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# Microsoft

**98-363 PRACTICE EXAM**

**Web Development Fundamentals**

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**Question: 1**

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Which of the following page events is raised at the end of the event-handling stage and is used for tasks that require that all other controls on the page be loaded?

- A. OnLoad
- B. UnLoad
- C. LoadComplete
- D. PreLoad

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**Answer: C**

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Explanation:

The Page.LoadComplete event occurs at the end of the load stage of the page's life cycle. The LoadComplete event occurs after all postback data as well as view-state data is loaded into the page and after the OnLoad method has been invoked for all controls on the page.

Answer: D is incorrect. This event will be raised after the page loads view state for itself and all controls, and after it processes postback data that is included with the Request instance.

Answer: A is incorrect. This event is used to raise the Load event.

Answer: B is incorrect. This event is used to do final cleanup for specific controls, such as closing control-specific database connections.

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**Question: 2**

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Which of the following types of authentications uses an authentication ticket that is created when a user logs on to a site and tracks the user throughout the site?

- A. SQL
- B. Basic
- C. Forms
- D. Digest

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**Answer: C**

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Explanation:

Forms authentication uses an authentication ticket that is created when a user logs on to a site. It then tracks the user throughout the site.

Answer: B is incorrect. Basic authentication transmits data over the network and hence is not much secure.

Answer: A is incorrect. SQL Authentication is the type of authentication which is used for various database systems, composed of a username and a password.

Answer: D is incorrect. Digest authentication transmits data in hashed form.

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**Question: 3**

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Which of the following actions will you take to enable tracing for a Web application? Each correct answer represents a part of the solution. Choose all that apply.

- A. Open the App.config file. Create a new file in the root folder and copy the appropriate XML code into it if no Web.config file exists.
- B. Set the trace element's pageOutput attribute to true.
- C. Add a trace element as a child of the system.web element.
- D. Open the Web.config file. Create a new file in the root folder and copy the appropriate XML code into it if no Web.config file exists.
- E. In the trace element, set the enabled attribute to true.

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**Answer: D, C, E, and B**

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Explanation:

Tracing is a feature in ASP.NET that enables you to view diagnostic information about a single request for an ASP.NET page. Tracing allows you to write debug statements directly in your code. These statements can be retained in your application when it is deployed.

Take the following steps to enable tracing for an application:

1. Open the Web.config file. Create a new file in the root folder and copy the following into it if no Web.config file exists:

```
<?xml version="1.0"? >
<configuration xmlns="http://schemas.microsoft.com/.NetConfiguration/v2.0">
<system.web>
</system.web>
</configuration>
```

2. Add a trace element as a child of the system.web element.

3. In the trace element, set the enabled attribute to true.

4. Set the trace element's pageOutput attribute to true if you want trace information to appear at the end of the page that it is associated. Set the pageOutput attribute to false if you want tracing information to be displayed only in the trace viewer.

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#### Question: 4

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Which of the following ScriptManager properties gets a ScriptReferenceCollection object that contains the ScriptReference objects, each of which represents a script file rendered to the client?

- A. ScriptManager.ScriptMode
- B. ScriptManager.Services
- C. ScriptManager.Scripts
- D. ScriptManager.ScriptPath

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**Answer: C**

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Explanation:

The ScriptManager.Scripts property gets a ScriptReferenceCollection object that contains the ScriptReference objects. This property returns an object that is a collection of ScriptReference objects, each of which represents a script file. The collection includes references to all the script files that ASP.NET needs for AJAX functionality, and to custom script files.

Answer: B is incorrect. The ScriptManager.Services property gets a ServiceReferenceCollection object that contains a ServiceReference object for each Web service that ASP.NET exposes on the client for AJAX functionality. This property returns an object that is a collection of ServiceReference objects, each of which represents a Web service that is registered with the ScriptManager control.

Answer: D is incorrect. This property gets or sets the root path of the location that is used to build the paths to ASP.NET AJAX and custom script files.

Answer: A is incorrect. This property gets or sets a value that specifies whether debug or release versions of client script libraries are rendered.

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**Question: 5**

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Which of the following options contains information that is sent to the client computer to be stored in the memory or a text file in the client's hard drive?

- A. Data type
- B. Cookies
- C. Web page
- D. Browser

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**Answer: B**

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Explanation:

Cookies are small pieces of information. Cookies contain information that are sent to the client computer to be stored in the memory or a text file in the client's hard drive. Cookies are not software. Cookies cannot be programmed, cannot carry viruses, and cannot install malware on the host computer. Cookies are often sent by a server from a site that the user has visited, but can also be set on the client side using JavaScript.

Answer: D is incorrect. A browser is an application that enables a user to view Hypertext Markup Language (HTML) documents on the World Wide Web, on another network, or on his computer. Internet Explorer is an example of a browser application. A browser is also known as a Web browser.

Answer: C is incorrect. A Web page is a document or resource of information that is suitable for the World Wide Web and can be accessed through a Web browser and displayed on a computer screen. Web pages may consist of files of static text stored within the Web server's file system (static Web pages), or the Web server may construct the (X)HTML for each Web page when it is requested by a browser (dynamic Web pages).

Answer: A is incorrect. In programming, a data type (or datatype) is a classification identifying one of various types of data, as floating-point, integer, or Boolean, stating the possible values for that type, the operations that can be done on that type, and the way the values of that type are stored.

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**Question: 6**

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Which of the following is a method that is used to navigate from one page to another and is called when execution of the first page is terminated and execution of the second page begins?

- A. Response.Redirect
- B. App.config
- C. Trace.axd
- D. Server.Transfer

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**Answer: D**

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Explanation:

The Server.Transfer() method is used to navigate from one page to another. When the method is called, execution of the first page is terminated and execution of the second page begins. It passes the page information, such as input field values, to the second page. It means only the ASP built-in objects and the ASP Error object values are transferred from the first page to the second page. Any variables declared on the first page are not available on the second page.

Use the `IsCrossPagePostBack` property of the first page object to determine whether the current page is posted from the `Server.Transfer()` method call. If the `Server.Transfer()` method is used, the `IsCrossPagePostBack` property value is false. If a cross-page posting is used, the `IsCrossPagePostBack` property value is true.

Answer: A is incorrect. `Redirect` is a method of the `Response` object. It is used to navigate through the server script. This method sends a redirect message to the browser, causing it to attempt to connect to a different URL. The `Response.Redirect` method accepts the Uniform Resource Locator (URL) of the page, to which a user has to be redirected, as a parameter.

Syntax:

`Response.Redirect URL`

where, URL is the Uniform Resource Locator (URL) of the page to which a user has to be redirected.

Answer: C is incorrect. `Trace.axd` is an Http Handler that can be used to view the trace details for an application. This file resides in the application's root directory. A request to this file through a browser displays the trace log of the last n requests in time-order, where n is an integer determined by the value set by `requestLimit="[n]"` in the application's configuration file.

Answer: B is incorrect. The `App.config` (Application configuration) file is a .NET configuration file that consists of a chain of settings specific to a Windows application. This file is usually located in the root directory of the application that is being configured according to a particular computer. Generally, the application configuration files override the configuration settings in the `Machine.config` (Machine configuration) file.

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### Question: 7

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You work as an ADO.NET Application Developer for company Inc. The company uses Microsoft Visual Studio .NET 2008 as its application development platform. You create an ADO.NET application by using .NET Framework 3.5. The application uses a Microsoft SQL Server database. You use a `DataSet` control in the application. You want to add or refresh rows in the `DataSet`. You need to ensure that when you add or refresh row in the `DataSet` you will get number of rows that are successfully added or refreshed in the `DataSet`. What will you do to accomplish the task?

- A. Use the `Update` method of the `DataAdapter` class.
- B. Use the `RefreshSchema` method of the `DataAdapter` class.
- C. Use the `FillSchema` method of the `DataAdapter` class.
- D. Use the `Fill` method of the `DataAdapter` class.

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**Answer: D**

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Explanation:

You will use the `Fill` method of the `DataAdapter` class. The `Fill` method of the `DataAdapter` class returns the number of rows that are successfully added or refreshed in the `DataSet`.

Answer: C is incorrect. The `FillSchema` method of the `DataAdapter` class returns an array of `DataTable` objects.

Answer: A is incorrect. The `Update` method of the `DataAdapter` class returns the number of rows that are successfully updated from a `DataSet`.

Answer: B is incorrect. The `DataAdapter` class does not have `RefreshSchema` method.

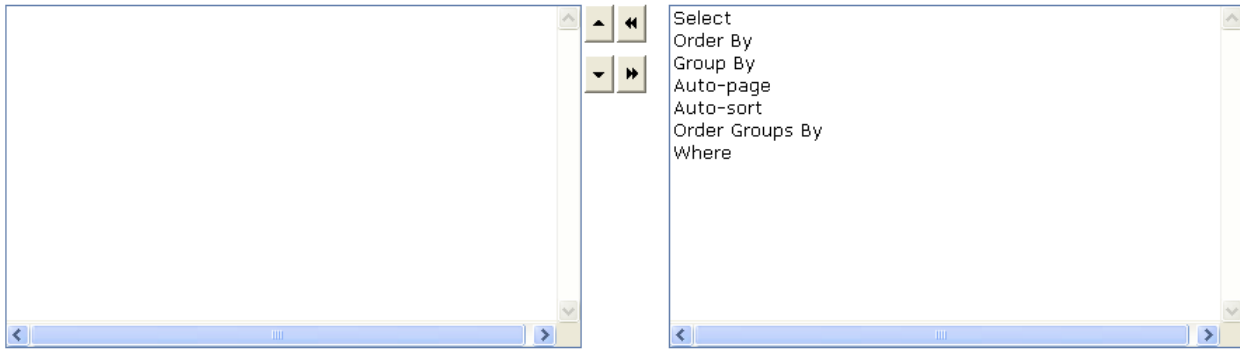
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### Question: 8

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Choose and reorder the data operation in which they are applied by `LinqDataSource`.

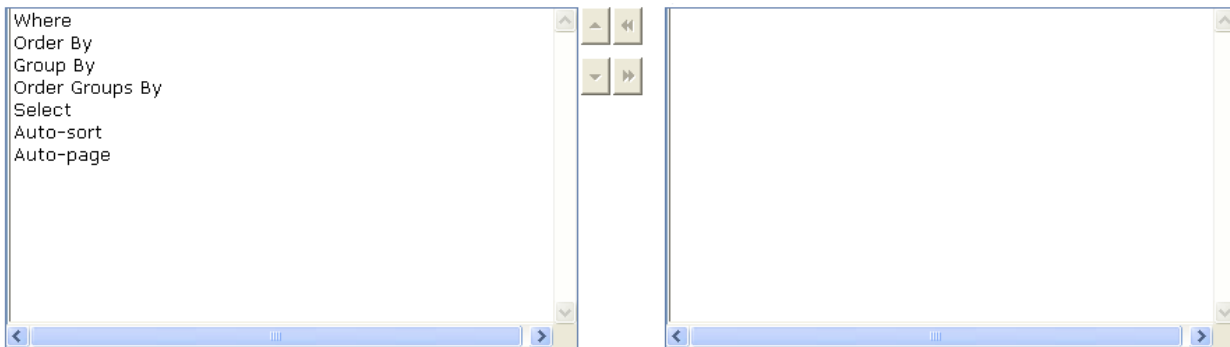





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**Answer:**

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Explanation: The `LinqDataSource` class is used to allow the use of LINQ in ASP.NET Web pages by using the markup text to fetch and modify the data from a data object. It uses LINQ to SQL to automatically generate the data commands. The data object can be either an in-memory data collection or an object that displays data from a database. A user can fetch or alter the data without writing SQL commands for each operation. The `LinqDataSource` control applies data operations in the following order:

1. Where: It is used to specify which data records to return.
2. Order By: It is used to sort.
3. Group By: It is used to aggregate data records that share values.
4. Order Groups By: It is used to sort grouped data.
5. Select: It is used to specify which fields or properties to return.
6. Auto-sort: It is used to sort data records by a property that a user has selected.
7. Auto-page: It is used to get a subset of data records that were selected by a user.

The user can add conditions to the Where property to filter a data record, otherwise the `LinqDataSource` control gets every record from the data object.

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### Question: 9

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Select which of the following is a correct description of DTD?

- A. It is a language for finding and extracting elements and attributes from XML documents.
- B. It defines the document structure with a list of legal elements and attributes.
- C. It is a language for transforming XML documents into XHTML documents or to other XML documents.
- D. It is a non-XML syntax for describing the appearance of particular elements in a document.

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**Answer: B**

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Explanation:

DTD stands for Document Type Definition. It defines the legal building blocks of an XML document. It is used to define the document structure with a list of legal elements and attributes. It can be declared inline inside an XML document, or as an external reference to the document. It is written in a formal syntax that explains precisely which elements may appear where in a document. It also specifies what are the elements' contents and attributes.

Answer: D is incorrect. CSS stands for Cascading Style Sheets. It is a non-XML syntax for describing the appearance of particular elements in a document. It is a straightforward language so no transformation is performed. A CSS style sheet applies styles to the content that already exists and does not change the markup of an XML document at all.

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**Question: 10**

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You work as a Windows Application Developer for company Inc. The company uses Visual Studio .NET 2008 as its application development platform. You have been tasked with creating a WCF service for your company using .NET Framework 3.5.. Which of the following properties should your service require in order to configure endpoints? Each correct answer represents a part of the solution. Choose all that apply.

- A. COM Interface
- B. Marshalling
- C. Binding
- D. Contract
- E. Entry Point
- F. Address

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**Answer: F, C, and D**

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Explanation:

An endpoint of a service enables a user to communicate with a WCF service. It provides clients access to the functionality offered by a WCF service. One or more endpoints can be defined for a service by using a combination of relative and absolute endpoint addresses. An endpoint consists of the following four properties:

Address: It indicates the location of a specified endpoint.

Binding: It specifies how a client communicates with a specified endpoint.

Contract: It identifies the availability of operations.

Behavior: It specifies local implementation details of an endpoint.

Answer: E is incorrect. Since an endpoint is itself an entry point, there is no need to define a separate entry point as part of the endpoint.

Answer: B is incorrect. Marshalling is an older concept of COM and is not used in WCF services. COM was used with older development tools such as Visual Studio 5.0 and 6.0 (circa late 1990's).

Answer A is incorrect. You should not use the COM interface, as it is not used by the Microsoft .NET Framework 3.5.

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**Question: 11**

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Which of the following elements can be added to the config file to assist in testing the application?

- A. ANY
- B. Key
- C. trace
- D. value

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**Answer: C**

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Explanation:

The trace element is an ASP.NET Settings Schema. It is used to configure the ASP.NET code tracing service that controls how trace results are assembled, stored, and displayed. It consists of attributes, child elements, and parent elements. An example of the trace element is as follows:

```
<trace
  enabled="true|false"
  localOnly="true|false"
  pageOutput="true|false"
  requestLimit="integer"
  mostRecent="true|false"
  writeToDiagnosticsTrace="true|false"
  traceMode="SortByTime|SortByCategory"
/>
```

Answer: D is incorrect. The <value> element contains the value of a setting defined in an application's configuration file used by the application settings. It is the sub-element or child element of the <setting> element.

Answer: A is incorrect. The ANY element specifies that an element exists without making any assertion about what it may or may not contain. A user can specify the keyword ANY as the content specification.

Answer: B is incorrect. The Key element is used to declare a named key that can be used in the style sheet with the key() function. A key does not have to be unique.

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### Question: 12

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Which of the following modes are provided by application pools? Each correct answer represents a complete solution. Choose all that apply.

- A. In-process
- B. Classic Mode
- C. Integrated Mode
- D. InProc

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**Answer: C and B**

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Explanation:

The mode of an application pool affects how the server processes request for managed code. It works in two modes:

1.Integrated Mode: In this mode, an application uses the integrated request-processing architecture of IIS and ASP.NET.

2.Classic Mode: In this mode, the server will continue to route requests for managed code through Aspnet\_isapi.dll, processing requests the same as if the application was running in IIS. It is used to maintain compatibility with older applications.

Answer: A is incorrect. The In-process mode is the default session state mode. It is used to specify the SessionStateMode enumeration. The In-process mode is used to store session state values and variables in memory on the local Web server. It is the only mode that supports the Session\_OnEnd event.

Note: If Web-garden mode is enabled by setting the webGarden attribute to true in the processModel element of the application's Web.config file, avoid using the In-process mode because data can be lost if different requests for the identical session are served by different worker processes.

Answer: D is incorrect. The InProc mode is a session management mode provided by ASP.NET, which stores session state in memory on the Web server. It is a default mode. It offers better performance than StateServer and SQLServer modes. However, it is limited in load-balanced scenarios where increasing scalability is given more importance than performance. This mode is used for simple applications. However, applications that use multiple Web servers or persist session data between application restarts should use the StateServer or SQLServer modes.



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**Question: 13**

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Which of the following statements correctly defines client-side scripting?

- A. It refers to the scripts that are executed on the Client Server instead of on the Web server.
- B. It refers to the scripts that are executed on the DOM instead of on the Web server.
- C. It refers to the scripts that are executed on the Web browser instead of on the Web server.
- D. It refers to the scripts that are executed on the Java Virtual Machine instead of on the Web server.

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**Answer: C**

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Explanation:

Client-side scripting refers to the scripts that are executed on the Web browser instead of on the Web server. Client-side scripting is used to make a Web page interactive and dynamic. It enables a user to respond to the events fired by him on the objects that he can see on the Web page. The most important part of client-side scripting is form validation, which helps a script writer to create a form and abort the users from entering wrong data. If a user fills in the wrong data in a field, the dialog boxes can warn him for the error and request him to correct it.

Answer: B, D, and A are incorrect. Client-side scripting refers to the scripts that are executed on the Web browser instead of on the Web server.

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**Question: 14**

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Which of the following is the first part of an internal and external style sheet that allows a developer to locate any desired set of elements within a document?

- A. Frame
- B. IFrame
- C. Property
- D. Selector

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**Answer: D**

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Explanation:

A selector is used to select elements on an HTML page so that they can be styled. It can be applied to all elements of a specific type, or only those elements that match a certain attribute. It is the first part of the internal and external style sheet. It allows a developer to locate any desired set of selected elements within a document.

Answer: C is incorrect. A property is a style attribute that a user can change, and each property has a value.

Answer: A is incorrect. Frames are used to display more than one HTML document in the same browser window.

Answer: B is incorrect. An iframe is used to display a Web page within a Web page.

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**Question: 15**

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Which of the following allows you to bind control property values to data and specify values for retrieving, updating, deleting, and inserting data?

- A. TemplateControl class
- B. DataBinder class
- C. Data binding syntax
- D. Binding markup extension

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**Answer: C**

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Explanation:

The data binding syntax allows you to bind control property values to data and specify values for retrieving, updating, deleting, and inserting data.

Answer: A is incorrect. The TemplateControl class supplies the Page and the UserControl classes along with a base set of functionality. It is an abstract class that supplies common properties and methods for the Page and the UserControl classes.

However, it is not possible to create a new instance of the TemplateControl class directly. It defines the following methods supporting declarative data-binding expressions:

The Eval method is used for data binding expression involving data sources.

The XPath method is used for parsing and evaluating an XPath data binding expression.

The XPathSelect method is used for data binding alongside an expression holding an XPath select statement. The outcome is a node collection that implements the IEnumerable interface.

Answer: B is incorrect. The DataBinder class provides support for Rapid Application Development (RAD) designers to produce and parse data binding expression syntax. A user can utilize the overloaded static Eval method of the DataBinder class in data binding syntax of an ASP.NET Web page. This provides a simple syntax instead of standard data binding syntax. The DataBinder.Eval method supports automatic type conversion, but it can result in slower performance. The DataBinder class cannot be inherited.

Answer: D is incorrect. Binding markup extension is used to provide a data-bound property value such that the value is delayed until runtime. A binding markup extension is converted into an intermediary expression object at XAML load-time. Both the expression and the data context are used by the Silverlight binding engine to find out the property value at runtime.

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**Question: 16**

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Which of the following states is a server-side technique that uses the Web server to store data?

- A. Session State
- B. View State
- C. Application state
- D. Control State

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**Answer: C**

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Explanation:

An application state is a server-side technique that uses the Web server to store data. Application state is a collection of user-defined variables that are shared by an ASP.NET application. These are set and initialized when the Application\_OnStart event fires on the loading of the first instance of the application and are available till the last instance exits. Application state variables are accessed using the Applications collection, which provides a wrapper for the application state variables. Application state variables are identified by names.

Answer: B is incorrect. View state refers to the page-level state management mechanism, which is utilized by the HTML pages emitted by ASP.NET applications to maintain the state of the Web form controls and widgets. The state of the controls is encoded and sent to the server at every form submission in a hidden field known as VIEWSTATE. The server sends back the variable so that when the page is re-rendered, the controls render at their last state. At the server side, the application might change the View state, if the processing results in updating the state of any control. The states of individual controls are decoded at the server, and are available for use in ASP.NET pages using the ViewState collection.

The main use of this is to preserve form information across postbacks. So if a user fills out a form but enters a wrong value, the form is automatically filled back in when the page is sent back to the user for correction. View state is

turned on by default and normally serializes the data in every control on the page regardless of whether it is actually used during a postback. This behavior can (and should) be modified, however, as View state can be disabled on a per-control, per-page, or server-wide basis.

Answer: A is incorrect. Session state is a collection of user-defined session variables, which are persisted during a user session.

These variables are unique to different instances of a user session, and are accessed using the Session collection. Session variables can be set to be, even if the session does not end. At the client end, a user session is identified either by a cookie or by encoding the session ID in the URL itself. By default, ASP.NET Session state is enabled for all ASP.NET applications.

ASP.NET supports the following three modes of persistence for session variables:

1. In Process mode
2. ASPState mode
3. SqlServer mode

Answer: D is incorrect. Control state is like View state but functionally independent. Control state retains control property

information during multiple round trips to the server. The control state data is specific to a custom control and is retained even if the View state is disabled at the page level.

Control state cannot be disabled and it is designed for storing a control's necessary data that must be available on postback to enable the control to function even when View state has been disabled. By default, the ASP.NET page framework stores Control state in the page in the same hidden element in which it stores View state. Use Control state only for small amounts of critical data that are necessary for the control across postbacks. Do not use control state as a substitute to View state.

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### Question: 17

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Which of the following is a lightweight object used for read-only access to data?

- A. DataSource
- B. DataReader
- C. SqlDataReader
- D. DataTable

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**Answer: B**

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Explanation:

DataReader is one of the .NET data providers of ADO.NET. It enables a user to read data in a sequential manner. A DataReader object retrieves only read-only and forward-only data and stores only one row of the data in memory at a time. The DataReader object enhances application performance by retrieving data fast when being requested.

ADO.NET infrastructure provides specific .NET data providers for many DataReader classes. They include the OLE DB .NET data provider for the OleDbDataReader class and the SQL Server .NET data provider for the SqlDataReader class.

Answer: D is incorrect. The DataTable class is used to represent one table of in-memory data. It is a central object in the ADO.NET library. Other objects, such as DataSet and DataView use the DataTable class. The DataTable class objects are conditionally case sensitive. If a user is creating a DataTable class object programmatically, he must first define its schema by adding DataColumn objects to the DataColumnCollection class. To add rows to a DataTable object, the user must first use the NewRow method to return a new DataRow object. The DataTable class also includes a collection of Constraint objects that can be used to ensure the integrity of the data.

Answer: A is incorrect. The DataSource class represents the location and grouping for a BaseProperty.

Answer: C is incorrect. SqlDataReader is a class used to read a forward-only stream of rows from a SQL server database. It cannot be inherited. The object of SqlDataReader class can be created by calling the ExecuteReader method of the SqlCommand class. The SqlDataReader class avoids creating unnecessary objects or making unnecessary copies of data. Hence, it provides optimal performance.

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**Question: 18**

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Which of the following enables an application to send and receive information across the Internet and allows programming logic and capabilities to be shared with many other applications?

- A. Windows Service
- B. Global.asax
- C. Console application
- D. Web service

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**Answer: D**

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Explanation:

A Web service is a way of communicating between two electronic devices. The World Wide Web Consortium (W3C) defines a "Web service" "as a software system intended to support interoperable machine-to-machine interactions over a network. It has an interface devised in a machine-processable format, particularly the Web Services Description Language (WSDL). Other systems interact with the Web service in such a way as is approved by its description; using SOAP messages and conveyed using HTTP with an XML serialization combining other Web-related standards."

The W3C also identifies two major classes of Web services, which are as follows:

- 1.The REST-compliant Web services in which the basic use of the service is to manipulate XML representations of the Web resources through a uniform set of "stateless" operations.
- 2.The Arbitrary Web services in which the service may possibly represent an arbitrary set of operations.

Answer: A is incorrect. Windows Service is a long-running executable that performs specific functions and does not require user intervention.

Answer: C is incorrect. A console application is a computer program designed to be used via a text-only computer interface, such as a text terminal, or the command line interface of some operating systems.

Answer: B is incorrect. Global.asax is an optional file that contains code for responding to global events that occur in a Web application. There can be only one Global.asax file for an application. This file resides in the root directory of an ASP.NET application. External users cannot download or view the code written within the Global.asax file.

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**Question: 19**

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Which of the following HttpContext objects provides properties and methods related to the browser and is used for retrieving information about the browser, reading cookies, and passing information directly from the Web page?

- A. Application
- B. Request
- C. Response
- D. Server

---

**Answer: B**

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Explanation:

The request object is a top-level object in the HttpContext.Current object. It provides properties and methods related to the browser. It is used for retrieving information about the browser, reading cookies, and passing information directly from the Web page. This object can also be used with the Response object to display browser information on the Web page.

Answer: C is incorrect. The response object is the top level object in the HttpContext.Current object. It provides the

properties and methods related to browser output.

Answer: D is incorrect. The server object is the top-level object from the HttpContext.Current object. It provides properties and methods related to a Web server.

Answer: A is incorrect. The application object is a top-level object of HttpContext.Current. It contains properties and methods related to the currently running application. It is used to store and access variables from any page, and all users share one Application object. It holds information that will be used by many pages in the application, and the information can be accessed from any page. The information can also be modified in one place, and the changes will automatically be reflected on all pages.

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### Question: 20

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Which of the following is the main advantage of using Windows authentication?

- A. Its authentication ticket is usually contained inside a cookie.
- B. It allows a .NET process to act as an authenticated user or as an arbitrarily specified user.
- C. It can be coupled with IIS authentication so that you do not have to write any custom code and it does not pass the user credentials over the wire.
- D. It determines the authentication mode that it should use for a particular application by looking at IIS metabase settings.

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**Answer: C**

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Explanation:

ASP.NET supports various authentication modes, including Windows authentication, forms authentication, Passport authentication, and custom authentication. The main benefit of using Windows authentication is that it can be coupled with IIS authentication so that you do not have to write any custom code. It does not pass the user credentials over the wire.

Answer: A is incorrect. In forms authentication, the authentication ticket is usually contained inside a cookie.

Answer: D is incorrect. IIS authentication determines the authentication mode that it should use for a particular application by looking at IIS metabase settings.

Answer: B is incorrect. Impersonation is a technique that allows the .NET process to act as an authenticated user or as an arbitrarily specified user. For this purpose, an authenticated token is passed to a .NET application for authenticating a user, or an unauthenticated token is passed to the .NET application for not authenticating the user. The .NET application impersonates receive token only if impersonation is enabled. Impersonation is applied only to those applications where .NET is used to communicate with a server.

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### Question: 21

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In which of the following locations will the configuration settings be stored while deploying an ASP.NET application?

- A. Global.asax
- B. Microsoft IIS metabase
- C. XML files
- D. GAC

---

**Answer: C**

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Explanation:

While deploying an ASP.NET application, the configuration settings are stored in XML files.

Answer: A is incorrect. Global.asax is an optional file that contains code for responding to global events that occur in a

Web application. There can be only one Global.asax file for an application. This file resides in the root directory of an ASP.NET application. External users cannot download or view the code written within the Global.asax file.

Answer: B is incorrect. The metabase is a repository for most Internet Information Services (IIS) configuration values.

Answer: D is incorrect. Global assembly cache (GAC) is a machine-wide cache. It stores assemblies that are designed to be shared amongst multiple applications on a computer. All assemblies stored in the global assembly cache must have strong names.

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### Question: 22

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Which of the following is a fundamental unit of deployment that allows a user to create external, user-defined functions using any common language runtime (CLR) language?

- A. Trace.axd
- B. Configuration file
- C. Global.asax
- D. Assembly

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**Answer: D**

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Explanation:

Assemblies allow users to create external, user-defined functions using any common language runtime (CLR) language, such as Microsoft Visual Basic .NET or Microsoft Visual C#. It is possible to extend the business functionality of DMX and MDX. The functionality that a user wants into a library, such as dynamic link library (DLL), is first built. This library is then added as an instance of Analysis Services or to an Analysis Services database. The public methods in the library are then exposed as the user-defined functions to MDX and DMX expressions, procedures, calculations, actions, and client applications.

Answer: B is incorrect. Configuration files are those standard XML files that define a set of elements that implement configuration settings.

Answer: C is incorrect. Global.asax is an optional file that contains code for responding to global events that occur in a Web application. There can be only one Global.asax file for an application. This file resides in the root directory of an ASP.NET application. External users cannot download or view the code written within the Global.asax file.

Answer: A is incorrect. Trace.axd is an Http Handler that can be used to view the trace details for an application. This file resides in the application's root directory. A request to this file through a browser displays the trace log of the last n requests in time-order, where n is an integer determined by the value set by requestLimit="[n]" in the application's configuration file.

---

### Question: 23

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You work as a Web Application Developer for company Inc. The company uses Visual Studio .NET as its application development platform. You create an ASP.NET Web application using the .NET Framework. The application is installed in a Network Load Balancing cluster. You are evaluating a bug statement. When a failure takes place in the Web application, the client occasionally gets an error page as anticipated. At other times, the client gets an exception stack with the error message, which is not anticipated. You are required to find out the configuration setting that causes the unanticipated error. Which of the following configuration settings causes the unanticipated error?

- A. <compilation debug="true" />
- B. <customErrors mode="Off" />
- C. <compilation debug="false" />
- D. <customErrors mode="On" />



---

**Answer: B**


---

Explanation:

The <customErrors mode="Off" /> configuration settings causes the unanticipated error. The <customErrors> element of the Web.config file provides information about custom error messages for ASP.NET applications. The mode attribute of the <customErrors> element is used to specify whether custom errors are enabled, disabled, or shown only to remote clients. It is a required attribute in the <customErrors> element. It can be set to one of the following values:

On: Setting the mode attribute to On enables custom errors for the application.

Off: Setting the mode attribute to Off disables custom errors for the application.

RemoteOnly: It is the default value for the mode attribute. Setting the mode attribute to RemoteOnly specifies that custom errors will be shown only to remote clients, and ASP.NET errors will be shown to the local host.

The defaultRedirect attribute of the <customErrors> element is used to specify the default URL to which a browser will be directed when an error occurs. It is an optional attribute.

Answer: C and A are incorrect. The compilation Element is an ASP.NET Settings Schema. It is used to configure all compilation settings that ASP.NET utilizes to compile applications. In .NET Framework 2.0, the compilers child element of the compilation element is deprecated in support of the compilers element of the system.codeDom section. Its syntax is as follows:

```
<compilation
  debug="[true|false]"  batch="[true|false]"
  batchTimeout="number of seconds"  defaultLanguage="language"
  explicit="[true|false]"  maxBatchSize="maximum number of pages"
  maxBatchGeneratedFileSize="maximum combined size"
  numRecompilesBeforeAppRestart="number"  optimizeCompilations="[true|false]"
  targetFrameworkMoniker="compilation target framework moniker"
  strict="[true|false]"  tempDirectory="temporary files directory"
  urlLinePragmas="[true|false]"
  assemblyPostProcessorType="assembly post processor, assembly">
  <assemblies>...</assemblies>  <buildproviders>...</buildproviders>
  <codeSubDirectories>...</codeSubDirectories>
  <compilers>...</compilers> <expressionBuilders>...</expressionBuilders>
</compilation>
```

The debug attribute is an optional boolean attribute of the compilation Element. It specifies whether to compile debug binaries instead of retail binaries. By default, the debug attribute is set to false.

Answer: D is incorrect. The mode attribute of the customErrors Element should be set to "Off" instead of "On". Setting the mode attribute to "On" enables custom errors for the application.

---

### Question: 24

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Which of the following options is a Microsoft .NET Framework component that adds native data querying capabilities to .NET languages?

- A. Common language runtime
- B. XmlDataSource
- C. SqlDataSource
- D. Language Integrated Query

---

**Answer: D**


---

Explanation:

Language Integrated Query (LINQ) is a Microsoft .NET Framework component that adds native data querying capabilities to .NET languages.

Answer: B is incorrect. XmlDataSource represents an XML data source to the data-bound controls such as GridView and TreeView controls. Data-bound controls can use XmlDataSource to display both hierarchical data and tabular data. The XmlDataSource control extends the HierarchicalDataSourceControl class and works with hierarchical data. It also implements the IDataSource interface; hence, it works with tabular data, or list style data.

Answer: C is incorrect. The SqlDataSource represents a database connection that uses an ADO.NET provider such as SqlClient, Odbc, etc. The SqlDataSource control enables a Web server control to access data located in a relational database. The SqlDataSource control can be used with data bound controls such as GridView, FormView, and DetailsView to display and modify data on a Web page. It uses ADO.NET classes to interact with any database supported by ADO.NET, such as Microsoft SQL Server and Oracle.

Answer: A is incorrect. Common language runtime (CLR) is a core component of Microsoft's .NET initiative. It is Microsoft's implementation of the Common Language Infrastructure standard, which defines an execution environment for program code. In the CLR, code is expressed in a form of bytecode called the Common Intermediate Language.

---

### Question: 25

---

Which of the following are the differences between client-side scripting and server-side scripting? Each correct answer represents a complete solution. Choose all that apply.

- A. Client-side scripts are browser independent, but server-side scripts are not.
- B. An Imagemap invokes a cgi.bin program in server-side scripts, but client-side scripts do not need cgi.bin to function.
- C. Client-side scripts can be blocked by a user, but server-side scripts cannot.
- D. PHP is a server-side script, and ActionScript is a client-side script.

---

**Answer: C, D, and B**

---

Explanation:

Client-side and server-side scripts run when an http request is made from the client computer and the response is given by the server.

The following table shows the differences between client-side scripting and server-side scripting:

Client-side scripting	Server-side scripting
Client-side imagemaps do not require a cgi-bin program to function.	Server-side imagemaps invoke a cgi-bin program.
Runs at the client (user) computer	Runs at the server computer
HTML, CSS, ActionScript, and JavaScript languages are used.	PHP, Python, ASP, and Ruby languages are used.
Can be executed, blocked, and changed by the user on his side	Cannot be executed or blocked by the user
Browser dependent	Browser independent
No relation to databases and IIS	Direct relation to databases and IIS

---

### Question: 26

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Which of the following options can catch exceptions and try to fix the problem, report it, or ignore it?

- A. Event handler
- B. Managed handler
- C. Exception handler
- D. Exception Handler Event

---

**Answer: C**

---

Explanation:

An exception handler can catch exceptions and try to fix the problem, report it, or ignore it. An exception handler is an element. During the execution of the protected node if the specified exception occurs, an exception handler specifies a body to execute. The set of execution handlers on the action is examined for a handler that matches the exception when an exception occurs during the execution of an action. A handler is set to be matched if the type of the exception is the same as or a descendant of one of the exception classifiers specified in the handler.

Answer: A is incorrect. An event handler is a course of action in program code and it is performed when an event occurs. Therefore, when an event is raised, the code within the event handler is executed. In order to handle an event, the event handler provides two parameters. The first parameter passes a reference to the object that raised the event, and the second parameter passes an object specific to the event that is being handled by the event handler. Event handlers can be created using the Windows Forms Designer as well as during runtime.

Answer: B is incorrect. A managed handler enables a user to call a .NET library to process a request. When a managed handler is added for a specific application, it works properly using .NET Libraries. For security reasons, it should always be kept in mind to make this handler available only to the Web application that requires it. This reduces the possibility of any unauthorized access or other types of attacks.

Answer: D is incorrect. Exception Handler Event is an invalid option and does not exist.

---

**Question: 27**

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Which of the following is a property of the Page class that can be used to get a value that tells whether a page is loaded in response or is loaded for the first time?

- A. IsValid
- B. Response
- C. IsPostBack
- D. IsPreStart

---

**Answer: C**

---

Explanation:

The IsPostBack property of the Page class can be used to get a value that tells whether a page is loaded in response to a client postback or it is loaded for the first time. It returns true if the page is loaded in response to a client postback. It returns false if the page is loaded and accessed for the first time. Answer: A is incorrect. It is used to retrieve a value indicating whether page validation has succeeded or not.

Answer: D is incorrect. There is no such property as IsPreStart.

Answer: B is incorrect. This property gets the HttpResponse object associated with the page.

---

**Question: 28**

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Which of the following controls serve as a base class that defines the methods, properties, and events common to all controls in the System.Web.UI.WebControls namespace?

- A. Server controls
- B. User controls
- C. Web controls
- D. Validation controls

---

**Answer: C**

---

Explanation:

Web controls serve as a base class that defines the methods, properties, and events common to all controls in the System.Web.UI.WebControls namespace.

Answer: A is incorrect. Server controls are those non-html controls that are compiled from a programming language and then processed on the server.

Answer: D is incorrect. Validation controls are those controls that are used for validating user input.

Answer: B is incorrect. User controls are those controls that work as a container into which a user can put markup and Web server controls. A user control can be treated as a unit and define properties and methods for it. A user can create a user control in the same way he creates an ASP.NET page and then add the markup and child controls that he needs. A user control may include code to manipulate its contents like a page can, including performing tasks such as data binding.

---

**Question: 29**

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Which of the following HTTP status codes represents the "Request URI Too Long" client error?

- A. 416
- B. 414
- C. 413
- D. 415

---

**Answer: B**

---

Explanation:

The 414 HTTP code represents the "Request URI Too Long" client error.

The following table represents the client error codes:

Status Code	Message
400	Bad Request
401	Unauthorized
402	Payment Required
403	Forbidden
404	Not Found
405	Method Not Allowed
406	Not Acceptable
407	Proxy Authentication Required
408	Request Timeout
409	Conflict
410	Gone
411	Length Required
412	Precondition Failed
413	Request Entity Too Large
414	Request URI Too Long
415	Unsupported Media Type
416	Requested Range Not Satisfiable
417	Expectation Failed
449	Retry With

---

**Question: 30**


---

Which of the following attributes of the img tag is required for strict XHTML compliance while embedding images in a Web page?

- A. alt
- B. src
- C. id
- D. xml:lang

---

**Answer: A**

---

Explanation:

The <img> tag is used to embed an image in an HTML page. Images are linked to HTML pages and are not technically inserted into an HTML page. The <img> tag creates a holding space for the referenced image. The <img> tag has two required attributes: src and alt. The <img> tag is supported in all major browsers. It is not required to put an end tag in HTML, but in XHTML, the <img> tag must be properly closed. The alt tag is acceptable for HTML, but it is required for XHTML. For example:

```

```

Answer: B is incorrect. This attribute specifies the URL of an image.

Answer: D is incorrect. In XHTML documents, this attribute specifies a language code for the content in an element.

Answer: C is incorrect. This attribute specifies a unique id for an element.

---

**Question: 31**


---

Which of the following files will you use to identify system specific information to reduce future compilation changes

to the application?

Each correct answer represents a complete solution. Choose all that apply.

- A. Web.config
- B. Trace.axd
- C. Global.asax
- D. Machine.config

---

**Answer: A and D**

---

Explanation:

The Web.config and Machine.config files will be used to identify system specific information to reduce future compilation changes to the application. Web.config is the main settings and configuration file for an ASP.NET Web application. The file is an XML document that defines configuration information regarding the Web application. It contains information that control module loading, security configuration, session state configuration, and application language and compilation settings. Web.config files can also contain application specific items, such as database connection strings. The example of Web.config is as follows:

```
<configuration>
  <system.web>
    <customErrors mode="off" defaultRedirect="mycustompage1.htm"/>
  </system.web>
</configuration>
```

The Machine.config file controls the configuration settings for the entire computer. It includes settings specific to a computer, such as built-in remoting channels, machine-wide assembly binding, and ASP .NET configuration settings. The configuration system first searches for APIs and ASP .NET settings in the machine.config file. The default configuration of the .NET Framework is declared in the Machine.config file.

Answer: C is incorrect. Global.asax is an optional file that contains code for responding to global events that occur in a Web application. There can be only one Global.asax file for an application. This file resides in the root directory of an ASP.NET application. External users cannot download or view the code written within the Global.asax file.

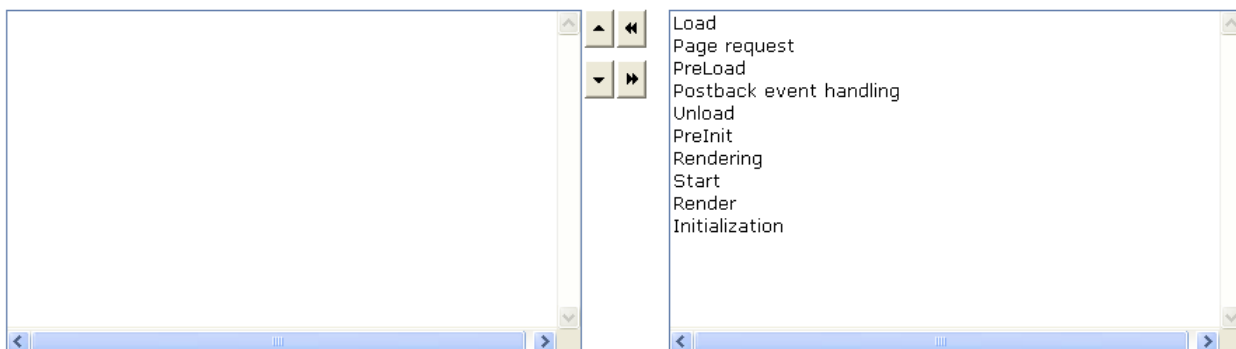
Answer: B is incorrect. Trace.axd is an Http Handler that can be used to view the trace details for an application. This file resides in the application's root directory. A request to this file through a browser displays the trace log of the last n requests in time-order, where n is an integer determined by the value set by requestLimit="[n]" in the application's configuration file.

---

### Question: 32

---

Choose and reorder in the correct sequence the stages of the page life cycle.

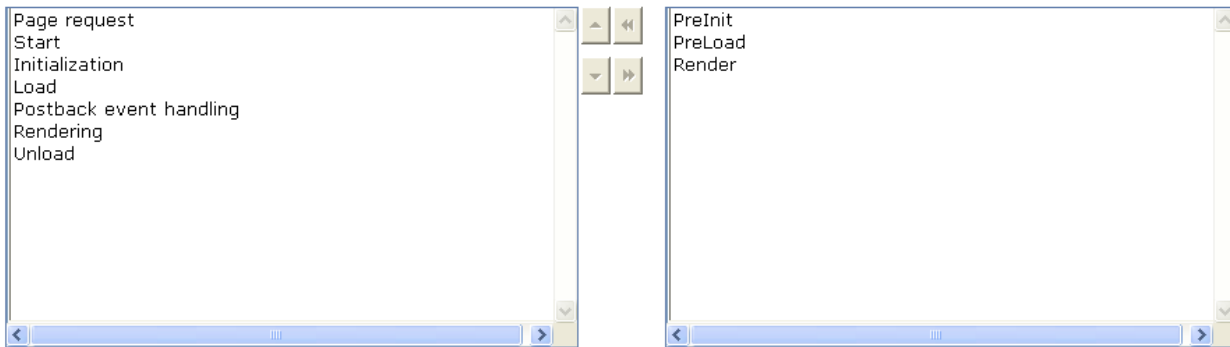



---

**Answer:**

---





Explanation: The page life cycle describes the stages that occur when a page is requested and when it is destroyed. Following are the stages of the page life cycle:

1. Page request: This stage occurs before the page life cycle begins. When the page is requested by a user, ASP.NET determines whether the page needs to be parsed and compiled or whether a cached version of the page can be sent in response without running the page.
2. Start: In this stage, the page properties such as Request and Response are set, and it determines whether the request is a postback or a new request and sets the IsPostBack property.
3. Initialization: In this stage, the controls on the page are available and each control's UniqueID property is set.
4. Load: In this stage, if the current request is a postback, control properties are loaded with information recovered from view state and control state.
5. Postback event handling: In this stage, if the request is a postback, control event handlers are called. After that, the Validate method of all validator controls is called, which sets the IsValid property of individual validator controls and of the page.
6. Rendering: Before this stage the view state is saved for the page and all controls. The page calls the Render method for each control, providing a text writer that writes its output to the OutputStream object of the page's Response property.
7. Unload: In this stage, the Unload event is raised after the page has been fully rendered, sent to the client, and is ready to be discarded. The page properties such as Response and Request are unloaded and cleanup is performed.

---

### Question: 33

---

Which of the following files controls the configuration settings for the entire computer and includes settings specific to a computer?

- A. Machine.config
- B. Web.config
- C. App.config
- D. Global.asax

---

**Answer: A**

---

Explanation:

The Machine.config file controls the configuration settings for the entire computer. It includes settings specific to a computer, such as built-in remoting channels, machine-wide assembly binding, and ASP .NET configuration settings. The configuration system first searches for APIs and ASP .NET settings in the machine.config file. The default configuration of the .NET Framework is declared in the Machine.config file.

Answer: B is incorrect. Web.config is the main settings and configuration file for an ASP.NET Web application. The file is an XML document that defines configuration information regarding the Web application. It contains information that control module loading, security configuration, session state configuration, and application language and compilation settings. Web.config files can also contain application specific items, such as database connection strings. The example of Web.config is as follows:

```
<configuration>
  <system.web>
    <customErrors mode="off" defaultRedirect="mycustompage1.htm"/>
  </system.web>
</configuration>
```

Answer: C is incorrect. The App.config (Application configuration) file is a .NET configuration file that consists of a chain of settings specific to a Windows application. This file is usually located in the root directory of the application that is being configured according to a particular computer. Generally, the application configuration files override the configuration settings in the Machine.config (Machine configuration) file.

---

### Question: 34

---

You work as a Web Application Developer for SunInfo Inc. The company uses Visual Studio 2008 as its application development platform. You create a Web application named Website1 using .NET Framework 3.5. You enable tracing by editing the Web.config file of your application. You have written the following code in Web.config:

```
<configuration>
<system.web>
  <trace enabled="true"
  pageOutput="true">
</system.web>
</configuration>
```

You want to view the entire log of your application. Which of the following actions will you perform to accomplish the task?

- A. Navigate to the Trace.aspx page on the Web application.
- B. Navigate to the Trace.axd page on the Web application.
- C. Navigate to the Trace.html page on the Web application.
- D. Navigate to the Trace.asmx page on the Web application.

---

**Answer: B**

---

Explanation:

You can view the trace output by navigating to the Trace.axd page on your application. This page shows a log event when pageOutput is set to true. The first page of the log contains a list of trace results that are in the cache. You can view the details of the trace record for a single page by clicking on one of the cache results.

Answer: A is incorrect. The Trace.aspx page represents a simple Web form and cannot show trace output for the entire log. However, if the trace attribute of the @ Page directive is set to true, tracing is enabled at the page level.

Answer: D is incorrect. The Trace.asmx page represents a Web service and does not show the trace output in the current scenario.

Answer: C is incorrect. The Trace.html page represents a simple html page and cannot show trace results.

---

### Question: 35

---

Which of the following controls enables a user to add scripts and services that are specific to nested components?

- A. UpdateProgress
- B. UpdatePanel
- C. ScriptManagerProxy
- D. Timer

---

**Answer: C**

---

Explanation:

The ScriptManagerProxy control enables a user to add scripts and services that are specific to nested components if a page already contains the ScriptManager control. Only one instance of the ScriptManager control can be added to a page. The page can include the control directly or indirectly inside a nested component such as a user control or nested master page. The ScriptManagerProxy control is used when the ScriptManager control is already in the page and a nested or parent component requires additional features of the ScriptManager control.

Answer: A is incorrect. The UpdateProgress control is used to provide status information of a partial-page update in the form of graphics or text. Multiple UpdateProgress controls can be used in a page where each control is associated with a different UpdatePanel control or a single UpdateProgress control can be associated with all UpdatePanel controls on the page. This is done by setting the AssociatedUpdatePanelID property of the UpdateProgress control. The information to be displayed is defined inside the ProgressTemplate tag of the UpdateProgress control. When a control inside an UpdatePanel causes a postback to the server, any associated UpdateProgress is displayed.

Answer: B is incorrect. The UpdatePanel control can be used to build rich, client-centric Web applications. It is a central part of AJAX functionality in ASP.NET. It can also be used to refresh chosen parts of the page rather than refreshing the entire page with a postback. This is referred to as performing a partial-page update. An ASP.NET Web page that holds a ScriptManager control and one or more UpdatePanel controls can automatically take part in partial-page updates, without custom client script.

Answer: D is incorrect. The Timer control is an AJAX server control that is used to perform postbacks at defined intervals. The Timer control can be used to post the complete page, or it can be used with the UpdatePanel control to perform partial-page updates at a defined interval.

---

**Question: 36**

---

Which of the following is the process of reusing existing active connections instead of creating new connections when a user makes a request to the database?

- A. Connection object
- B. Connection pooling
- C. Database connection
- D. LinqDataSource

---

**Answer: B**

---

Explanation:

Connection pooling is the process of reusing existing active connections instead of creating new connections when a user makes a request to the database. The connection manager is responsible for maintaining a pool of available connections. When the connection manager receives a request for a new connection, it checks the pool for the available connections. If a connection is available, it is returned, otherwise a new connection is created and returned, provided that the maximum pool size has not been reached.

Answer: C is incorrect. Database connection is a capability in computer science that permits client software to converse with database server software. A connection is necessary to send commands and receive answers.

Answer: A is incorrect. The Connection object is used to create an open connection to the data source. It is used to send queries and data to the data source and the information from the data source to an Application. Each connection object is designed to effectively connect to its specific data source. It does not store, update or fetch the data from the database.

Answer: D is incorrect. The LinqDataSource class is used to allow the use of LINQ in ASP.NET Web pages by using the markup text to fetch and modify the data from a data object. It uses LINQ to SQL to automatically generate the data commands. The data object can be either an in-memory data collection or an object that displays data from a

database. A user can fetch or alter the data without writing SQL commands for each operation.

---

**Question: 37**

---

Which of the following classes retrieves data from a data source and also resolves changes made to the DataSet back to the data source?

- A. DataSource
- B. DataTable
- C. DataAdapter
- D. DataReader

---

**Answer: C**

---

Explanation:

A DataAdapter in ADO.NET functions as a bridge between a data source, and a disconnected data class, such as a DataSet. It is used to specify SQL commands that provide elementary CRUD functionality. At a more advanced level it offers all the functions required in order to create Strongly Typed DataSets, including DataRelations.

Answer: A is incorrect. The DataSource class represents the location and grouping for a BaseProperty.

Answer: D is incorrect. DataReader is one of the .NET data providers of ADO.NET. It enables a user to read data in a sequential manner. A DataReader object retrieves only read-only and forward-only data and stores only one row of the data in memory at a time. The DataReader object enhances application performance by retrieving data fast when being requested.

ADO.NET infrastructure provides specific .NET data providers for many DataReader classes. They include the OLE DB .NET data provider for the OleDbDataReader class and the SQL Server .NET data provider for the SqlDataReader class.

Answer: B is incorrect. The DataTable class is used to represent one table of in-memory data. It is a central object in the ADO.NET library. Other objects, such as DataSet and DataView use the DataTable class. The DataTable class objects are conditionally case sensitive. If a user is creating a DataTable class object programmatically, he must first define its schema by adding DataColumn objects to the DataColumnCollection class. To add rows to a DataTable object, the user must first use the NewRow method to return a new DataRow object. The DataTable class also includes a collection of Constraint objects that can be used to ensure the integrity of the data.

---

**Question: 38**

---

Which of the following configuration files contains the ASP.NET settings that apply to the entire Web server and is used to control the configuration settings for the entire computer?

- A. Common.config
- B. Web.config
- C. Machine.config
- D. PolicyCache.config

---

**Answer: C**

---

Explanation:

The Machine.config file contains the ASP.NET settings that apply to the entire Web server. The Machine.config file controls the configuration settings for the entire computer. It includes settings specific to a computer, such as built-in remoting channels, machine-wide assembly binding, and ASP .NET configuration settings. The configuration system first searches for APIs and ASP .NET settings in the machine.config file. The default configuration of the .NET Framework is declared in the Machine.config file.

Answer: B is incorrect. Web.config is the main settings and configuration file for an ASP.NET Web application. The file is an XML document that defines configuration information regarding the Web application. It contains information that control module loading, security configuration, session state configuration, and application language and compilation settings. Web.config files can also contain application specific items, such as database connection strings.

Answer: A is incorrect. The Common.config file consists of three sections, namely <SystemURIs>, <DBConnectionStrings>, and <RetrySettings>.

Answer: D is incorrect. The TraceSessions.config file is used by the Enterprise Instrumentation Framework (EIF), which is used by the CSF.

---

### Question: 39

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Which of the following is a set of feature extension modules created by Microsoft for use with Microsoft Windows?

- A. Application Pool
- B. IIS
- C. Connection Pooling
- D. Windows Installer

---

**Answer: B**

---

Explanation:

Internet Information Services (IIS) formerly called Internet Information Server is a web server application and set of feature extension modules created by Microsoft for use with Microsoft Windows. It is the world's second most popular web server in terms of overall websites behind the industry leader Apache HTTP Server. As of March 2010, it served 24.47% of all websites on the Internet according to Netcraft. The protocols supported in IIS 7 include:

FTP, FTPS, SMTP, NNTP, and HTTP/HTTPS.

Answer: A is incorrect. An application pool is a collection of URLs that are served by a worker process or a set of worker processes. It limits process boundaries to separate applications and to prevent them from affecting another application on a Web server. Deploying applications in an application pool is the most important advantage of running IIS 6.0 in worker process isolation mode because the user can modify the application pool to get the amount of application isolation that he needed.

Answer: C is incorrect. Connection pooling is the process of reusing existing active connections instead of creating new connections when a user makes a request to the database. The connection manager is responsible for maintaining a pool of available connections. When the connection manager receives a request for a new connection, it checks the pool for the available connections. If a connection is available, it is returned, otherwise a new connection is created and returned, provided that the maximum pool size has not been reached.

Answer: D is incorrect. Windows Installer is a Windows component that helps users to install, update, and uninstall programs. It supports a file format with an .MSI extension (Windows Installer Package) that contains all the files and settings necessary to install an application. The Windows Installer package can be installed in one of the following ways:

Manually, by double clicking on the .MSI file from the computer on which a user wants to install a program.  
Automatically, through a script using the MsiExec.exe tool. By using the Group Policy Software Distribution.

---

### Question: 40

---

Which of the following folders contains reference contract files (.wsdl files), schemas (.xsd files), and discovery document files (.disco and .discomap files)?

- A. App\_Data
- B. App\_GlobalResource

- C. App\_WebReferences
- D. App\_Browsers

---

**Answer: C**

---

Explanation:

The App\_WebReferences folder holds the following:

Reference contract files (.wsdl files)

Schemas (.xsd files)

Discovery document files (.disco and .discomap files)

The App\_WebReferences folder defines a Web reference for these files to be used in an application.

Answer: B is incorrect. This folder contains .resx files that are not bound to a specific page.

Answer: A is incorrect. This folder contains Microsoft Access databases (.mdb files), XML files, and other data stored in local file.

Answer: D is incorrect. This folder contains browser definition files that ASP.NET uses to identify individual browsers and determine their capabilities.

---

### Question: 41

---

Which of the following classes is an in-memory cache of data retrieved from a data source that consists of a collection of DataTable objects that you can relate to each other with objects?

- A. DataRelation
- B. DataAdapter
- C. DataReader
- D. DataSet

---

**Answer: D**

---

Explanation:

DataSet is a memory-resident representation of data. It represents related tables, constraints, and relationships among the tables. DataSet reads and writes data and schema as XML documents. It is an in-memory cache of data retrieved from a data source that consists of a collection of DataTable objects that you can relate to each other with objects.

Answer: C is incorrect. DataReader is one of the .NET data providers of ADO.NET. It enables a user to read data in a sequential manner. A DataReader object retrieves only read-only and forward-only data and stores only one row of the data in memory at a time. The DataReader object enhances application performance by retrieving data fast when being requested. ADO.NET infrastructure provides specific .NET data providers for many DataReader classes. They include the OLE DB .NET data provider for the OleDbDataReader class and the SQL Server .NET data provider for the SqlDataReader class.

Answer: A is incorrect. The DataRelation class represents a parent/child relationship between two DataTable objects.

Answer: B is incorrect. A DataAdapter in ADO.NET functions as a bridge between a data source, and a disconnected data class, such as a DataSet. It is used to specify SQL commands that provide elementary CRUD functionality. At a more advanced level it offers all the functions required in order to create Strongly Typed DataSets, including DataRelations.

---

### Question: 42

---

You develop a Windows-based application using Visual Studio .NET. You want to deploy the application on a user's computer by using the ClickOnce technology. What deployment strategies can you use to deploy the application on a client computer? Each correct answer represents a part of the solution. Choose three.



- A. Install the application from a CD.
- B. Install the application from a client computer.
- C. Start the application from a Web or a network file share.
- D. Install the application from a Web server or a network file share.

---

**Answer: D, A, and C**

---

Explanation:

The three different deployment strategies for deploying a ClickOnce application are as follows:

The installation of a Windows-based application from a Web server or a network file share is one of the deployment strategies of the ClickOnce technology. In this deployment strategy, a user clicks an icon on a Web page or double-clicks an icon on the file share. The application is then downloaded, installed, and started on the client computer. This is the default deployment strategy and depends on network connectivity. It is useful to those users who have an access to a local-area network or a high-speed Internet connection while deploying applications.

The installation of a Windows-based application from a CD is a ClickOnce deployment strategy. This strategy is used to deploy the application to removable media such as a CD-ROM or DVD. This strategy is useful when no network connection is necessary for an application installation. It is also useful with low-bandwidth connections. One of the ClickOnce deployment strategies is to start a Windows-based application from a Web or a network file share. In this strategy, the application behaves like a Web application. The application starts when a user clicks a link on a Web page or double-clicks an icon on the file share. The strategy is more useful for those applications that are rarely used. In Visual Studio, this strategy is enabled by clicking the Do not install the application on the Install or Run From Webpage of the Publish Wizard.

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### Question: 43

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Which of the following statements is true about the control state client-based technique?

- A. It is not versatile, as custom adapters cannot be written to control the manner of storing control state data.
- B. It is not reliable to manage the state of controls, as it is not available if the view state is disabled at the page level.
- C. Unlike the view state, it cannot be disabled.
- D. It does not require any server resources, as it is stored in hidden fields on a Web page.

---

**Answer: C**

---

Explanation:

Control state is like View state but functionally independent. Control state retains control property information during multiple round trips to the server. The control state data is specific to a custom control and is retained even if the View state is disabled at the page level. Control state cannot be disabled and it is designed for storing a control's necessary data that must be available on postback to enable the control to function even when View state has been disabled. By default, the ASP.NET page framework stores Control state in the page in the same hidden element in which it stores View state. Use Control state only for small amounts of critical data that are necessary for the control across postbacks. Do not use control state as a substitute to View state. The following are the advantages of using control state client-based technique:

It does not require any server resources, as it is stored in hidden fields on a Web page.

It is more reliable to manage the state of controls, as it is available even if the view state is disabled at the page level. It is more versatile, as custom adapters can be written to control the manner of storing control state data.

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### Question: 44

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Which of the following options establishes a connection between an ASP.NET web page control and a data source?

- A. Data binding
- B. DataReader
- C. Data Conversion
- D. DataTemplate class

---

**Answer: A**

---

Explanation:

Data binding establishes a connection between an ASP.NET web page control and a data source. Data binding is the process in which a connection between the application UI and business logic will be established. The elements that are bound to the data reflect changes automatically if the binding has the correct settings and the data provides the proper notifications when the data changes its value. The underlying data can be automatically updated to reflect the change if an outer representation of the data in an element changes.

Answer: B is incorrect. DataReader does not help in establishing a connection between an ASP.NET web page control and a data source. DataReader is only a read-only representation of the data.

Data retrieved through the DataReader is forward-only, and once the data has been read, the DataReader is closed. The only way to access the data again is by opening another DataReader.

Answer: D is incorrect. The DataTemplate class does not help in establishing a connection between an ASP.NET web page control and a data source. The DataTemplate class is used to describe the visual structure of a data object. DataTemplate objects are mainly useful when binding an ItemsControl, such as binding a ListBox to a whole collection. Without specific instructions, a ListBox is used to display the string representation of the objects in a collection. DataTemplate can be used to define the appearance of the data objects. The content of the DataTemplate becomes the visual structure of the data objects.

Answer: C is incorrect. Data Conversion refers to the conversion of computer data from one format to another and thus does not help in establishing a connection between an ASP.NET web page control and a data source.

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### Question: 45

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Which of the following options are the building blocks of Microsoft .NET Framework applications and form the fundamental unit of deployment, version control, reuse, activation scoping, and security permissions?

- A. MSI files
- B. Connection objects
- C. Web services
- D. Assemblies

---

**Answer: D**

---

Explanation:

Assemblies are the building blocks of Microsoft .NET Framework applications and thus they form the fundamental unit of deployment, version control, reuse, activation scoping, and security permissions.

Answer: A is incorrect. MSI files contain the instructions and data required to install an application.

Answer: C is incorrect. Web services are typically application programming interfaces (API) or web APIs that are accessed via Hypertext Transfer Protocol and executed on a remote system hosting the requested services. Web services tend to fall into one of two camps: Big Web Services and RESTful Web Services.

Answer: B is incorrect. Connection objects are used to provide the capability to move data between a data store and an application.

---

**Question: 46**

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Which of the following events are initiated by actions performed on specific controls such as a Button control's Click event or a Textbox Control's TextChanged event?

- A. Session\_OnEnd
- B. Control
- C. Application
- D. Activated

---

**Answer: B**

---

Explanation:

Control events are initiated by actions performed on specific controls such as a Button control's Click event or a Textbox Control's TextChanged event.

Answer: D is incorrect. An Activated event occurs when an application becomes the foreground application.

Answer: A is incorrect. A Session\_OnEnd event is raised when a session is abandoned or expires.

Answer: C is incorrect. An Application event is invoked by an HttpApplication object during the lifetime of an application.

---

**Question: 47**

---

Which of the following attributes of the trace element is used to state whether tracing is enabled for an application?

- A. localOnly
- B. pageOutput
- C. enabled
- D. writeToDiagnosticsTrace

---

**Answer: C**

---

Explanation:

The enabled attribute of the trace element is an optional Boolean attribute. It is used to state whether tracing is enabled for an application. In order to use the Trace.axd viewer, it is necessary to enable tracing. By default, the Trace.axd viewer is added to the httpHandlers element. Its default value is set to false.

Answer: A is incorrect. The localOnly attribute of the trace element is an optional boolean attribute. It is used to identify whether the trace viewer is accessible only on the host Web server. If false, the trace viewer is accessible from any computer. By default, the trace viewer is added to the httpHandlers element. By default, the localOnly attribute is set to true.

Answer: D is incorrect. The writeToDiagnosticsTrace attribute of the trace element is an optional boolean attribute. It is used to identify whether ASP.NET Trace messages are forwarded to the System.Diagnostics tracing infrastructure. This applies to any listeners that are registered to display Trace messages. This attribute is new in .NET Framework version 2.0. By default, it is set to false.

Answer: B is incorrect. The pageOutput attribute of the trace element is an optional boolean attribute. It is used to identify whether trace output is rendered at the end of each page. If false, trace output is accessible all the way

through the trace utility only. By default, the pageOutput attribute is set to false.

---

**Question: 48**

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Which of the following is the process of establishing a connection between the application UI and business logic?

- A. Data conversion
- B. Data validation
- C. Data binding
- D. Template binding

---

**Answer: C**

---

Explanation:

Data binding is the process in which a connection between the application UI and business logic will be established. The elements that are bound to the data reflect changes automatically if the binding has the correct settings and the data provides the proper notifications when the data changes its value. The underlying data can be automatically updated to reflect the change if an outer representation of the data in an element changes.

Answer: D is incorrect. A template binding represents a relationship between a templateable element and a template. It is used to substitute actual parameters on the formal parameters of the template. It is a directed relationship from a bound templateable element to the template signature of the target template. Each binding owns a set of template parameter substitutions.

Answer: A is incorrect. It is the process in which the type of an object will be changed to another object. Answer: B is incorrect. It is the process of associating ValidationRules with your Binding object.

---

**Question: 49**

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Which of the following HTTP status codes represents the "Non-Authoritative Information" message?

- A. 206
- B. 204
- C. 205
- D. 203

---

**Answer: D**

---

Explanation:

The 203 HTTP status code represents the "Non-Authoritative Information" message.

The following table represents HTTP error messages:

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**Question: 50**

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Which of the following controls are client-side HTML elements and attributes that provide limited interaction with the user?

- A. Validation controls

- B. HTML controls
- C. Ajax extensions
- D. WebParts

---

**Answer: B**

---

Explanation:

HTML controls are client-side HTML elements and attributes that provide limited interaction with the user.

Answer: C is incorrect. Ajax extensions are used for client-side scripting support.

Answer: D is incorrect. WebParts enable users to personalize and manage pages from the browser.

Answer: A is incorrect. Validation controls are used for validating user input.

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**Question: 51**

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Which of the following classes is used to represent a business object that gives data to data-bound controls in multi-tier Web applications?

- A. LinqDataSource
- B. ObjectDataSource
- C. XmlDataSource
- D. SqlDataSource

---

**Answer: B**

---

Explanation:

The ObjectDataSource class is used to represent a business object. The business object gives data to data-bound controls in multi-tier Web applications. The ObjectDataSource class allows users to use an ASP.NET data source control while retaining their three-tier application architecture. The ObjectDataSource class makes use of reflection to construct instances of business objects and to call methods on them to insert, update, retrieve, and delete data. The ObjectDataSource class constructs and destroys an instance of the class for each method call. However, it does not contain the object in memory for the lifetime of the Web request.

Answer: C is incorrect. XmlDataSource represents an XML data source to the data-bound controls such as GridView and TreeView controls. Data-bound controls can use XmlDataSource to display both hierarchical data and tabular data. The XmlDataSource control extends the HierarchicalDataSourceControl class and works with hierarchical data. It also implements the IDataSource interface; hence, it works with tabular data, or list style data.

Answer: D is incorrect. The SqlDataSource represents a database connection that uses an ADO.NET provider such as SqlClient, Odbc, etc. The SqlDataSource control enables a Web server control to access data located in a relational database. The SqlDataSource control can be used with data bound controls such as GridView, FormView, and DetailsView to display and modify data on a Web page. It uses ADO.NET classes to interact with any database supported by ADO.NET, such as Microsoft SQL Server and Oracle.

---

**Question: 52**

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Which of the following statements best describes an MSI deployment?

- A. It copies the entire directory with the application and configuration files at one time.
- B. It specifies and edits user interface dialog boxes that are displayed during the application installation on the target computer.
- C. It creates a Microsoft Windows installer package with instructions and data to install an application.
- D. It publishes a non-updatable application to the Web server.

---

**Answer: C**

---

Explanation:

Windows Installer is a Windows component that helps users to install, update, and uninstall programs. It supports a file format with an .MSI extension (Windows Installer Package) that contains all the files and settings necessary to install an application.

The Windows Installer package can be installed in one of the following ways:

Manually, by double clicking on the .MSI file from the computer on which a user wants to install a program.

Automatically, through a script using the MsiExec.exe tool.

By using the Group Policy Software Distribution.

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**Question: 53**

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Which of the following is an optional file on the server that contains program code for handling session and application events?

- A. Trace.axd
- B. Global.asax
- C. Svcutil.exe
- D. App.config

---

**Answer: B**

---

Explanation:

Global.asax is an optional file that contains code for responding to global events that occur in a Web application. There can be only one Global.asax file for an application. This file resides in the root directory of an ASP.NET application. External users cannot download or view the code written within the Global.asax file.

Answer: C is incorrect. The Svcutil.exe tool stands for ServiceModel Metadata Utility Tool that is used to generate service model code from metadata documents and metadata documents from service model code. The Svcutil.exe tool can be found at the Windows SDK installation location, particularly at C. \Program Files\Microsoft SDKs\Windows\v6.0\Bin.

Answer: A is incorrect. Trace.axd is an Http Handler that can be used to view the trace details for an application. This file resides in the application's root directory. A request to this file through a browser displays the trace log of the last n requests in time-order, where n is an integer determined by the value set by requestLimit="[n]" in the application's configuration file.

Answer: D is incorrect. The App.config (Application configuration) file is a .NET configuration file that consists of a chain of settings specific to a Windows application. This file is usually located in the root directory of the application that is being configured according to a particular computer. Generally, the application configuration files override the configuration settings in the Machine.config (Machine configuration) file.

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**Question: 54**

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Which of the following statements correctly describe the differences between HTML and XML? Each correct answer represents a complete solution. Choose all that apply.

- A. XML is a W3C Recommendation and HTML is not.
- B. HTML defines only the Web display format of data through tags but XML defines the semantic information of data through tags.



- C. XML focuses on what data is and HTML focuses on how data looks.  
 D. HTML was designed to transport and store data and XML was designed to display data.

---

**Answer: C and B**

---

Explanation:

XML stands for Extensible Markup Language. It is a metamarkup language for developing text documents. This language allows developers and writers to invent the elements they need, as they need them. This language defines a generic syntax used to mark up data with simple, human-readable tags. The following table depicts the differences between HTML and XML:

XML	HTML
XML stands for Extensible Markup Language.	HTML stands for Hypertext Markup Language.
XML was designed to transport and store data.	HTML was designed to display data.
XML focuses on what data is.	HTML focuses on how data looks.
XML can define the semantic information of data through tags.	HTML defines only the Web display format of data through tags.
Tag names (element names) under XML can be used freely according to the well-formed document.	The name and meaning of each tag in HTML are already defined.

Answer: D is incorrect. XML was designed to transport and store data and HTML was designed to display data.

Answer: A is incorrect. Both, XML and HTML are W3C recommendations.

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### Question: 55

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Which of the following actions will prevent a Web page from complying with the XHTML standard?

- A. Using Cascading style sheets (CSS)  
 B. Using JavaScript  
 C. Using a table for page layout  
 D. Using Hypertext Markup Language (HTML)

---

**Answer: C**

---

Explanation:

Using a table for page layout will prevent a Web page from complying with the XHTML standard.

Answer: D is incorrect. HTML stands for Hypertext Markup Language. It is a set of markup symbols or codes used to create Web pages and define formatting specifications. The markup tells the Web browser how to display the content of the Web page.

Answer: A is incorrect. Cascading Style Sheets (CSS) is a style sheet language used to describe the presentation (that is, the look and formatting) of a document written in a markup language. Its most common application is to style Web pages written in HTML and XHTML, but the language can be applied to any kind of XML document, including SVG and XUL. Cascading style sheets (CSS) is used so that the Web site authors can exercise greater control on the appearance and presentation of their Web pages.

And also because CSS increases the ability to precisely point to the location and enhance the look of elements on a Web page and helps in creating special effects. Cascading Style Sheets contains code that is interpreted and applied by the browser on to the Web pages and their elements. There are three types of Cascading Style Sheets, which are as follows:

External Style Sheets

Embedded Style Sheets

Inline Style Sheets

Answer: B is incorrect. JavaScript is a simple, light weight, and dynamic World Wide Web (WWW) scripting language developed by Netscape Communications. The syntax of JavaScript resembles that of C++. JavaScript facilitates integration of HTML documents, Web components, and multimedia plug-ins. It also aids in the development of

server-side Web applications.

---

**Question: 56**

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Which of the following is a cache of database connections maintained by a database so that the connections can be reused when the database receives future requests for data?

- A. Database connection
- B. Connection object
- C. Connection pool
- D. Transaction object

---

**Answer: C**

---

Explanation:

A connection pool is a cache of database connections maintained by a database so that the connections can be reused when the database receives future requests for data. A connection pool is used to enhance the performance of executing commands on the database. It is used to open and maintain a database connection for each user. In a connection pool, when a connection is created, it is placed in the pool and it is used again so that a new connection does not need to be established. If all the connections are being used, a new connection is made and is added to the pool. Connection pool also cuts down the amount of time a user must wait to establish a connection to the database.

Answer: B is incorrect. The Connection object is used to create an open connection to the data source. It is used to send queries and data to the data source and the information from the data source to an Application. Each connection object is designed to effectively connect to its specific data source. It does not store, update or fetch the data from the database.

Answer: D is incorrect. A transaction object is used for allowing multiple SQL statements to be processed as a group. Each transaction object represents the DTC transaction. The transaction object exists for the life of the transaction. It should be released when the transaction completes. It is used to begin, commit, or roll back a transaction.

Answer: A is incorrect. Database connection is a capability in computer science that permits client software to converse with database server software. A connection is necessary to send commands and receive answers.

---

**Question: 57**

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Which of the following statements are true about the purpose of using an application pool? Each correct answer represents a complete solution. Choose all that apply.

- A. Determines the right to access a resource
- B. Improved security
- C. Decreases reliability and manageability of a Web infrastructure
- D. Improved server and application performance

---

**Answer: D and B**

---

Explanation:

An application pool is a collection of URLs that are served by a worker process or a set of worker processes. It limits process boundaries to separate applications and to prevent them from affecting another application on a Web server. Deploying applications in an application pool is the most important advantage of running IIS 6.0 in worker process isolation mode because the user can modify the application pool to get the amount of application isolation that he needed. An application pool is used for the following purposes:

- 1.Improved server and application performance: Administrators can assign resource-intensive applications to their

own application pools to isolate such applications and prevent them from hampering the performance of other applications.

2.Improved application availability: In case an application in a pool fails, it will not affect other applications in other pools.

3.Improved security: Through application isolation, administrators reduce the chance that one application will access the resources of another application.

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### Question: 58

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You work as a Software Developer for company Inc. The company uses Visual Studio.NET 2008 as its application development platform. You have recently finished development of an ASP.NET Web application using the .NET Framework 3.5. You are required to make a configuration setting change that will be global to all Web and Windows applications on the current computer. What will you do to accomplish this task?

- A. Make changes in the resource file.
- B. Make changes in the Web.config file.
- C. Make changes in the Machine.config file.
- D. Make changes in the Global.asax file.

---

**Answer: C**

---

Explanation:

You will make changes in the Machine.config file, to accomplish this task. The Machine.config file controls the configuration settings for the entire computer. It includes settings specific to a computer, such as built-in remoting channels, machine-wide assembly binding, and ASP .NET configuration settings. The configuration system first searches for APIs and ASP .NET settings in the machine.config file. The default configuration of the .NET Framework is declared in the Machine.config file.

Answer: D is incorrect. The Global.asax is an optional file that contains code for responding to global events that occur in a Web application. There can be only one Global.asax file for an application. This file resides in the root directory of an ASP.NET application. External users cannot download or view the code written within the Global.asax file.

Answer: A is incorrect. A resource file is an XML file that contains text based on the user's preferred language setting for the Web browser. A separate resource file can be created for each particular language or culture. The resource file is stored with a .resx extension in a Web application directory and is compiled dynamically. The .resx file is compiled into a satellite assembly at runtime.

Answer: B is incorrect. The Web.config is an XML file that consists of a series of settings specific to an application. Whenever a new Web service project is created in Visual Studio .NET, the Web.config file is automatically created and added to the project. It contains a number of empty settings and text that explain each section and its use. Example of a minimal Web.config file is as follows:

```
<?xml version="1.0" encoding="utf-8" ?>
<configuration>
<system.web>
Add configuration setting here
</system.web>
</configuration>
```

Add the configuration settings of an ASP.NET application between the <system.web> and </system.web> lines.

---

### Question: 59

---

Which of the following is a mechanism for defining how to display elements of a Web page, including their characteristics such as fonts, borders, color, and size?

- A. CSS
- B. XML
- C. JavaScript
- D. HTML

---

**Answer: A**

---

Explanation:

Cascading Style Sheets (CSS) is a style sheet language used to describe the presentation (that is, the look and formatting) of a document written in a markup language. Its most common application is to style Web pages written in HTML and XHTML, but the language can be applied to any kind of XML document, including SVG and XUL.

Cascading style sheets (CSS) is used so that the Web site authors can exercise greater control on the appearance and presentation of their Web pages. And also because CSS increases the ability to precisely point to the location and enhance the look of elements on a Web page and helps in creating special effects. Cascading Style Sheets contains code that is interpreted and applied by the browser on to the Web pages and their elements. There are three types of Cascading Style Sheets, which are as follows:

External Style Sheets

Embedded Style Sheets

Inline Style Sheets

Answer: D is incorrect. HTML is used for primarily defining the content and layout of a Web document.

Answer: C is incorrect. JavaScript is a language that is used to make the Web pages interactive. The user can send and receive information with the use of JavaScript objects. JavaScript can be used to create image rollovers and validating forms. It can also be used to open a new browser window. It is placed in the HTML code by using the <script>...</script> tag pair. It was developed by Netscape in conjunction with Sun Microsystems.

Answer: B is incorrect. XML stands for Extensible Markup Language. It is a metamarkup language for developing text documents. This language allows developers and writers to invent the elements they need, as they need them. This language defines a generic syntax used to mark up data with simple, human-readable tags.

---

### Question: 60

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Which of the following Validation Web controls are special controls that allow you to write your own validation code to validate a control?

- A. DynamicValidator
- B. CompareValidator
- C. ValidationSummary
- D. CustomValidator

---

**Answer: D**

---

Explanation:

CustomValidator controls are special controls that allow you to write your own validation code to validate a control.

Answer: B is incorrect. It is used to compare an input control to a fixed value or another input control.

Answer: A is incorrect. It is used to catch exceptions identified in the data model during validation and to create a validation event on the Web page.

Answer: C is incorrect. It is used to report all validation errors.

---

### Question: 61

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Which of the following page events is raised after the start stage is complete and before the initialization stage begins?

- A. PreInit
- B. Init
- C. InitComplete
- D. LoadComplete

---

**Answer: A**

---

Explanation:

The Page.PreInit event is used to perform the following tasks:

It checks the IsPostBack property to decide whether this is the first time the page is being processed.

It creates or re-creates dynamic controls.

It sets a master page dynamically.

It sets the Theme property dynamically.

It reads or sets profile property values.

Answer: B is incorrect. The Page.Init event is raised only if all controls have been initialized and any skin settings have also been applied. The Init event of individual controls occurs before the Init event of the page. The Page.Init event can be used to read or initialize control properties.

Answer: C is incorrect. This event is raised at the end of the page's initialization stage.

Answer: D is incorrect. This event is raised at the end of the event-handling stage.

---

### Question: 62

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Which of the following is an attribute that needs to be set at the beginning of a program in order to monitor a Web page's life cycle?

- A. AutoEventWireup
- B. Server.Transfer
- C. Response.Redirect
- D. Global.asax

---

**Answer: A**

---

Explanation:

The AutoEventWireup attribute is an attribute of the @ Page directive. It determines whether the ASP.NET events are autowired. In other words, ASP.NET automatically connects the methods containing specific names, such as Page\_Init() and Page\_Load(), with the page events. If the attribute is set to true, the events autowiring is enabled. Otherwise, it is set to false.

Answer: B is incorrect. The Server.Transfer() method is used to navigate from one page to another. When the method is called, execution of the first page is terminated and execution of the second page begins. It passes the page information, such as input field values, to the second page. It means only the ASP built-in objects and the ASP Error object values are transferred from the first page to the second page. Any variables declared on the first page are not available on the second page. Use the IsCrossPagePostBack property of the first page object to determine whether the current page is posted from the Server.Transfer() method call. If the Server.Transfer() method is used, the IsCrossPagePostBack property value is false. If a cross-page posting is used, the IsCrossPagePostBack property value is true.

Answer: C is incorrect. Redirect is a method of the Response object. It is used to navigate through the server script. This method sends a redirect message to the browser, causing it to attempt to connect to a different URL. The

Response.Redirect method accepts the Uniform Resource Locator (URL) of the page, to which a user has to be redirected, as a parameter.

Syntax:

Response.Redirect URL

where, URL is the Uniform Resource Locator (URL) of the page to which a user has to be redirected.

Answer: D is incorrect. Global.asax is an optional file that contains code for responding to global events that occur in a Web application. There can be only one Global.asax file for an application. This file resides in the root directory of an ASP.NET application. External users cannot download or view the code written within the Global.asax file.

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### Question: 63

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Which of the following methods is typically used with input controls for two-way (updatable) binding?

- A. Bind
- B. Eval
- C. DataBind
- D. Validate

---

**Answer: A**

---

Explanation:

The Bind method supports read/write functionality to retrieve data-bound control values and submit the changes made back to the database. It is used to reference the bound data field to insert, edit, or delete data in the database or the data source.

Answer: B is incorrect. The Eval method is a static or read-only method that takes a data field value and returns it as a string. It is used as a property setting and references the bound data field to display data.

Answer: C is incorrect. The DataBind method resolves the data-binding expressions.

Answer: D is incorrect. The Validate method performs validation checks on a value.

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### Question: 64

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What are the various characteristics of AJAX?M Each correct answer represents a complete solution. Choose all that apply.

- A. It uses DOM for interacting with the page.
- B. It supports the data interchange between XML and XSLT.
- C. It uses COM for interacting with the page.
- D. It supports HTML and CSS standards-based presentation.
- E. It supports synchronous data retrieval with XMLHttpRequest.

---

**Answer: D, A, B, and E**

---

Explanation:

Asynchronous Javascript and XML (AJAX) is a combination of number of existing technologies, such as HTML, CSS, DOM, XML, XSLT, XMLHttpRequest, and JavaScript. It is used on the client-side for creating the interactive Web applications. The various characteristics of AJAX are as follows:

- 1.It supports HTML and CSS standards based presentation.
- 2.It uses DOM for interacting with the page.
- 3.It supports the data interchange between XML and XSLT.

4.It supports synchronous data retrieval with XMLHttpRequest.

Answer: C is incorrect. This is an invalid option.

---

**Question: 65**

---

Which of the following will you use for laying out a Web page for navigation?

- A. JavaScript
- B. HTML
- C. Table
- D. CSS

---

**Answer: D**

---

Explanation:

The use of CSS is now the standard technique for laying out a Web page with the division element. Using CSS for page layout will allow the Web page to comply with the XHTML standard. Cascading Style Sheets (CSS) is a style sheet language used to describe the presentation (that is, the look and formatting) of a document written in a markup language. Its most common application is to style Web pages written in HTML and XHTML, but the language can be applied to any kind of XML document, including SVG and XUL.

Cascading style sheets (CSS) is used so that the Web site authors can exercise greater control on the appearance and presentation of their Web pages. And also because CSS increases the ability to precisely point to the location and enhance the look of elements on a Web page and helps in creating special effects. Cascading Style Sheets contains code that is interpreted and applied by the browser on to the Web pages and their elements. There are three types of Cascading Style Sheets, which are as follows:

External Style Sheets

Embedded Style Sheets

Inline Style Sheets

Answer: A is incorrect. JavaScript is a simple, light weight, and dynamic World Wide Web (WWW) scripting language developed by Netscape Communications. The syntax of JavaScript resembles that of C++. JavaScript facilitates integration of HTML documents, Web components, and multimedia plug-ins. It also aids in the development of server-side Web applications.

Answer: B is incorrect. HTML stands for Hypertext Markup Language. It is a set of markup symbols or codes used to create Web pages and define formatting specifications. The markup tells the Web browser how to display the content of the Web page.

Answer: C is incorrect. Using a table for page layout will prevent the Web page from complying with the XHTML standard.

---

**Question: 66**

---

Which of the following controls enables AJAX functionality in ASP.NET and registers the script for the Microsoft AJAX Library with the page?

- A. UpdateProgress
- B. UpdatePanel
- C. ScriptManager
- D. Timer

---

**Answer: C**

---



Explanation:

The ScriptManager control is used to enable AJAX functionality in ASP.NET. It handles all ASP.NET AJAX resources on a page. This includes downloading Microsoft AJAX Library scripts to the browser and managing partial-page updates enabled by using UpdatePanel. By default, ScriptManager is used to register the script for the Microsoft AJAX Library with the page.

Answer: B is incorrect. The UpdatePanel control is a server control that enables a user to define areas of a page that should postback to the server without refreshing the whole page. This is known as partial-page update. This process is organized by the ScriptManager server control and the client PageRequestManager class. The partial-page updates are enabled by default, as the default value of the EnablePartialRendering property of the ScriptManager control is true. The controls postback to the server asynchronously when the partial-page updates are enabled.

Answer: A is incorrect. The UpdateProgress control is used to provide status information of a partial-page update in the form of graphics or text. Multiple UpdateProgress controls can be used in a page where each control is associated with a different UpdatePanel control or a single UpdateProgress

control can be associated with all UpdatePanel controls on the page. This is done by setting the AssociatedUpdatePanelID property of the UpdateProgress control. The information to be displayed is defined inside the ProgressTemplate tag of the UpdateProgress control. When a control inside an UpdatePanel causes a postback to the server, any associated UpdateProgress is displayed.

Answer: D is incorrect. The Timer control is an AJAX server control that is used to perform postbacks at defined intervals. The Timer control can be used to post the complete page, or it can be used with the UpdatePanel control to perform partial-page updates at a defined interval.

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### Question: 67

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Which of the following statements correctly describe the features of XML? Each correct answer represents a complete solution. Choose all that apply.

- A. XML is excellent for long-term data storage and data reusability.
- B. XML handles data in a graph structure having multiple root elements.
- C. XML is an excellent tool for handling data with a complex structure or a typical data.
- D. XML allows the author to define his own tags and his own document structure.
- E. XML does not do anything and it does not have any predefined tags.

---

**Answer: D, C, A, and  
E**

---

Explanation:

XML stands for Extensible Markup Language. It is a markup language for developing text documents. Following are the features of XML:

- 1.XML is an excellent tool for handling data with a complex structure or a typical data.
- 2.In XML data is described using markup language.
- 3.XML does not do anything itself as it was created to structure, store, and transport information and data.
- 4.XML has no predefined tags.
- 5.XML is an excellent tool for long-term data storage and data reusability.
- 6.XML provides the text data description.
- 7.XML allows the author to define his own tags and his own document structure.
- 8.XML provides a human and computer-friendly format.
- 9.XML handles data in a tree structure having one and only one root element.

Answer: B is incorrect. XML handles data in a tree structure having one-and only one-XML root element. In XML, only one root element must exist, giving XML a single "tree structure" always having a single root element at the top.

---

**Question: 68**

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Which of the following are used to enhance the client capabilities of standard ASP.NET Web server controls to provide a richer user experience in the browser?

- A. ChildrenAsTriggers
- B. UpdateProgress
- C. Extender controls
- D. Client-side libraries

---

**Answer: C**

---

Explanation:

AJAX extender controls are used to enhance the client capabilities of standard ASP.NET Web server controls. A user can target standard Web server controls such as TextBox controls, Button controls, and Panel controls by using one or more extender controls to provide a richer user experience in the browser.

Answer: A is incorrect. The ChildrenAsTriggers property is used to set a value that indicates whether postbacks from immediate child controls of an UpdatePanel control update the panel's content. This property is set to true if a user wants postbacks from immediate child controls of the UpdatePanel control to cause an update of the panel's content.

Answer: B is incorrect. The UpdateProgress control is used to provide status information of a partial-page update in the form of graphics or text. Multiple UpdateProgress controls can be used in a page where each control is associated with a different UpdatePanel control or a single UpdateProgress control can be associated with all UpdatePanel controls on the page. This is done by setting the AssociatedUpdatePanelID property of the UpdateProgress control. The information to be displayed is defined inside the ProgressTemplate tag of the UpdateProgress control. When a control inside an UpdatePanel causes a postback to the server, any associated UpdateProgress is displayed. Answer: D is incorrect. Client-side libraries are those libraries that hold client-side programming code that runs on a browser.

---

**Question: 69**

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Which of the following is an alternative to the Web site project and is used to build a model that creates a single assembly for the whole project?

- A. GAC
- B. Web setup project
- C. Web Application Project
- D. Assembly

---

**Answer: C**

---

Explanation:

A Web application project type is an alternative to the Web site project. It uses a build model that creates a single assembly for the whole project. A Web application project type is used to enable scenarios where Visual Studio 2008 Web projects are different than in the previous version of Visual Studio. It is an alternative project type that a user might choose depending on his requirements and his preferred development workflow.

Answer: B is incorrect. A Web setup project installs files into a Virtual Root directory on a Web server.

Answer: A is incorrect. Global assembly cache (GAC) is a machine-wide cache. It stores assemblies that are designed to be shared amongst multiple applications on a computer. All assemblies stored in the global assembly cache must have strong names.

Answer: D is incorrect. Assemblies allow users to create external, user-defined functions using any common language runtime (CLR) language, such as Microsoft Visual Basic .NET or Microsoft Visual C#. It is possible to extend the

business functionality of DMX and MDX.

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**Question: 70**

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You work as a Windows Application Developer for company Inc. The company uses Visual Studio .NET 2008 as its application development platform. You create a Windows Forms application using .NET Framework 3.5. The application contains a data-bound control. You want to display both hierarchical and tabular data by using the data-bound control. Which of the following GUI-based data source classes will you use to accomplish the task?

- A. XmlDataSource
- B. LinqDataSource
- C. ObjectDataSource
- D. SqlDataSource

---

**Answer: A**

---

Explanation:

You will use the XmlDataSource class to accomplish this task. The XmlDataSource class is used to provide an XML data source to data-bound controls. It can be used by data-bound controls to exhibit both hierarchical and tabular data. It is normally used to exhibit hierarchical XML data in read-only states.

Since the XmlDataSource class is inherited from the HierarchicalDataSourceControl class, it works with hierarchical data. It also implements the IDataSource interface and works with tabular or list-style data.

Answer: D is incorrect. The SqlDataSource class is used to represent a SQL database to data-bound controls. It can be used with a data-bound control to get data from a relational database as well as to edit, display, and sort data on a Web page with least or no code. The SqlDataSource class can support any SQL relational database that can be connected using the ADO.NET provider, such as the SqlClient, OleDb, Odbc, or OracleClient providers.

Answer: C is incorrect. The ObjectDataSource class is used to represent a business object. The business object gives data to data-bound controls in multi-tier Web applications. The ObjectDataSource class allows users to use an ASP.NET data source control while retaining their three-tier application architecture. The ObjectDataSource class makes use of reflection to construct instances of business objects and to call methods on them to insert, update, retrieve, and delete data. The ObjectDataSource class constructs and destroys an instance of the class for each method call. However, it does not contain the object in memory for the lifetime of the Web request.

Answer: B is incorrect. The LinqDataSource class is used to allow the use of LINQ in ASP.NET Web pages by using the markup text to fetch and modify the data from a data object. It uses LINQ to SQL to automatically generate the data commands. The data object can be either an in-memory data collection or an object that displays data from a database. A user can fetch or alter the data without writing SQL commands for each operation.

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**Question: 71**

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Which of the following classes belongs to the family of data source controls in the ASP.NET framework, which enables a declarative data-binding model against a range of underlying data stores?

- A. XmlDataSource
- B. SqlDataSource
- C. ObjectDataSource
- D. LinqDataSource

---

**Answer: A**

---

Explanation:

XmlDataSource belongs to the family of data source controls in the ASP.NET framework, which enables a declarative data-binding model against a range of underlying data stores. The XmlDataSource class is used to provide an XML data source to data-bound controls. It can be used by data-bound controls to exhibit both hierarchical and tabular data. It is normally used to exhibit hierarchical XML data in read-only states. Since the XmlDataSource class is inherited from the HierarchicalDataSourceControl class, it works with hierarchical data. It also implements the IDataSource interface and works with tabular or list-style data.

Answer: B is incorrect. The SqlDataSource class is used to represent a SQL database to data-bound controls. It can be used with a data-bound control to get data from a relational database as well as to edit, display, and sort data on a Web page with least or no code. The SqlDataSource class can support any SQL relational database that can be connected using the ADO.NET provider, such as the SqlClient, OleDb, Odbc, or OracleClient providers.

Answer: D is incorrect. The LinqDataSource class is used to allow the use of LINQ in ASP.NET Web pages by using the markup text to fetch and modify the data from a data object. It uses LINQ to SQL to automatically generate the data commands. The data object can be either an in-memory data collection or an object that displays data from a database. A user can fetch or alter the data without writing SQL commands for each operation.

Answer: C is incorrect. The ObjectDataSource class is used to represent a business object. The business object gives data to data-bound controls in multi-tier Web applications. The ObjectDataSource class allows users to use an ASP.NET data source control while retaining their three-tier application architecture. The ObjectDataSource class makes use of reflection to construct instances of business objects and to call methods on them to insert, update, retrieve, and delete data. The ObjectDataSource class constructs and destroys an instance of the class for each method call. However, it does not contain the object in memory for the lifetime of the Web request.

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### Question: 72

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Which of the following events is a session event that is triggered when a user who does not have an open session opens a page on a site?

- A. OnEnd
- B. Init
- C. OnStart
- D. PreInit

---

**Answer: C**

---

Explanation:

The onStart event is a session event that is triggered when a user who does not have an open session opens a page on a site.

Answer: A is incorrect. The onEnd session event is triggered when a session is terminated.

Answer: D is incorrect. It is a page event and is raised after the start stage is complete and before the initialization stage begins.

Answer: B is incorrect. It is a page event and is raised after all controls have been initialized and any skin settings have been applied. The Init event of individual controls occurs before the Init event of the page.

---

### Question: 73

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Which of the following objects enables a Web developer to work with SQL server, OLEDB, ODBC, or Oracle database?

- A. Enlistment object
- B. Export object
- C. Connection object
- D. Transaction object

---

**Answer: C**

---

Explanation:

The Connection object is used to create an open connection to the data source. It is used to send queries and data to the data source and the information from the data source to an Application. Each connection object is designed to effectively connect to its specific data source. It does not store, update or fetch the data from the database. Connection object enables a Web developer to work with SQL server, OLEDB, ODBC, or Oracle database.

Answer: D is incorrect. A transaction object is used for allowing multiple SQL statements to be processed as a group. Each transaction object represents the DTC transaction. The transaction object exists for the life of the transaction. It should be released when the transaction completes. It is used to begin, commit, or roll back a transaction.

Answer: A is incorrect. The enlistment object represents the relationship between a resource manager and a transaction object on which the resource manager has enlisted.

Answer: B is incorrect. The export object represents a connection between an RM proxy and a resource manager.

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**Question: 74**

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Which of the following elements stores file paths, XML Web service URLs, or any information that is stored in the .ini file for an application?

- A. appSettings
- B. system.web
- C. configuration
- D. add

---

**Answer: A**

---

Explanation:

The appSettings element is used to store custom application configuration information, such as file paths, or XML Web service URLs. It can also be used to store any information that is stored in the .ini file for an application. The appSettings element contains the key/value pairs and can be accessed in code using the ConfigurationManager class.

Answer: C is incorrect. The configuration element specifies the required root element in every configuration file that is used by the common language runtime and the .NET Framework applications.

Answer: B is incorrect. The system.web element specifies the root element for the ASP.NET configuration settings in a configuration file and contains configuration elements that configure ASP.NET Web applications and control how the applications behave.

Answer: D is incorrect. The add element adds a custom application setting as a name/value pair to the application settings collection.

---

**Question: 75**

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Which of the following HttpContext objects provides properties and methods related to individual users or instances of a Website?

- A. Application
- B. Session
- C. Response
- D. Request

---

**Answer: B**

---

Explanation:

The session object is a top-level object from the HttpContext.Current object. It provides properties and methods related to individual users or instances of a Website. The Session object is used to store information or change settings for a user session. Session objects hold information about one single user in the form of variables, and are available to all pages in one application.

Answer: C is incorrect. The response object is the top level object in the HttpContext.Current object. It provides the properties and methods related to browser output. This object is used for the following two purposes:

1. Write text directly to the Web page using its response.
2. Redirect the browser to another page using its Response.Redirect method.

Answer: A is incorrect. The application object is a top-level object of HttpContext.Current. It contains properties and methods related to the currently running application. It is used to store and access variables from any page, and all users share one Application object. It holds information that will be used by many pages in the application, and the information can be accessed from any page. The information can also be modified in one place, and the changes will automatically be reflected on all pages.

Answer: D is incorrect. The request object is a top-level object in the HttpContext.Current object. It provides properties and methods related to the browser. It is used for retrieving information about the browser, reading cookies, and passing information directly from the Web page. This object can also be used with the Response object to display browser information on the Web page.

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### Question: 76

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Which of the following is a client-side scripting language?

- A. PHP
- B. XML
- C. JavaScript
- D. ASP

---

**Answer: C**

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Explanation:

JavaScript is a language that is used to make the Web pages interactive. The user can send and receive information with the use of JavaScript objects. JavaScript can be used to create image rollovers and validating forms. It can also be used to open a new browser window. It is placed in the HTML code by using the <script>... </script> tag pair. It was developed by Netscape in conjunction with Sun Microsystems. JavaScript is a language that is used to make Web pages interactive. It provides the following benefits:

1. A user can send and receive information with the use of JavaScript objects.
2. It is very useful for creating interactive Web pages or Web sites.
3. It helps in adding dynamic functionality to Web sites.
4. It has the ability to instantly notify users in case there is any mistake in input data.
5. It can be used or executed with ease without pre-compilation because it is an interpreted language.
6. The use of simple syntax and rules makes it a popular Client-side scripting language.
7. A new JavaScript form known as Visual JavaScript is a component-based visual development tool for the Netscape Open Network Environment. It is used by programmers who want to build cross-platform Web-based applications.
8. The newer version of JavaScript incorporates built-in Generators and Iterators.

Answer: B is incorrect. XML stands for Extensible Markup Language. It is a metamarkup language for developing text documents. This language allows developers and writers to invent the elements they need, as they need them. This language defines a generic syntax used to mark up data with simple, human-readable tags.

Answer: A and D are incorrect. These are server-side scripting languages.

---

**Question: 77**

---

You work as a Software Developer for company Inc. The company uses Visual Studio.NET 2008 as its application development platform. You have recently finished development of an ASP.NET Web application using the .NET Framework 3.5. You want to build the application and deploy it to a remote server. You employ VPN to connect to the remote server's network. You can access the folder where you want to deploy the application. Front Page Server Extensions are not installed on the remote server. You are required to make use of Microsoft Visual Studio 2008 to deploy the application. You need to ensure that source code files cannot be accessed by the application. What will you do?

- A. Use the Publish Web Site utility and choose the Remote Site option.
- B. Use the Copy Web Site tool and choose the Remote Site option.
- C. Use the Publish Web Site utility and choose the File System option.
- D. Use the Copy Web Site tool and choose the File System option.

---

**Answer: C**

---

Explanation:

You will use the Publish Web Site utility and choose the File System option. This allows you to compile and deploy the application to a local directory, network drive, or file share. The Publish Web Site utility pre-compiles the content of a Web site, including Web pages and code, and copies the output to a directory or to a specified server. It performs the following tasks:

It pre-compiles source code, pages in the App\_Code folder, and so on, into executable output.

It saves the executable output to a target folder.

A user can publish directly either as part of the pre-compilation process, or pre-compile locally, and then copy the files. This utility compiles the Web site and strips the source code out of the files, leaving only stub files for the pages and compiled assemblies. When the user requests pages, ASP.NET executes the request from the pre-compiled assemblies. The utility is not available in Visual Web Developer Express Edition.

Answer: D and B are incorrect. You will not choose the Copy Web Site tool. This tool copies project files, which include source code, to a target location. The Copy Web Site tool allows a user to copy files between the current Web site and another site. It is like an FTP utility but varies in the following ways:

It allows the user to connect to and copy files between any types of Web sites the user can create in Visual Studio, including IIS, local, remote, and FTP Web sites. It has a synchronization feature, which inspects the files on both sites and ensures that all the files are up-to-date. The user can use this tool to move files from a local computer to a staging server. This tool is particularly handy in situations where the user cannot open files from the remote site to edit them.

Answer: A is incorrect. You will not use the Publish Web Site utility and choose the Remote Site option. This option needs the server that has Front Page Server Extensions installed.

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**Question: 78**

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Which of the following is a process that determines whether an identity should be granted access to a specific resource?

- A. Authorization
- B. Authentication
- C. Impersonation
- D. Client-side scripting

---

**Answer: A**

---



Explanation:

Authorization is a process that verifies whether a user has permission to access a Web resource. A Web server can restrict access to some of its resources to only those clients that log in using a recognized username and password. To be authorized, a user must first be authenticated.

Answer: B is incorrect. Authentication is the act of establishing or confirming something (or someone) as authentic, i.e., the claims made by or about the subject are true ("authentication" is a variant of this word).

Answer: C is incorrect. Impersonation is a technique that allows the .NET process to act as an authenticated user or as an arbitrarily specified user. For this purpose, an authenticated token is passed to a .NET application for authenticating a user, or an unauthenticated token is passed to the .NET application for not authenticating the user. The .NET application impersonates receive token only if impersonation is enabled. Impersonation is applied only to those applications where .NET is used to communicate with a server.

Answer: D is incorrect. Client-side scripting is the technology for embedding a scripting language in the core code, to act as control code.

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### Question: 79

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Which of the following CSS selectors is used to specify a style for a single, unique element and is defined with a "#"?

- A. Class
- B. Id
- C. Type
- D. Universal

---

**Answer: B**

---

Explanation:

The id selector is used to specify a style for a single, unique element. It uses the id attribute of the HTML element, and is defined with a "#". For example, id="id1":

```
#id1
{
text-align:center;
color:green;
}
```

Answer: C is incorrect. A type selector matches every instance of the element type in the document tree.

Answer: A is incorrect. The class selector is used to specify a style for a group of elements. It can be used on several elements. It allows a user to set a particular style for many HTML elements with the same class. It uses the HTML class attribute and is defined with a "." For example, all t elements with class="center" will be center-aligned:

```
t.center {text-align:center;}
```

Answer: D is incorrect. The universal selector matches the name of any element type. It matches any single element in the document tree.

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### Question: 80

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Which of the following properties enables a user to update regions of the page individually by using UpdatePanel controls?

- A. EnableScriptGlobalization
- B. IsInAsyncPostBack
- C. EnableScriptLocalization

D. EnablePartialRendering

---

**Answer: D**

---

Explanation:

The EnablePartialRendering property of the ScriptManager control is used to determine whether a page participates in partial-page updates. The default value of this property is true. When a user adds a ScriptManager control to the page, by default partial-page rendering is enabled. This property enables partial rendering of a page, which in turn enables a user to update regions of the page individually by using UpdatePanel controls.

Answer: A is incorrect. This property indicates whether the ScriptManager control renders script that supports parsing and formatting of culture-specific information.

Answer: C is incorrect. This property indicates whether the ScriptManager control renders localized versions of the script file.

Answer: B is incorrect. This property indicates whether the current postback is being executed in partial-rendering mode.

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**Question: 81**

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Which of the following is the difference between custom controls and user controls?

- A. Custom controls are good for static content, and user controls are good for dynamic content.
- B. Custom controls cannot be added to the Toolbox in Visual Studio, and user controls can be added to the Toolbox in Visual Studio.
- C. User controls are added in the source form (.ascx) along with the source code of the application, and custom controls are added in the application's Bin directory or in the global assembly cache.
- D. User controls are designed for multiple applications, and custom controls are designed for an application.

---

**Answer: C**

---

Explanation:

The main differences between user control and custom control are as follows:

User control	Custom control
It is designed for one application.	It is designed for multiple applications.
It is added in the source form (.ascx) along with the source code of the application.	It is added in the application's Bin directory or in the global assembly cache.
It is easier to create. It is created in a similar way as Web forms are created.	It is harder to create. It involves writing lots of code, as there is no designer support.
It is good for static content.	It is good for dynamic content.
It cannot be added to the Toolbox in Visual Studio.	It can be added to the Toolbox in Visual Studio.

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**Question: 82**

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What will you use to achieve the following benefits?

1. Web site managers and authors may share style sheets across a number of documents (and sites).
2. An author may change the style sheet without requiring modifications to the document.
3. A user agent may load style sheets selectively (based on media descriptions).

- A. Inline style sheet
- B. HTML
- C. Internal style sheet
- D. External style sheet

---

**Answer: D**

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Explanation:

An external style sheet is used when the style is applied to multiple pages. A user can change the look of an entire Web site by using an external style sheet. Each page must link to the style sheet using the <link> tag. Following are the benefits of using the external style sheet:

1. Web site managers and authors may share style sheets across a number of documents (and sites).
2. Authors may change the style sheet without requiring modifications to the document.
3. User agents may load style sheets selectively (based on media descriptions).

Answer: C is incorrect. An internal style sheet is used when a single document has a unique style and you want to define internal styles in the head section of an HTML page by using the <style> tag.

Answer: A is incorrect. An inline style loses many of the advantages of style sheets by mixing content with presentation, but it is embedded within HTML and overrides all other style sheet settings.

Answer: B is incorrect. HTML stands for Hypertext Markup Language. It is a set of markup symbols or code used to create Web pages and define formatting specifications. The markup tells the Web browser how to display the content of the Web page.

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### Question: 83

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Which of the following uses an authentication ticket that is created when a user logs on to a site in order to track the user throughout the site?

- A. Impersonation
- B. Windows authentication
- C. Forms authentication
- D. Authorization

---

**Answer: C**

---

Explanation:

Forms authentication is an authentication process in which an authentication ticket is created when a user logs on to a site in order to track the user throughout the site. The FormsAuthenticationModule class handles the forms authentication processing, which is an HTTP module that participates in the regular ASP.NET page-processing cycle.

Answer: A is incorrect. Impersonation is a technique that allows the .NET process to act as an authenticated user or as an arbitrarily specified user. For this purpose, an authenticated token is passed to a .NET application for authenticating a user, or an unauthenticated token is passed to the .NET application for not authenticating the user. The .NET application impersonates receive token only if impersonation is enabled. Impersonation is applied only to those applications where .NET is used to communicate with a server.

Answer: D is incorrect. Authorization determines whether an identity should be granted access to a specific resource. In ASP.NET, there are two ways to authorize access to a given resource.

Answer: B is incorrect. Windows Authentication allows users to authenticate using Active Directory credentials. It provides the highest level of security because it uses the Kerberos security protocol for authentication. It is installed in the SQL Server by default, but this can be changed in a customized installation.

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### Question: 84

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You work as a Software Developer for company Inc. The company uses Visual Studio.NET 2008 as its application development platform. You have recently finished development of an ASP.NET Web application using the .NET Framework 3.5. The application is deployed on the IIS 6.0 Web server by using the default ASP.NET 2.0 application pool and Windows Authentication. The ASP.NET application is capable of uploading files to a location on a different

server. Users get an access denied error message when they try to submit a file. You are required to amend the Web.config file to accomplish this task. What will you do?

A. Add the following configuration to the Web.config file:

```
<authorization>
<allow users="*" />
</authorization>
```

B. Add the following configuration to the Web.config file:

```
<identity impersonate="false" />
```

C. Add the following configuration to the Web.config file:

```
<anonymousIdentification enabled="true" />
```

D. Add the following configuration to the Web.config file:

```
<identity impersonate="true" />
```

---

**Answer: D**

---

Explanation:

You will add the following configuration to the Web.config file:

```
<identity impersonate="true"/>
```

You will enable impersonation by setting the impersonate attribute of the identity element to true. The identity element is an ASP.NET Settings Schema.

It is used to configure the identity of a Web application. The identity element can be declared at any level in the configuration file hierarchy. Its syntax

is as follows:

```
<identity impersonate="true|false"
    userName="domain\username"
    password="<secure password>" />
```

The above syntax includes a password to show how the syntax works. In applications, it is recommended to use a secure password. The impersonate attribute of the <identity> element specifies whether or not client impersonation is used on each request. The impersonate attribute can be set either to true or false. It is set to true when client impersonation is used. Otherwise, it is false. Impersonation is a technique that allows the .NET process to act as an authenticated user or as an arbitrarily specified user. For this purpose, an authenticated token is passed to a .NET application for authenticating a user, or an unauthenticated token is passed to the .NET application for not authenticating the user. The .NET application impersonates receive token only if impersonation is enabled. Impersonation is applied only to those applications where .NET is used to communicate with a server.

Answer: C is incorrect. The anonymousIdentification Element is an ASP.NET Settings Schema. It is used to configure anonymous identification for an application authorization. It is also required for identifying entities that are not authenticated when authorization is needed. Its syntax is as follows:

```
<anonymousIdentification
    enabled="[true | false]"
    cookieless="[UseUri | UseCookies | AutoDetect | UseDeviceProfile]"
    cookieName=""
    cookiePath=""
    cookieProtection="[None | Validation | Encryption | All]"
    cookieRequireSSL="[true | false]"
    cookieSlidingExpiration="[true | false]"
    cookieTimeout="[DD.HH:MM:SS]"
    domain="cookie domain"
/>
```

Answer: B is incorrect. In order to accomplish this task, the impersonate attribute should be set to true.

Answer: A is incorrect. The <authorization> element is used to configure ASP.NET authorization support. It contains <allow> and <deny> sub elements. These sub elements are used to allow or deny access to a resource based on specific users or roles.

1.<allow> element: The <allow> element is used to allow access to a resource based on specific users or roles. This element can be used with the following attributes:

The users attribute: The users attribute of the <allow> element is used to specify user names that are allowed access to a resource. Setting this attribute to "\*" allows all users to access the application. Setting it to "?" allows only anonymous users to access the application.

The roles attribute: The roles attribute of the <allow> element is used to specify a comma-separated list of roles that are granted access to a resource.

2.<deny> element: The <deny> element is used to deny access to a resource based on specific users or roles. This element can be used with the following attributes:

The users attribute: The users attribute of the <deny> element is used to specify user names that are denied access to a resource. Setting the users attribute to "\*" will deny all users from accessing the application. Setting this attribute to "?" will deny anonymous or unauthorized users from accessing the application.

The roles attribute: The roles attribute of the <deny> element is used to specify a comma-separated list of roles that are denied access to a resource.

---

### Question: 85

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Which of the following directives is used to define page-specific attributes that are used by the Web page parser and compiler?

- A. @Control directive
- B. @Include directive
- C. @ServiceHost directive
- D. @Page directive

---

**Answer: D**

---

Explanation:

The @Page directive is used to define page-specific attributes that are used by the Web page parser and compiler. The @ Page directive is a directive syntax of a Web page. It is used to define page-specific attributes that are used by the Web page parser and compiler. Some commonly used attributes of the @ Page directive are AutoEventWireup, CodeBehind, CodeFile, Inherits, and Language. The syntax of the @ Page directive is as follows:

```
<%@ Page attribute="value" [attribute="value"...] %>
```

Answer: A is incorrect. The @ Control directive is a directive syntax of a Web Forms page. It is used to define user-control specific attributes that are used by the ASP.NET page parser and compiler. The directive is used only with user controls. Some commonly used attributes of the @ Control directive are Language, AutoEventWireup, ClassName, and Inherits. The syntax of the @ Page directive is as follows:

```
<%@ Control attribute="value" [attribute="value" ... ] %>
```

Answer: C is incorrect. The @ServiceHost directive is used to associate the service host factory with the WCF service to be hosted. This directive is required to access or compile the service hosting code provided in a .svc file.

Answer: B is incorrect. The include directive inserts code of the included file into a JSP page at translation time, i.e., when the JSP page is compiled. This include mechanism is also known as static include. The included file can be a JSP page, an HTML file, a text file, or Java code. If any change is made in the included file, the JSP page has to be recompiled. The syntax of the include directive is as follows:

```
<%@ include file="path" %>
```

Here, path is the relative path of the file to be included.

---

**Question: 86**

---

Which of the following is the main reason for having a strong name for an assembly?

- A. It is used in the interpreter.
- B. It is used at runtime to locate the assembly.
- C. It is used to deploy an assembly into the Global Assembly Cache.
- D. It is used to provide security permissions.

---

**Answer: B**

---

Explanation:

Assemblies allow users to create external, user-defined functions using any common language runtime (CLR) language, such as Microsoft Visual Basic .NET or Microsoft Visual C#. It is possible to extend the business functionality of DMX and MDX. The functionality that a user wants into a library, such as dynamic link library (DLL), is first built. This library is then added as an instance of Analysis Services or to an Analysis Services database. The public methods in the library are then exposed as the user-defined functions to MDX and DMX expressions, procedures, calculations, actions, and client applications. Each assembly must have a strong name because it is used at runtime to locate the assembly. Global assembly cache (GAC) is a machine-wide cache. It stores assemblies that are designed to be shared amongst multiple applications on a computer. All assemblies stored in the global assembly cache must have strong names.

---

**Question: 87**

---

Which of the following page events will be raised after the Page object has created all controls that are required in order to render the page, including child controls of composite controls?

- A. PreRender
- B. Render
- C. SaveStateComplete
- D. PreRenderComplete

---

**Answer: A**

---

Explanation:

The Page.PreRender event is used for each and every control on a page. It is used to make ultimate changes to the contents of the page or its controls. However, before this event occurs, the following actions are performed:

The Page object calls the EnsureChildControls method for each and every control as well as for the page.

Each data bound control calls its DataBind method if DataSourceID property is set.

Answer: D is incorrect. The Page.PreRenderComplete event occurs before the page content is rendered. In other words, the PreRenderComplete event is raised when the pre-render stage of the page life cycle is complete. At this stage, all controls are created, any pagination needed is completed, and the page is all set to render to the output. The PreRenderComplete event is the last event that occurs before the page's view state is saved.

Answer: C is incorrect. The Page.SaveStateComplete event occurs after the View state and Control state of a page and Controls on the page are saved to the persistence standard. The state information for Controls on the page is saved after the PreRenderComplete event. It is the last event raised before the page is rendered to the requesting browser.

Answer: B is incorrect. The Page.Render event is not an event instead it is a stage of processing. The Page object calls the Page.Render method on each and every control. ASP.NET Web server controls contain a Render method that writes out the control's markup that is sent to the browser. A user control (.ascx file) automatically includes rendering, therefore, no need to explicitly render the control in code.

---

**Question: 88**

---

Which of the following is used to control and maintain the integrity and consistency of each action in a transaction even though errors may occur in the system?

- A. Global.asax
- B. Tracing.axd
- C. Trace.axd
- D. App.config

---

**Answer: C**

---

Explanation:

Trace.axd is an Http Handler that can be used to view the trace details for an application. This file resides in the application's root directory. A request to this file through a browser displays the trace log of the last n requests in time-order, where n is an integer determined by the value set by requestLimit="[n]" in the application's configuration file.

Answer: B is incorrect. There is no such file as Tracing.axd.

Answer: A is incorrect. Global.asax is an optional file that contains code for responding to global events that occur in a Web application. There can be only one Global.asax file for an application. This file resides in the root directory of an ASP.NET application. External users cannot download or view the code written within the Global.asax file.

Answer: D is incorrect. The App.config (Application configuration) file is a .NET configuration file that consists of a chain of settings specific to a Windows application. This file is usually located in the root directory of the application that is being configured according to a particular computer. Generally, the application configuration files override the configuration settings in the Machine.config (Machine configuration) file.

---

**Question: 89**

---

Which of the following options have DataSource and DataSourceID properties?

- A. Validation controls
- B. Data-bound controls
- C. WebParts
- D. Data-aware controls

---

**Answer: D**

---

Explanation:

Data-aware controls are those controls that are not bound to a specific data source and that have DataSource and DataSourceID properties.

Answer: B is incorrect. Data-bound controls are those controls that are bound to a specific data source.

Answer: C is incorrect. WebParts enable users to personalize and manage pages from the browser.

Answer: A is incorrect. Validation controls are used to validate user input.

---

**Question: 90**

---

Which of the following classes includes the intrinsic objects, Request and Response?

- A. HttpContextBase



- B. HttpCachePolicy
- C. HttpApplication
- D. HttpContext

---

**Answer: D**

---

Explanation:

The HttpContext class includes the intrinsic objects, Request and Response. It is also used to encapsulate all HTTP-specific information about an individual HTTP request.

Answer: A is incorrect. The HttpContextBase class is used to serve as the base class for all the classes that consist of HTTP information about an individual HTTP request.

Answer: B is incorrect. The HttpCachePolicy class consists of methods for setting cache-specific HTTP headers and is also used for controlling the ASP.NET page output cache functions.

Answer: C is incorrect. The HttpApplication class is used to define the methods, properties, and events that are similar to all application objects in an ASP.NET application.

---

### Question: 91

---

Which of the following tags are required for the web.config file so that it executes properly in an ASP.NET application? Each correct answer represents a complete solution. Choose all that apply.

- A. customErrors
- B. system.web
- C. configuration
- D. sessionState

---

**Answer: C and B**

---

Explanation:

Web.config is the main settings and configuration file for an ASP.NET Web application. The file is an XML document that defines configuration information regarding the Web application. It contains information that control module loading, security configuration, session state configuration, and application language and compilation settings. Web.config files can also contain application specific items, such as database connection strings. The example of Web.config is as follows:

```
<configuration>
  <system.web>
    <customErrors mode="off" defaultRedirect="mycustompage1.htm"/>
  </system.web>
</configuration>
```

Answer: A is incorrect. customErrors is not a required tag for the web.config file.

Answer: D is incorrect. sessionState is an invalid tag for the web.config file.

---

### Question: 92

---

Which of the following represents a database connection that uses an ADO.NET provider such as SqlClient or Odbc that enables a Web server control to access data located in a relational database?

- A. XmlDataSource
- B. SqlDataSource
- C. ObjectDataSource

## D. LinqDataSource

---

**Answer: B**


---

**Explanation:**

The SqlDataSource represents a database connection that uses an ADO.NET provider such as SqlClient, Odbc, etc. The SqlDataSource control enables a Web server control to access data located in a relational database. The SqlDataSource control can be used with data bound controls such as GridView, FormView, and DetailsView to display and modify data on a Web page. It uses ADO.NET classes to interact with any database supported by ADO.NET, such as Microsoft SQL Server and Oracle.

Answer: A is incorrect. XmlDataSource represents an XML data source to the data-bound controls such as GridView and TreeView controls. Data-bound controls can use XmlDataSource to display both hierarchical data and tabular data. The XmlDataSource control extends the HierarchicalDataSourceControl class and works with hierarchical data. It also implements the IDataSource interface; hence, it works with tabular data, or list style data.

Answer: C is incorrect. The ObjectDataSource class is used to represent a business object. The business object gives data to data-bound controls in multi-tier Web applications. The ObjectDataSource class allows users to use an ASP.NET data source control while retaining their three-tier application architecture. The ObjectDataSource class makes use of reflection to construct instances of business objects and to call methods on them to insert, update, retrieve, and delete data. The ObjectDataSource class constructs and destroys an instance of the class for each method call. However, it does not contain the object in memory for the lifetime of the Web request.

Answer: D is incorrect. The LinqDataSource class is used to allow the use of LINQ in ASP.NET Web pages by using the markup text to fetch and modify the data from a data object. It uses LINQ to SQL to automatically generate the data commands. The data object can be either an in-memory data collection or an object that displays data from a database. A user can fetch or alter the data without writing SQL commands for each operation.

---

**Question: 93**


---

Which of the following properties of the UpdatePanel control is used to set a value that indicates whether postbacks from immediate child controls of the UpdatePanel control update the panel's content?

- A. ContentTemplate
- B. EnablePartialRendering
- C. IsInPartialRendering
- D. ChildrenAsTriggers

---

**Answer: D**


---

**Explanation:**

The ChildrenAsTriggers property is used to set a value that indicates whether postbacks from immediate child controls of an UpdatePanel control update the panel's content. This property is set to true if a user wants postbacks from immediate child controls of the UpdatePanel control to cause an update of the panel's content.

Answer: A is incorrect. This property gets or sets the template that defines the content of the UpdatePanel control.

Answer: B is incorrect. The EnablePartialRendering property of the ScriptManager control is used to determine whether a page participates in partial-page updates. The default value of this property is true. When a user adds a ScriptManager control to the page, by default partial-page rendering is enabled. This property enables partial rendering of a page, which in turn enables a user to update regions of the page individually by using UpdatePanel controls.

Answer: C is incorrect. This property gets a value that indicates whether the UpdatePanel control is being updated as a result of an asynchronous postback.

---

**Question: 94**

---

Which of the following can be defined by an XML schema? Each correct answer represents a complete solution. Choose all that apply.

- A. Attributes that cannot appear in a document
- B. Default values for elements and attributes
- C. Data types for elements and attributes
- D. Elements that cannot appear in a document
- E. Fixed values for elements and attributes
- F. Number and order of child elements

---

**Answer: F, C, B, and E**

---

Explanation:

XML schema describes the structure of an XML document. It is an XML-based alternative to DTD. An XML Schema defines the following:

- 1.Elements that can appear in a document.
- 2.Attributes that can appear in a document.
- 3.Elements that are child elements.
- 4.Order of child elements.
- 5.Number of child elements.
- 6.Whether an element is empty or can include text.
- 7.Data types for elements and attributes.
- 8.Default and fixed values for elements and attributes.

Answer: D and A are incorrect. An XML schema never defines the elements and attributes that cannot appear in a document.

---

**Question: 95**

---

Which of the following HTTP error codes represents the "Bandwidth Limit Exceeded" server error message?

- A. 503
- B. 504
- C. 505
- D. 509

---

**Answer: D**

---

Explanation:

The 509 HTTP error code represents the "Bandwidth Limit Exceeded" server error message.

The following table represents the HTTP codes for server error messages:

Status Code	Message
500	Internal Server Error
501	Not Implemented
502	Bad Gateway
503	Service Unavailable
504	Gateway Timeout
505	HTTP Version Not Supported
509	Bandwidth Limit Exceeded

---

**Question: 96**


---

Which of the following classes provides objects that are constructed automatically for every request given to an ASP.NET application and destroyed when the request has been completed?

- A. HttpResponse
- B. HttpContext
- C. HttpServletUtility
- D. HttpRequest

---

**Answer: B**

---

Explanation:

The HttpContext class provides objects that are constructed automatically for every request given to an ASP.NET application and destroyed when the request has been completed.

Answer: D is incorrect. It is used to enable ASP.NET to read the HTTP values sent by a client during a Web request.

Answer: A is incorrect. It is used to encapsulate HTTP-response information from an ASP.NET operation.

Answer: C is incorrect. It is used to provide helper methods for processing Web requests.

---

**Question: 97**


---

What are the basic steps involved in the life cycle of a WFC application? Each correct answer represents a complete solution. Choose all that apply.

- A. Implementing the contract
- B. Defining the service contract
- C. Hosting the service in an application
- D. Building a client application
- E. Defining a client application
- F. Implementing Web services

---

**Answer: B, A, C, and D**

---

Explanation:

The basic steps involved in the life cycle of a WFC application are as follows:

1. Defining the service contract
2. Implementing the contract
3. Configuring the service by determining endpoint details and other behavior details

- 4. Hosting the service in an application
- 5. Building a client application

Answer: E and F are incorrect. These steps are not the basic steps involved in the life cycle of a WFC application.

---

**Question: 98**

---

Which of the following is a non-XML syntax for describing the appearance of particular elements in a document?

- A. DTD
- B. XSL-FO
- C. SAX
- D. CSS

---

**Answer: D**

---

Explanation:

CSS stands for Cascading Style Sheets. It is a non-XML syntax for describing the appearance of particular elements in a document. It is a straightforward language so no transformation is performed. A CSS style sheet applies styles to the content that already exists and does not change the markup of an XML document at all.

Answer: B is incorrect. XSL-FO stands for Extensible Stylesheet Language Formatting Objects. It is used for formatting XML data for output to screen, paper, or other media. It is a language for formatting XML data. It is based on XML and is a W3C Recommendation.

Answer: C is incorrect. SAX is an event-driven API that notifies the application of an event regarding information associated with the detection of an element's start tag or end tag, or occurrences of text.

Answer: A is incorrect. A DTD is written in a formal syntax that explains precisely which elements may appear where in the document and what the elements' contents and attributes are.

---

**Question: 99**

---

Which of the following is a capability in computer science that permits client software to converse with database server software?

- A. Transaction object
- B. ScriptManager.Scripts
- C. Database connection
- D. ObjectDataSource

---

**Answer: C**

---

Explanation:

Database connection is a capability in computer science that permits client software to converse with database server software. A connection is necessary to send commands and receive answers. Connections are a key theory in data-centric programming. Some DBMS engines need considerable time to connect to connection pooling to improve performance. No command can be performed against a database without an "open and available" connection to it.

Connections are built by providing a primary driver or provider with a Connection String that is a way of addressing a particular database or server and instance user authentication credentials. For example, Server=sql\_box;Database=Common;User ID=uid;Pwd=password. When a connection has been built, it can be opened and closed and the properties can be set. The Connection String is composed of a set of key/value pairs as specified by the data access interface and the data provider being used. Some databases only permit one operation to be performed at a time on each connection, others do not force this restriction. However, databases providing several

operations per connection acquire more overheads than those permitting only a single operation task at a time.  
 Answer: B is incorrect. The ScriptManager.Services property gets a ServiceReferenceCollection object that contains a ServiceReference object for each Web service that ASP.NET exposes on the client for AJAX functionality. This property returns an object that is a collection of ServiceReference objects, each of which represents a Web service that is registered with the ScriptManager control.

Answer: D is incorrect. The ObjectDataSource class is used to represent a business object. The business object gives data to data-bound controls in multi-tier Web applications. The ObjectDataSource class allows users to use an ASP.NET data source control while retaining their three-tier application architecture. The ObjectDataSource class makes use of reflection to construct instances of business objects and to call methods on them to insert, update, retrieve, and delete data. The ObjectDataSource class constructs and destroys an instance of the class for each method call. However, it does not contain the object in memory for the lifetime of the Web request.

Answer: A is incorrect. A transaction object is used for allowing multiple SQL statements to be processed as a group. Each transaction object represents the DTC transaction. The transaction object exists for the life of the transaction. It should be released when the transaction completes. It is used to begin, commit, or roll back a transaction.

---

### Question: 100

---

Which of the following delimiters are used to create data binding expressions?

- A. <%% and %>
- B. < %# and %>
- C. < % \$ and %>
- D. < % & and %>

---

**Answer: B**

---

Explanation:

A data-binding expression creates bindings between a server control property and a data source when the Page.DataBind method is called on a Web page. The expression can be included in the opening tag of the server control. The following is the syntax of the data-binding expression:

```
<tagprefix:tagname property="< %# data-binding expression %>" runat="server" />
```

OR

Literal text < %# data-binding expression %>

Every data-binding expression is contained between < %# and %> characters. The expression uses the following two methods:

Eval: The Eval method is a static or read-only method that takes a data field value and returns it as a string. It is used as a property setting and references the bound data field to display data.

Bind: The Bind method supports read/write functionality to retrieve data-bound control values and submit the changes made back to the database. It is used to reference the bound data field to insert, edit, or delete data in the database or the data source.

---

### Question: 101

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Which of the following statements best describes XML?

- A. XML is a programming language, which reads XML files and produces executable code.
- B. XML is a metamarkup, platform dependent and long-term data format language.
- C. XML is an ascendant of SGML, which defines a generic syntax used to mark up data with simple, human-readable tags.
- D. XML is a markup language, which is not a replacement of HTML and designed to store and display data.

---

**Answer: D**

---

Explanation:

XML is a markup language, which is not a replacement of HTML and designed to store and display data. XML stands for Extensible Markup Language. It is a metamarkup language for developing text documents. This language allows developers and writers to invent the elements they need, as they need them. This language defines a generic syntax used to mark up data with simple, human-readable tags. Answer: A is incorrect. XML is not a programming language. There is no such thing as an XML compiler that reads XML files and produces executable code.

Answer: C is incorrect. XML is a descendant of SGML, which defines a generic syntax used to mark up data with simple, human-readable tags.

Answer: B is incorrect. XML is a markup, cross platform and long-term data format language. The XML text can be read with any tool that can read a text file.

---

**Question: 102**

---

Which of the following statements correctly describes an application pool?

- A. It is a collection of directory files that will be served by a worker process or a set of worker processes.
- B. It is a collection of configuration files that will be served by a worker process or a set of worker processes.
- C. It is a collection of URLs that will be served by a worker process or a set of worker processes.
- D. It is a collection of database objects that will be served by a worker process or a set of worker processes.

---

**Answer: C**

---

Explanation:

An application pool is a collection of URLs. These URLs are served by a worker process or a set of worker processes. It limits process boundaries to separate applications and prevent them from affecting another application on a Web server. In IIS7, an application pool operates in two modes:

Integrated mode, in which the application uses the integrated request-processing architecture of IIS and ASP.NET; and Classic mode, in which IIS7 handles requests in the same way as IIS6 worker process isolation mode. Application pools provide the following features:

Improved server and application performance: Administrators can assign resource-intensive application to their own application pools to isolate such applications and prevent from hampering other applications performance.

Improved application availability: In case an application in a pool fails; it will not affect other applications in other pools.

Improved security: Through application isolation, administrators reduce the chance that one application will access the resources of another application.

The Classic mode of application pool is used to maintain compatibility with older applications.

---

**Question: 103**

---

You work as a Web Application Developer for SunInfo Inc. The company uses Visual Studio 2008 as its application development platform. You create a Web application using .NET Framework 3.5. You have written the following code in the Machine.config file:

```
<authorization>
<allow users="Eric" />
</authorization>
```

Sam has added the following code within the <system.web> section in the Web.config file of your application:

```
<authorization>
```

```
<allow users="Sam" />  
</authorization>
```

Which of the following statements is true about your application?

- A. Both Eric and Sam can access the application.
- B. Only Eric can access the application.
- C. None of them can access the application.
- D. Only Sam can access the application.

---

**Answer: D**

---

Explanation:

Sam overrides the Machine.config security settings by editing the Web.config file in the root of the ASP.NET application and adding the following code in the <system.web> section:

```
<authorization>  
<allow users="Sam" />  
</authorization>
```

Therefore, only Sam can access the application.

Answer: B is incorrect. Sam has configured the application to provide access only to the user Sam by overriding the Machine.config security settings. Hence, the user Eric cannot access the application.

Answer: A and C are incorrect. Only Sam can access the application.

---

### Question: 104

---

Which of the following will you use to retrieve rows from a data source in a DataReader?

- A. GetData
- B. GetValues
- C. Read
- D. ExecuteReader

---

**Answer: D**

---

Explanation:

You can retrieve data using a DataReader by creating an instance of the Command object and then creating a DataReader by calling Command.ExecuteReader to retrieve rows from a data source.

Answer: C is incorrect. The Read() method is used to read a DataReader.

Answer: A is incorrect. The GetData() method returns a DbDataReader object for the requested column ordinal.

Answer: B is incorrect. The GetValues() method populates an array of objects with the column values of the current row.

---

### Question: 105

---

Which of the following options is used to provide a common base for data description and validation in XML documents?

- A. Schematron
- B. Web service
- C. SOAP



D. XML schema

---

**Answer: D**

---

Explanation:

An XML schema is used to provide a common base for data description and validation in XML documents. An XML schema is the building block of an XML document containing a formal description of what comprises a valid XML document. It defines elements, attributes, child elements, and the number of child elements that may appear in a document. An XML schema is written in a particular syntax recommended by the W3C.

Answer: B is incorrect. A Web service is a unit of application logic that can be accessible via standard protocols. A Web service is defined by the W3C as a software system designed to support interoperable machine-to-machine interaction over a network.

Answer: C is incorrect. Simple Object Access Protocol (SOAP) is an XML-based protocol. It is used to exchange structured and type information on the Web. SOAP defines rules for data encoding. It is highly extensible and modular because it does not contain application or transport semantics.

Answer: A is incorrect. Schematron is a type of language for making assertions about the presence or absence of patterns in an XML document.

---

### Question: 106

---

Which of the following classes is used to enable sections of a page to be partially rendered without a postback?

- A. UpdateProgress
- B. ScriptManager
- C. Timer
- D. UpdatePanel

---

**Answer: D**

---

Explanation:

The UpdatePanel control is a server control that enables a user to define areas of a page that should postback to the server without refreshing the whole page. This is known as partial-page update. This process is organized by the ScriptManager server control and the client PageRequestManager class. The partial-page updates are enabled by default, as the default value of the EnablePartialRendering property of the ScriptManager control is true. The controls postback to the server asynchronously when the partial-page updates are enabled.

Answer: B is incorrect. The ScriptManager control is used to enable AJAX functionality in ASP.NET. It handles all ASP.NET AJAX resources on a page. This includes downloading Microsoft AJAX Library scripts to the browser and managing partial-page updates enabled by using UpdatePanel. By default, ScriptManager is used to register the script for the Microsoft AJAX Library with the page.

Answer: A is incorrect. The UpdateProgress control is used to provide status information of a partial-page update in the form of graphics or text. Multiple UpdateProgress controls can be used in a page where each control is associated with a different UpdatePanel control or a single UpdateProgress control can be associated with all UpdatePanel controls on the page.

Answer: C is incorrect. The ASP.NET Timer control is an AJAX control that updates a portion of a page on a periodic basis. It performs asynchronous or synchronous postback of a page at a defined time period. The interval property of the Timer control specifies the number of milliseconds to wait before initiating a postback.

---

### Question: 107

---

Which of the following control categories will you use if you are creating an interactive Web page that requires

security for data as well as for the source code?

- A. Server control
- B. HTML control
- C. User control
- D. Validation control

---

**Answer: A**

---

Explanation:

The server control category will be used if you are creating an interactive Web page that requires security for data as well as for the source code.

Answer: C is incorrect. A user control will be used if you are creating a Web site that has multiple pages in which each page has many of the same controls, so that you can gain the benefits of code reuse.

Answer: B is incorrect. HTML controls are used to apply client-side scripting.

Answer: D is incorrect. Validation controls are used if you want to implement automatic input validation.

---

### Question: 108

---

Which of the following is a common method for connecting to other Web sites and Web pages?

- A. Response.LCID
- B. Response.AppendToLog
- C. Response.flush
- D. Response.Redirect

---

**Answer: D**

---

Explanation:

Redirect is a method of the Response object. It is used to navigate through the server script. This method sends a redirect message to the browser, causing it to attempt to connect to a different URL. The Response.Redirect method accepts the Uniform Resource Locator (URL) of the page, to which a user has to be redirected, as a parameter.

Syntax:

Response.Redirect URL

where, URL is the Uniform Resource Locator (URL) of the page to which a user has to be redirected.

Answer: A is incorrect. It is a property that specifies how dates, times, and currencies are formatted.

Answer: C is incorrect. The flush method sends buffered output immediately.

Answer: B is incorrect. This method adds a string to the end of the Web server log entry for the request.

---

### Question: 109

---

The server object is the top-level object from the HttpContext.Current object. It is used to make changes on a server. Which of the following methods does it use? Each correct answer represents a complete solution. Choose two.

- A. Finalize
- B. Execute
- C. GetConfig
- D. Transfer

---

**Answer: B and D**

---

Explanation:

The server object is the top-level object from the HttpContext.Current object. It provides properties and methods related to the Web server. It is used to make changes on a server. It uses two methods:

1.Execute: It runs another page and returns the calling page.

2.Transfer: It runs another page but does not return.

These objects are used to tie multiple pages together on a Website.

Answer: A is incorrect. This method allows an object to try to free resources and perform other cleanup operations before it is reclaimed by garbage collection.

Answer: C is incorrect. This method returns requested configuration information for the current HTTP request.

---

### Question: 110

---

You work as a Web Application Developer for SunInfo Inc. The company uses Visual Studio 2008 as its application development platform. You create a Web application using .NET Framework 3.5. You want to redirect users to a default error page if an unhandled error occurs within your site. Which of the following actions will you perform to accomplish the task?

A. Set the mode attribute of the customErrors element to On and the defaultRedirect attribute to an error page within your site.

B. Set the redirect attribute of the error element to an error page within your site.

C. Set the statusCode attribute of the error element to 404 and the redirect attribute to a custom error page.

D. Set the mode attribute of the customErrors element to Off and the defaultRedirect attribute to an error page within your site.

---

**Answer: A**

---

Explanation:

You can use the <customErrors> element nested inside <system.web> to configure custom errors in the Web.config file. The <customErrors> element has a mode attribute that can be set to On to turn custom errors on and a defaultRedirect attribute that can be set to the path to a default error page.

Answer: D is incorrect. The mode attribute of the <customErrors> element is set to Off, which indicates that custom errors are disabled. The detailed ASP.NET error page will be shown to the users.

Answer: B is incorrect. The <error> element nested inside the <customErrors> element defines an error-specific custom page.

Answer: C is incorrect. The statusCode of the <error> element is set to 404, which indicates that if a file is not found at the requested URL, the user is redirected to a custom error page specified by the redirect attribute.

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### Question: 111

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Which of the following options enables the client to read and write data and create Structured Query Language objects in the database?

A. Connection pooling

B. Connection object

C. Transaction object

D. Database connection

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**Answer: D**

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Explanation:

A database connection enables the client to read and write data and create Structured Query Language objects in the database. Database connection is a capability in computer science that permits client software to converse with database server software. A connection is necessary to send commands and receive answers. Connections are a key theory in data-centric programming. Some DBMS engines need considerable time to connect to connection pooling to improve performance. No command can be performed against a database without an "open and available" connection to it.

Answer: A is incorrect. Connection pooling is the process of reusing existing active connections instead of creating new connections when a user makes a request to the database. The connection manager is responsible for maintaining a pool of available connections. When the connection manager receives a request for a new connection, it checks the pool for the available connections

Answer: B is incorrect. The Connection object is used to create an open connection to the data source. It is used to send queries and data to the data source and the information from the data source to an Application. Each connection object is designed to effectively connect to its specific data source. It does not store, update or fetch the data from the database

Answer: C is incorrect. A transaction object is used for allowing multiple SQL statements to be processed as a group. Each transaction object represents the DTC transaction. The transaction object exists for the life of the transaction. It should be released when the transaction completes. It is used to begin, commit, or roll back a transaction.

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### Question: 112

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Which of the following will you use to catch all unhandled ASP.NET errors that are not caught with a Try/Catch block or in a page-level error handler?

- A. Breakpoints
- B. Trace.axd
- C. SDK
- D. Global.asax

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**Answer: D**

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Explanation:

The Global.asax file is used to catch all unhandled ASP.NET errors while processing a request in a Web application. This file is helpful for handling all the errors that are not caught with a Try/Catch block or in a page-level error handler. The handler transfers control to a generic error page, which interprets the error and displays an appropriate message.

Answer: B is incorrect. Trace.axd is an Http Handler that can be used to view the trace details for an application. This file resides in the application's root directory. A request to this file through a browser displays the trace log of the last n requests in time-order, where n is an integer determined by the value set by requestLimit="[n]" in the application's configuration file.

Answer: C is incorrect. SDK is used for providing a tool called Visual Debugger, which allows you to examine an application while it is running.

Answer: A is incorrect. Breakpoints are places in the code where the debugger will stop the application, allow you to view the current data state of the application, and then step through each line of code.

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### Question: 113

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Which of the following statements are true about the advantages and disadvantages of the application state server-based technique? Each correct answer represents a complete solution. Choose all that apply.

- A. The global data stored is non-volatile. Therefore, data is lost if the server process is destroyed, i.e., if a server

crashes, upgrades, or shuts down.

B. It is accessible to all the pages in a Web application. Therefore, it keeps only a single copy of information.

C. The state variables that contain large blocks of information that increases Web server performance due to increase in server loads.

D. It requires server memory that affects memory performance and the scalability of an application.

E. Application state variables should be used only with small and infrequently changed datasets.

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**Answer: D, B, and E**

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Explanation:

Application state is a collection of user-defined variables that are shared by an ASP.NET application. These are set and initialized when the Application\_OnStart event fires on the loading of the first instance of the application and are available till the last instance exits. Application state variables are accessed using the Applications collection, which provides a wrapper for the application state variables. Application state variables are identified by names. The following table describes the advantages and disadvantages of using application state server-based technique:

Advantages	Disadvantages
It is easy to use and is familiar to .NET developers. It is consistent with other .NET Framework classes.	It requires server memory that affects memory performance and the scalability of an application.
It is accessible to all the pages in a Web application. Therefore, it keeps only a single copy of information, instead of keeping copies in session state or in individual pages.	The state variables that are stored in an application state are global. Since each application process can have different values, storing unique values or updating global counters in Web-garden and Web-farm server configurations will not be useful.
Its careful design and implementation can increase the performance of a Web application. Therefore, a frequently used and relatively static dataset should be placed in the application state to increase Web site performance.	The state variables that contain large blocks of information reduce Web server performance due to increase in server loads.
Application state variables should be used only with small and infrequently changed datasets.	The global data stored is volatile. Therefore, data is lost if the server process is destroyed i.e. if a server crashes, upgrades, or shutdowns.

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### Question: 114

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Which of the following events is invoked only once throughout the life cycle of an application and is invoked when the first resource in an ASP.NET application is requested?

A. Application\_End

B. Application\_Start

C. Application\_LogRequest

D. Application\_Error

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**Answer: B**

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Explanation:

The Application\_Start method is invoked when the first resource in an ASP.NET application is requested. It is invoked only once throughout the life cycle of an application. It can be used to perform startup tasks, such as loading data into the cache and initializing static values. Only static data should be set during application start. However, do not set any instance data, as the Application\_Start method will be available only to the first instance of the HttpApplication class that is created.

Answer: A is incorrect. This event is triggered when an application is terminated.

Answer: D is incorrect. This event is triggered when an error occurs on a site.

Answer: C is incorrect. This event is triggered when a request has been made to the application; it is used for custom logging.