to process the request to execute a commands defined by your colleague? (Select the best choice.)

- A. OnCustomCommand
- B. OnContinue
- C. OnStart
- D. OnPowerEvent

Answer: A

You should process the request to purge old entries from the log file in the OnCustomCommand event handler of the Service Base 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 39** 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

The TypeOf keyword is used to determine whether an object is derived from a particular class or interface.

---

**QUESTION 40** Which type of components will require these:

- . • Use the Sn.exe utility to sign the assembly with a strong name.
- . • Inherit the Serviced Component class.
- . • Add the <Transaction(TransactionOption.Required)> attribute to the component.
- . • Import the System.EnterpriseServices namespace.
- . • Add the <AutoComplete()> attribute to all function definitions.
- . A. A web method
- . B. An XML service
- . C. Queued component
- . D. Serviced component

Answer: D

In order to create a serviced component that implements automatic transactions, you should import the System.EnterpriseServices namespace, inherit the Serviced Component 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 Serviced Component 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 41** 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

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 42** 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

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 43** You have developed an assembly that will be shared among the Web application using C# 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

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 44** You are creating a stock broking application. You want the Search StockPrice function to use the document SOAP format but you notice that Search StockPrice method uses the incorrect format. What are not the causes? (Select all that apply.)

- A. The SoapRpcServiceAttribute has been applied to the Search StockPrice method.
- B. The document SOAP format cannot be used with the SoapDocumentServiceAttribute.
- C. The SoapRpcMethodAttribute has been applied to the Search StockPrice method.
- D. The document SOAP format cannot be used with functions that return a String.

Answer: A, B, D

You should check to see if the SoapRpcMethodAttribute has been applied to the Search StockPrice 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 45** You have created a Windows form application using C# 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

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 46** 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

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 47** You are writing an assembly that will be used by an ASP.NET page for GetJobsCK. 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

You should use imperative security for this component. Because you do not know until runtime 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 48** 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

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 49** 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

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 50** You are creating an XML Web service named TimeEntryService for LawyersCK. 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 trust worth credential

Which type of authentication should you use?

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

Answer: D

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 51** 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 using C#.

Which deployment mechanism should you use?

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

Answer: B

Just copying the files would require manual registration and configuration.

---

**QUESTION 52** 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 CKComponent by using a strong name.
  - B. Compile CKComponent 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 CKComponent.
  - E. Add an application configuration file to CKComponent 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 CKComponent. 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 53** 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 using C#. 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:

```
If !ConnectUtil.IsSecurityEnabled { ContextUtil.DisableCommit() }
```

- D. To the beginning of all methods, add the following code segment:

```
If !ContextUtil.IsSecurityEnabled { Throw New SecurityException(_ "Security must be enabled.") }
```

```
}
```

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 54** You have created a class that is derived from the Serviced Component 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 55** 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 56** You are creating an XML Web service named CKRetrieveExamResults. 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 57** 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. XMLDataDocuments enables you to load either relational data or XML data and manipulate that data.

---

**QUESTION 58** You have a strongly typed DataSet object named Certkiller DataSet. This object contains three DataTable objects named Students, Subjects and Subject Taken. Students and Subjects have a data column named StudentsID. Subjects and Subject Taken have a data column named OrderID.

Subjects have a foreign key constraint between Students and Subjects on StudentsID.

Subject Taken has a foreign key constraint between Subjects and Subject Taken on OrderID.

You want to populate Students, Subjects and Subject Taken with data from Microsoft SQL Server database.

In which order should you fill the Data table objects?

- A. Students, Subject Taken, Subjects
- B. Subject Taken, Subjects, Students
- C. Students, Subjects, Subject Taken
- D. Subjects, Subject Taken, 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 Subject Taken table last.

---

**QUESTION 59** You need to develop an application using C# 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 60** 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 be 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 61** 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 62** You have created a remote type that will be hosted on a Web server running Internet Information Services (IIS). You have these requirements from your client CKWare Inc.

- Only one instance of the remote object will be created
- The remote object should be server-activated. Which of the following attributes should you set in the `Web.config` file? (Select the best choice.)

- A. `<service mode="SingleCall" />`
- B. `<client mode="SingleCall" />`
- C. `<wellknown mode="Singleton" />`
- D. `<channel mode="Singleton" />`

Answer: C

You should use the attribute `<wellknown mode="Singleton" />` in the `Web.config` file so that only one instance of the server-activated remote object will be created. The Microsoft .NET Framework makes it possible for applications to activate objects on different computers through a process known as remoting. A wellknown object is one that is server-activated. Wellknown objects can be activated in two modes: `Singleton` and `SingleCall`. The Web server will create only one object if the remote type is configured as `Singleton`. The Web server will create a separate object each time a method is called if the remote type is configured as `SingleCall`.

---

**QUESTION 63** You are the application using C# developer for CKConsulting. Your application is to be used online. It will have these requirements:

- . • The lifetime must be controlled
- . • The remote object should be server-activated.

Which approach is deemed suitable? (Select the best choice.)

- A. XML web service
- B. Queued component
- C. Serviced component
- D. .Net remoting component

Answer: D

We can meet the requirements using .Net remoting components.

---

**QUESTION 64** You are debugging your Web service.

The configuration file for your Web service contains this declaration:

```
<system.runtime.remoting>
<application>
<client>
<activated type="RemoteType, RemoteAssembly"/>
</client>
<channels>
</channels>
</application>
</system.runtime.remoting>
```

When you attempt to instantiate the remote object identified by this declaration, an exception is thrown.

What should you do to prevent the exception? (Select the best choice.)

- A. Add a url attribute that specifies the location of the remote object to the <channels> element. Add:

```
<channel ref="http" port="777"/>
```

- B. Add a url attribute that specifies the location of the remote object to the <client> element. Add:

```
<channel ref="http" port="777"/>
```

- C. Add another <channel> element. Include the location of the remote object in the body of the element. Add:

```
<channel ref="http" port="777"/>
```

- D. Add a url attribute that specifies the location of the remote object to the <channel> element. Add:

```
<channel ref="http" port="777"/>
```

Answer: B

You should add a url attribute that specifies the location of the remote object to the <client> element to prevent the exception. The <activated> element is used to define a client-activated object. When only client-activated objects are defined for a client, the <client> element must have a url attribute that identifies the location of the remote object. Adding the location of the remote object to any other element will not correct the problem.

---

**QUESTION 65** You are developing a portfolio management software to be used via an XML web service. It will make use of datasets to load data of clients. Which of the following code fragments will create the dataset properly? (Select the best choice.)

A.

```
<WebMethod> Public MyDataSet Function GetMyData() { MyDataSet dsMain = New
MyDataSet;MyDataAdapter.Fill(MyDataSet); Return MyDataSet; }
```

B.

<WebMethod> Public MyDataSet Function GetMyData() { MyDataSet dsMain = New MyDataSet;  
MyDataAdapter.Fill(dsMain); Return dsMain; }

C.

<WebMethod> Private MyDataSet GetMyData() { MyDataSet dsMain = New MyDataSet;  
MyDataAdapter.Fill(MyDataSet); Return MyDataSet; }

D.

<WebMethod> Private MyDataSet GetMyData() { MyDataSet dsMain = New MyDataSet;  
MyDataAdapter.Fill(dsMain); Return dsMain; }

Answer: B

To return a DataSet object from the Web service described in the scenario, you should use this code:

<WebMethod> Public MyDataSet Function GetMyData() { MyDataSet dsMain = New MyDataSet;  
MyDataAdapter.Fill(dsMain); Return dsMain; }

The GetMyData function should be declared as Public and the function should return a dataset type as defined by the MyDataSet class. Within the GetMyData function, a dataset is derived from the class MyDataSet. The Fill method of the SqlDataAdapter fills the strong typed dataset with data.

---

**QUESTION 66** You are debugging an application using C# in Visual Studio .NET. You notice that the application returns an invalid result once a variable has changed.

Which of the following actions should you perform to stop execution? (Select the best choice.)

- A. Use a Stop statement.
- B. Set a breakpoint with a condition.
- C. Set an assertion.
- D. Set a watch for the variable.

Answer: B

Breakpoints are used to break execution while code is running in the Visual Studio .NET IDE. You can set conditions on breakpoints so that execution will pause only if a given condition is met. One of the conditions that you can set is whether a variable's value has changed. If the value has changed since the last time that the breakpoint was encountered, execution will stop on the line of code containing the variable.

---

**QUESTION 67** You are creating a high security application to verify access to a military installation. Your application uses the RegistryPermission class to control access to the Registry in your application. When a request is made to read the Registry, the request must pass both the current permission and a specified permission. Which method of the RegistryPermission class should you use to confirm access to the request? (Select the best choice.)

- A. Assert
- B. Union
- C. Demand
- D. Intersect

Answer: D

You should use the Intersect method to confirm access to a request that must pass both the current permission and a specified permission. The Intersect method requires that the request must pass both permissions. The Union method requires that the request pass only one of the two permissions. The Assert method gives the calling code permission to access the resource. The Demand method checks for permission to a resource.

---

**QUESTION 68** You are creating a dataset from an XML file for use in your XML based stock broking application using C#.

Your application keeps track of your clients' portfolio. The dataset will contain two tables, both of which contain a StockID column. You want to establish a foreign key constraint on these two columns. Which XML segment will place the proper constraint on the StockID columns? (Select the best choice.)

A.

```
<xs:key name="StockIDKey">
<xs:field xpath=".//Table1" />
<xs:selector xpath="StockID" />
</xs:key>
<xs:keyref name="StockIDRef" refer="StockIDKey">
<xs:field xpath="..//Table2" />
<xs:selector xpath="StockID" />
</xs:keyref>
```

B.

```
<xs:key name="StockIDKey">
<xs:selector xpath=".//Table1" />
<xs:field xpath="StockID" />
</xs:key>
<xs:keyref name="StockIDRef" refer="StockIDKey">
<xs:selector xpath="..//Table2" />
<xs:field xpath="StockID" />
</xs:keyref>
```

C.

```
<xs:foreignkey name="StockIDKey">
<xs:field xpath=".//Table1" />
<xs:selector xpath="StockID" />
</xs:foreignkey>
<xs:foreignkeyref name="StockIDRef" refer="StockIDKey">
<xs:field xpath="..//Table2" />
<xs:selector xpath="StockID" />
</xs:foreignkeyref>
```

D.

```
<xs:foreignkey name="StockIDKey">
<xs:selector xpath=".//Table1" />
<xs:field xpath="StockID" />
</xs:foreignkey>
<xs:foreignkeyref name="StockIDRef" refer="StockIDKey">
<xs:selector xpath="..//Table2" />
<xs:field xpath="StockID" />
</xs:foreignkeyref>
```

Answer: B

The `<key>` and `<keyref>` elements are used to place a foreign key constraint on two fields. 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 69** You have finished developing your .Net Remoting application. It depends on several tables and it uses Microsoft SQL Server database. What feature of the Web Installer project should you use? (Select the best choice.)

- A. deployment conditions
- B. File System Editor
- C. merge modules
- D. custom actions

Answer: D

You can create a custom action that will run the update script that updates the database. Custom actions are executable files, DLLs, scripts, or assemblies that contain instructions that are invoked at the end of an installation. A deployment condition is a condition that must be met before an installation can proceed. A merge module is a

setup file that can only be called from other setup files, and it is used to package assemblies and other reusable components. The File System Editor is used to create folders and shortcuts and to perform other tasks associated with the file system during a setup event.

**QUESTION 70** You are debugging you stock broking application. Since you do not need to much test data, you want to limit the display of data so that only information about stock TSCK. What should you do to most easily limit the amount of information displayed? (Select the best choice.)

- A. Use the Trace object instead of the Debug object.
- B. Use the code, If stockCode = "TSCK" Then Debug.WriteLine(intEmployeeNumber & " " & sEmployeeName) End If
- C. Use the code Debug.WriteLineIf("TSCK", stockCode & " " & stockName).
- D. Use the code Debug.WriteLineIf(stockCode = "TSCK", stockName).

Answer: D

You should use the code Debug.WriteLineIf(stockCode = "TSCK", stockName). The WriteLineIf method of the Debug object provides the ability to display debug information only when a specified condition is met. The Boolean expression controlling whether the information will be displayed is passed as the first parameter of the method. Although surrounding the original line of code with an If statement testing whether the employee number is "TSCK" will work, it is not the easiest solution. Using the value "TSCK" as the conditional parameter for the WriteLineIf method will cause the value to be evaluated as a Boolean value. Because the value is non-zero, it will evaluate to True, and thus will display information for all records. Simply using the Trace object rather than the Debug object will not provide the desired results.

**QUESTION 71** You are building an ASP.NET XML Web service. Your project supervisor lists down the requirements:

- The application will return data from a Microsoft SQL Server database
- You are to use a component that was built in Visual Basic 6.0 to read data from the database
- You want to be able to load a DataSet object in your application with the contents of the component's recordset.

What actions must you take? (Each choice presents a part of the solution.) (Select all choices that are correct.)

- A. Use the Resource File Generator to convert the component into a satellite assembly.
- B. Use an OleDbDataAdapter object to fill the DataSet object with rows from the Recordset object.
- C. Add an <ADODB> element to the application's Web.config file.
- D. Use the Type Library Importer to create a .NET-compatible assembly from the component.

E. Use a SqlDataAdapter object to fill the DataSet object with rows from the Recordset object.

Answer: B, D

You may use a component built with Visual Basic 6 that returns an ADO Recordset object by creating a .NET compatible assembly from the component and using an OleDbDataAdapter object to fill the DataSet object. Once the dataset has received the record set's data, the recordset should be closed. No updated data in the dataset can be returned to the recordset. To use a COM component in a .NET application, a .NET-compatible assembly must be created with the Type Library Importer, TlbImp.exe. It is also necessary to create a .NET assembly of the ADO msado15.dll library, which provides the Recordset object. No elements need to be added to the application's Web.config file. It is not possible to use a SqlDataAdapter object with an ADO Recordset object.

---

**QUESTION 72** Your company, SpeechCK specializes in providing speech therapy. Your XML web services application using C# is to monitor participant's progress week by week. Your application will analyze data on a weekly basis.

Which of the following techniques can be used to send both the previous and the current week's results with the least amount of effort? (Select the best choice.)

- A. Serialize the DataSet object as a DiffGram.
- B. Send the information in two table structures in the DataSet object.
- C. Add a flag field to the rows in the DataSet object to indicate which rows belong to the original route and which rows belong to the new route.
- D. Serialize the DataSet object using the Write Schema flag.

Answer: A

You should serialize the DataSet object as a DiffGram. DiffGram structures include both the original and current values of data held in a DataSet object. In this scenario, you could query the existing route, allow the application to update the DataSet, and then serialize the DataSet object into DiffGram format to be returned to the client application.

---

**QUESTION 73** You are developing a stock broking application using C# for agents that will use Web services provided by your company. The IT department will not open any new ports other than the existing 80 and 443. Which of the following authentication options should you use? (Select the best choice.)

- A. You should use Windows Authentication with Client Certificates.
- B. You should use Windows Digest Authentication.
- C. You should use Windows Basic Authentication with SSL.
- D. You should use Custom Authentication; send the encrypted authentication information in SOAP headers.

Answer: D

You should use a custom authentication method that sends authentication information to the service in the SOAP headers. This method is independent of transport mechanisms and can easily traverse across firewalls. None of the other mechanisms meet these requirements.

---

**QUESTION 74** You are creating a web service which will use a COM+ library.

You perform the following:

- . • You add a reference to the COM+ library.
  - . • You write the following code:
- ```
10 Dim ms As ScriptControl = New COMLibApp()
30 ms.Language = "VBScript"
40 ms.Modules.Add("MyCode")
```

50 ms.Modules("MyCode").AddCode(

When you attempt to compile the project, you receive the error message "Type 'COMLibApp' is not defined." Which of the following options will correct the problem and cause the COMLibApp object to be recognized? (Each choice presents a complete solution.) (Select all choices that are correct.)

A. Create a COM+ Interop assembly using the Tlbimp utility, and add a reference to this assembly to the project.

B. Add the line Import MSCOMLibApp to the top of the file.

C. Register the MSCOMLibApp library with COM+ using the Installutil utility.

D. Register the MSCOMLibApp library with COM+ using the RegSvr utility.

E. Register the MSCOMLibApp library with COM+ using the RegSvr32 utility.

F. Replace line 10 with the code Dim ms As MSCOMLibApp.COMLibApp = New

MSCOMLibApp.COMLibApp.

Answer: A, D

You should either replace line 10 with the code Dim ms As MSCOMLibApp.COMLibApp = New MSCOMLibApp.COMLibApp, or add the line Import MSCOMLibApp to the top of the file. Imported COM+ objects are added to a namespace created with the name of the library. You must either import the namespace into the module where the COM objects will be used, or explicitly identify the namespace when referring to its objects. The COM+ Interop assembly was created and added to the list of references when the reference was added to the COM+ library in the scenario. If the COM+ library were not already registered with COM+, then it would not have been available for selection on the COM tab of the Add Reference dialog box.

QUESTION 75 You are developing a stock price watch application called WatchPriceApp. Users will access it using a web service. Once prices change, you need to send modified records back to the Web service. Which of the following code segments should you use to accomplish this goal? (Select the best choice.)

A.

If StockPriceDS.HasChanges() { Data. DataSet oData = StockPriceDS.GetChanges() 'Add code here to send oData to the Web Service}

B.

If StockPriceDS.HasChanges(DataRowState.Added) {Data. DataSet oData = StockPriceDS.GetChanges(DataRowState.Added) 'Add code here to send oData to the Web Service}

C.

If StockPriceDS.HasChanges() { Data. DataSet oData = StockPriceDS.GetChanges(DataRowState.Added) 'Add code here to send oData to the Web Service}

D.

If StockPriceDS.HasChanges(DataRowState.Added) { Data. DataSet oData = StockPriceDS.GetChanges() 'Add code here to send oData to the Web Service }

Answer: A

In order to pass all changes to the Web service in the most compact form, you should pass no parameter to the Has Changes and Get Changes methods of the StockPriceDS in this code sample. Passing the DataRowState.Added parameter to the Has Changes method causes the method to return True only if new records have been added to the dataset.

QUESTION 76 The following code handles various errors that might occur in a subroutine.

Try { ' Code to connect to SQL Server. errorStr = "SQL Error: 111"

Catch (SqlException e) { errorStr = " SQL Error: 112" Catch (SqlTypeException e) { errorStr = " SQL Error: 113" Catch (DataException e) { errorStr = " SQL Error: 114"

Catch (Exception e) { errorStr = " SQL Error:11 5" }

If an error occurs while connecting to a SQL Server database, what value will the variable errorStr contain? (Select the best choice.)

- A. SQL Error: 113
- B. SQL Error: 115
- C. SQL Error: 111
- D. SQL Error: 112
- E. SQL Error: 114

Answer: D

A SqlException object is thrown whenever an error is produced from SQL Server. The catch block that specifies the SqlException type will handle those errors. The SqlDbTypeException object is thrown during a type conversion error with SQL data types. The DataException object is thrown as the result of ADO.NET errors. The catch block that specifies the generic Exception type will catch all errors that are not picked up by earlier catch blocks.

QUESTION 77 Which of the following methods must you code when processing a SOAP message? (Select the best choice.)

- A. GetInitializer
- B. ProcessMessage
- C. ChainStream
- D. Initialize

Answer: B

The ProcessMessage method is called at each processing stage of a SOAP message. There are four processing stages of a SOAP message: SoapMessageStage.BeforeSerialize, SoapMessageStage.AfterSerialize, SoapMessageStage.BeforeDeserialize, and SoapMessageStage.AfterDeserialize. An XML Web service can read and alter the contents of SOAP messages during these stages. None of the other methods are called at each processing stage.

QUESTION 78 You are writing code in a Windows form application that activates a .NET remote object called CKOrderModule. The object need to be kept in memory for at least 25 minutes.

You have written the following code: (Line numbers are for reference purposes only.)

```
01 Dim myLease As ILease = CType MyBase.InitializeLifetimeService(), ILease)
02 If CKObjectLease.CurrentState = LeaseState.Initial Then
04 End If
```

What line of code should you place on line 03? (Select the best choice.)

- A. CKObjectLease.InitialLeaseTime = TimeSpan.FromMinutes(25);
- B. CKObjectLease.SponsorshipTimeout = TimeSpan.FromMinutes(25);
- C. CKObjectLease.RenewOnCallTime = TimeSpan.FromMinutes(25);
- D. CKObjectLease.Default = TimeSpan.FromMinutes(25);

Answer: A

The code CKObjectLease.InitialLeaseTime = TimeSpan.FromMinutes(25) should be used on line 03 to ensure that the activated .NET remote object remains in memory for at least one minute. When a client activates a .NET remote object, the client's application domain controls the lifetime of the object. Unlike COM, where the lifetime of remote objects was determined by reference counts and pinging, .NET uses lifetime leases. The lifetime of a remote object can be set through an application configuration file or through code. The ILease

interface exposes properties that control leases. One of the properties of ILease, InitialLeaseTime, determines the default amount of time that the object remains

- QUESTION 79** You are debugging your application. You notice that the debug code does not execute properly. Your code is listed below: #If DEBUG Then ' Code to connect to perform complex calculation #Else ' Code to bypass calculation. #End If What should you do? (Each choice presents a complete solution.) (Select 2 choices.)
- Add the code Dim Debug As Boolean = True to the beginning of the source code.
 - Compile the application with the command line vbc /d:DEBUG=TRUE.
 - Compile the application with the command line vbc /r:debug=true.
 - Add the <debug value=true> attribute to the beginning of the source code.
 - Add the code #CONST DEBUG=True to the beginning of the source code.

Answer: B, E

In order to ensure that only the code that accesses the testing database executes, you can add the code #CONST DEBUG=True to the module, or you can compile the application with the command line vbc /d:DEBUG=TRUE. As with previous versions of Visual Basic, you may write conditional compile statements that are included in a compiled application based on the value of a constant. Visual Basic .NET provides both debugging and tracing conditional attributes. You may set the Debug conditional attribute either in code with the #CONST statement or in the command line by specifying the /d:DEBUG parameter.

- QUESTION 80** Which method do you call for the first time when you access an XML Web service or service method with which the SOAP extension is configured to execute? (Select the best choice.)

- GetInitializer
- Intialize
- SetIntialize
- Begin

Answer: A

You call the GetInitializer method the first time when you access an XML Web service or service method with which the SOAP extension is configured to execute.

- QUESTION 81** You need to log when your application is restarted. Which file would interest you? (Select the best choice.)

- Global.asax
- web.config
- Machine.xonfig
- Global.asa

Answer: A

The Global.asax file enables you to manage application-level events. This file resides in the root directory of an ASP.NET Web application or ASP.NET Web service. The Global.asax.cs or Global.asax.vb class file is a hidden, dependent file of Global.asax, which contains the code for handling application events such as the Application_OnError event.

- QUESTION 82** You create an application using C#, CKOrderFulfillment and configure CKOrderFulfillment to use Integrated Windows authentication. You write the following code to create permissions in GetSalesInfo:
- ```
PrincipalPermission myPermission1 = New_PrincipalPermission(Nothing, "HRMgr")PrincipalPermission
myPermission2 = New_PrincipalPermission(Nothing,
```

"ManagingDirector")

You need to write the remaining code in GetDailyRevenue to ensure that only users in the HRMgr group and the ManagingDirector group can access SalesInformation. Which code segment should you use?

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

Answer: C

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 HRMgr and the Director group.

---

**QUESTION 83** You are creating an online application using C# to manage meetings for MeetingMakers Inc. This application will contain two fields: Date and time. Which of these codes will create a unique constraint named Events for the table named Calendar?

A.

```
<xs:unique name=" Calendar ">
<xs:field xpath="Date" />
<xs:field xpath="Time" />
<xs:field xpath="Location" />
</xs:unique>
```

B.

```
<xs:unique name="Events">
<xs:selector xpath=".//Calendar" />
<xs:field xpath="Date" />
<xs:field xpath="Time" />
<xs:field xpath="Location" />
</xs:unique>
```

C.

```
<xs:unique name="Events">
<xs:selector xpath=".//Calendar" />
<xs:field xpath="Location" />
</xs:unique>
```

D.

```
<xs:unique name="Events">
<xs:field xpath="Calendar" />
<xs:field xpath="Time" />
<xs:field xpath="Location" />
</xs:unique>
```

Answer: B

This code creates a unique constraint named Events for the table named Calendar. The `<xs:unique>` element defines a unique constraint. The `msdata:PrimaryKey="true"` attribute must be included in order to define 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>` elements identifies the fields that make up the primary key. Multiple `<xs:field>` elements must be used to specify a composite key.

---

**QUESTION 84** You are creating a web service that will be used to perform online banking. The bank requires fast response and is protected by a firewall. Which should you choose? (Select all that apply.)

- A. Use HTTP protocol
- B. Use Binary-formatted messages
- C. Use TCP protocol
- D. Use SOAP-formatted messages

Answer: A, B

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 HTTP Channel class in the .NET Framework provides the mechanism to communicate with the HTTP protocol. To configure the Web service to use the HTTP protocol with binary-formatted messages, the Web.config file should contain text similar to the following.

---

**QUESTION 85** You are creating a web based email system which assesses a web service. Which of the following methods should your Web service use to store the provided credentials by email users? (Select the best choice.)

- A. Store the submitted credentials in a Credential Cache object.
- B. Store the submitted credentials in an Authentication Manager object.
- C. Store the submitted credentials in a string array.
- D. Store the submitted credentials in a string, separating each set of credentials with semicolons (;).

Answer: A

In order to store multiple sets of credentials, you should store the submitted credentials in a Credential Cache object. Credential Cache objects store credentials for multiple resources. Neither strings nor string arrays are the ideal choice for storing credentials. The Authentication Manager object manages the authentication modules that are called during authentication.

---

**QUESTION 86** Which property of the Soap Exception class will return the SOAP fault code? (Select the best choice.)

- A. Detail
- B. Source
- C. Actor
- D. Code

Answer: D

The Actor property gets the code that causes the exception. The Source property gets the name of the application or assembly where the exception occurs. The Code property returns the SOAP fault code.

---

**QUESTION 87** Which property of the Soap Exception class will return the code that causes the exception? (Select the best choice.)

- A. Detail
- B. Source
- C. Actor
- D. Code

Answer: C

The Actor property gets the code that causes the exception. The Source property gets the name of the application or assembly where the exception occurs. The Code property returns the SOAP fault code.

---

**QUESTION 88** You create a serviced component named Register Student. Register Student implements the IOOrderInit interface. The component and the interface contain the following code segments:

```
<GuidAttribute("CK9485-kdgc-fd9-CKCKhjdCK94"), _
InterfaceType(ComInterfaceType.InterfaceIsDual)> _ Public Interface IStudent
' IStudent methods go here End Interface
Public Class RegisterStudent Inherits ServicedComponent Implements
IStudent ' RegisterStudent methods go here.
End Class
```

You discover that every time you rebuild RegisterStudent, 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 IStudent interface.
- B. Add a Guid attribute to the RegisterStudent class.
- C. Add a COM Import attribute to the IStudent interface.
- D. To the RegisterStudent class, add the following attribute:  
ClassInterface(ClassInterfaceType.DualType)
- E. To the RegisterStudent class, add the following attribute:  
ClassInterface(ClassInterfaceType.Registered)
- F. To the RegisterStudent class, add the following attribute:  
ClassInterface(ClassInterfaceType.AutoDual)

Answer: F

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.

---

**QUESTION 89** Which code is a valid way to read the data in the XmlTextReader object? (Select the best choice.)

- A. For myCounter = 0 to reader.Nodes -1
- B. For myCounter = 0 to reader.RecordCount -1
- C. Do Until reader.EOF
- D. While reader.Read()

Answer: D

You should use the code While reader.Read() to read the data in the XmlTextReader object. The XmlTextReader provides read-only, forward-only access to XML data.

---

**QUESTION 90** Which XML attribute will not ensure that the IsPrimaryKey property is set to the correct value? (Select all that applies.)

- A. msdata:PrimaryKey="unique"
- B. msdata:Unique="PrimaryKey"
- C. msdata:PrimaryKey="true"
- D. msdata:Unique="true"

Answer: A, B, D

The msdata:PrimaryKey attribute of the <key> or <unique> element determines the value of the IsPrimaryKey property of the unique constraint when a dataset is built from XML data containing a schema. If the attribute is set to true, then the property's value will also be true when the dataset is created.

---

**QUESTION 91** Which window in Visual Studio .NET should you use to select the stored procedure to debug? (Select the best choice.)

- A. Command
- B. Output
- C. Server Explorer
- D. Task List

Answer: C

C is correct. You can debug Microsoft SQL Server stored procedures with version 6.5 and Service Pack 3 or later while in Visual Studio .NET. First, use the Server Explorer window to establish a connection to your database. Next, navigate through the database until you find the stored procedure that you want to debug in the stored procedure node. Then, right-click the stored procedure and choose the Step Into Stored Procedure option.

---

**QUESTION 92** You are designing a robust class to handle SQL exceptions. You need access to the collection of warning messages that are sent from Microsoft SQL Server. What should you do? (Select the best choice.)

- A. SqlTransaction.Connection
- B. SqlException.Class
- C. SqlError.Source
- D. SqlInfoMessageEventArgs.Errors

Answer: B

The Errors property of the SqlInfoMessageEventArgs class is a collection of warning messages that are sent from Microsoft SQL Server. It is possible to evaluate each message in this collection, but this would not be the most efficient solution. The Connection property of the SqlTransaction class returns a Connection object for a transaction. The Source property of the SqlError class returns the provider's name that produced the error.

---

**QUESTION 93** You are working on an XML application using C# which may read XML files without schemas. Which approach will you choose? (Select the best choice.)

- A.  
Dim dsData As DataSet  
dsData. ReadXml ("myinfo.xml", XmlReadMode.Infer)
- B.  
Dim fsMain As New SystemIO.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)
- E.

Dim dsData As DataSet  
 dsData. ReadXml ("myinfo.xml", XmlReadMode. Missing Schema)  
 F.

Dim dsData As DataSet = New dsData. ReadXml("myinfo.xml",  
 XmlReadMode.Infer)  
 G.

Dim dsData As DataSet  
 dsData. ReadXml ("myinfo.xml", XmlReadMode.InferSchema)

Answer: G

When XML data is intended to be used in a DataSet object, it is important to know the data structure, or schema. If the schema is not available with the data, then the data can still be used if the XmlReadMode parameter of the ReadXml method is set to InferSchema. When InferSchema is used, elements and attributes in the XML help determine tables and columns.

---

**QUESTION 94** You constantly update your assembly. You need a convenient way to inform all applications that utilize the assembly that the applications should use the latest version of the assembly. What should you do? (Select the best choice.)

- A. Use Regsvr32.exe to register the assembly.
- B. Place a publisher policy in the GAC.
- C. Use the Fuslogvw.exe tool to modify assembly bindings.
- D. Use the Sn.exe utility to assign the assembly a strong name.

Answer: B

Using a policy file, we can inform all applications that utilize the assembly that the applications should use the latest version of the assembly.

---

**QUESTION 95** You are debugging your .Net remoting application using C#. Which tool will provide you with information regarding an application's inability to bind to an assembly? (Select the best choice.)

- A. Use Regsvr32.exe to register the assembly.
- B. Place a publisher policy in the GAC.
- C. Use the Fuslogvw.exe tool to modify assembly bindings.
- D. Use the Sn.exe utility to assign the assembly a strong name.

Answer: C

The Fuslogvw.exe tool provides information regarding an application's inability to bind to an assembly.

---

**QUESTION 96** You have developed a serviced component to handle a distributed transactions for WholesaleCK Inc. You need to ensure that all orders must be completed successfully committed or rolled back but you prefer to handle it manually. You have used the <AutoComplete()> attribute previously. You use a Try..Catch block Which of the following actions should you take? (Select the best choice.)

- A. Replace the <AutoComplete()> attribute with a <JustInTime> attribute.
- B. Replace the <AutoComplete()> attribute with a <ManualTransaction()> attribute.
- C. Remove the <AutoComplete()> attribute and use the SetComplete and SetAbort methods of the ContextUtil object in the Try..Catch block.
- D. Remove the <AutoComplete()> attribute and use the RollBack and Commit methods of the ContextUtil object in the Try..Catch block.

Answer: C

You should remove the <AutoComplete()> attribute and use the SetComplete and SetAbort methods of the

ContextUtil object in the Try..Catch block. The ContextUtil object is Microsoft's preferred method of interacting with COM+ services. The SetComplete and SetAbort methods manually commit or roll back a distributed transaction. The <AutoComplete()> attribute is used to define a function that implements automatic transactions. Because this function will now be using manual transactions, the <AutoComplete()> attribute should be removed. None of the other choices will produce the desired result.

---

**QUESTION 97** Your application creates an XML Schema Definition (XSD) file from a DataSet object in your application.

You need to retain the structure of the dataset only. Which of the following lines of code should you use? (Select the best choice.)

- A. dsMain.StreamWriter.Write("c:\CK\StudentInfo.xsd", XmlWriteMode.XmlSchema)
- B. dsMain.WriteXml("c:\CK\StudentInfo.xsd", XmlWriteMode.XmlSchema)
- C. dsMain.WriteXmlSchema("c:\CK\StudentInfo.xsd")
- D. dsMain.SaveXmlSchema("c:\CK\StudentInfo.xsd")

Answer: C

You should use the code dsMain.WriteXmlSchema("c:\CK\StudentInfo.xsd") to create an XML Schema Definition (XSD) file from a DataSet object named dsMain. The WriteXmlSchema method accepts a String name of a file, a System.IO.Stream object, a StreamWriter object or an XmlWriter object to determine the file that it will create. ADO.NET makes the transfer of XML to and from datasets very simple. To write the contents of a dataset as XML, you can use the WriteXml method of the DataSet class.

---

**QUESTION 98** You are creating an application using C# that will communicate with a Web service located at your supplier's company. Your dataset, DataSet1 includes the data and schema. You will also use an XmlWriter object named CKXMLWriter. Which line of code will output the dataset's data and schema in XML format? (Select the best choice.)

- A. CKProductsDS.WriteXmlSchema(CKXMLWriter)
- B. CKProductsDS.WriteXmlData(CKXMLWriter)
- C. CKProductsDS.WriteXmlDataSchema(CKXMLWriter)
- D. CKProductsDS.WriteAll (CKXMLWriter, WriteXmlMode.DiffGram)
- E. CKProductsDS.WriteXml(CKXMLWriter, WriteXmlMode.DiffGram)
- F. CKProductsDS.WriteXml(CKXMLWriter, WriteXmlMode.IgnoreSchema)
- G. CKProductsDS.WriteXml(CKXMLWriter, WriteXmlMode.WriteSchema)

Answer: G

To output the dataset's data and schema in XML format, you should use the WriteXml method with the WriteXmlMode.WriteSchema enumeration.

---

**QUESTION 99** You have written a serviced component to create client accounts. You need it to always create a new transaction when it is called. <%@ WebService Language="VB" Class="MyClass"%> <%@ assembly name="System.EnterpriseServices" %> Using System.Web.Services Using System.EnterpriseServices Public Class MyClass Inherits WebService Public Sub CreateNewClientAccount(MyCommand As String) What action should you take so that the CreateNewClientAccount subroutine will always create a new transaction when called? (Select the best choice.)

- A. Add a call to the ContextUtil.SetComplete() at the end of the CreateNewClientAccount subroutine.
- B. Add a call to the ContextUtil.SetComplete() at the beginning of the CreateNewClientAccount subroutine.
- C. Add the <AutoComplete()> attribute to the CreateNewClientAccount declaration.
- D. Add the <RequiresNew()> attribute to the CreateNewClientAccount declaration.

- E. Add a <Transaction> attribute and specify the TransactionOption.Required value in the CreateNewClientAccount declaration.
- F. Add a < WebMethod > attribute and specify the TransactionOption.Required value in the CreateNewClientAccount declaration.
- G. Add a <WebMethod> attribute and specify the TransactionOption.RequiresNew value in the CreateNewClientAccount declaration.

Answer: G

You should add a <WebMethod> attribute and specify the TransactionOption.RequiresNew value in the CreateNewClientAccount declaration so that the CreateNewClientAccount subroutine will always create a new transaction when called. The subroutine declaration should resemble this code:

```
<WebMethod(TransactionOption:=TransactionOption.RequiresNew)> Public Sub
CreateNewClientAccount(MyCommand As String). Web service methods may participate in transactions. The TransactionOption property of the <WebMethod> attribute determines how the method participates in a transaction. The TransactionOption.RequiresNew value indicates that a new transaction will start when the Web service method is called. None of the other actions are appropriate for this scenario.
```

---

**QUESTION 100** You have coded the following line: Dim cmdMain As New OleDbCommand()  
cmdMain.CommandText ="UPDATE StaffTable SET LastName = " & strLName cmdMain.ExecuteNonQuery  
What actions could you take to improve the performance of this code? (Select 2 choices.)

- A. Index the database completely.
- B. Use a Cache object to execute the command.
- C. Use a SQLDataReader object to execute the command.
- D. Use an OLEDBDataReader object to execute the command.
- E. Use a DataReader object to execute the command.
- F. Call the Prepare method on cmdMain before executing the query.
- G. Use a stored procedure instead of dynamic text in the CommandText property.
- H. Use a SqlCommand object rather than an OleDbCommand object.

Answer: G, H

To improve the performance of the code, you should use a SqlCommand object rather than an OleDbCommand object and use a stored procedure instead of dynamic text in the CommandText property. When data is accessed from SQL Server, the SqlCommand object is faster than the generic OleDbCommand object. Stored procedures process faster than dynamic text because the execution path has already been determined when the stored procedure was compiled. None of the other options would improve the processing speed.

---

**QUESTION 101** Which of the following four stages of processing is included in the processing of a SOAP message? (Select the best choice.)

- A. SoapMessageStage.BeforeSerialize
- B. SoapMessageStage.AfterDeserialize
- C. SoapMessageStage.AfterSerialize
- D. SoapMessageStage.BeforeDeserialize
- E. SoapMessageStage.PreDeserialize
- F. SoapMessageStage.PostDeserialize

Answer: A, B, C, D

The ProcessMessage method is called at each processing stage of a SOAP message. There are four processing stages of a SOAP message: SoapMessageStage.BeforeSerialize, SoapMessageStage.AfterSerialize, SoapMessageStage.BeforeDeserialize, and SoapMessageStage.AfterDeserialize. An XML Web service can read

and alter the contents of SOAP messages during these stages. None of the other methods are called at each processing stage.