

(2 ½ Hours)

[Total Marks: 75]

- N.B.: 1) All questions are compulsory.
 2) Figures to the right indicate marks.
 3) Illustrations, in-depth answers and diagrams will be appreciated.
 4) Mixing of sub-questions is not allowed.

Q. 1 Attempt All (Each of 5Marks)**(15)****(a) Multiple Choice Questions****(5)**

- 1) The _____ regular expression represents any whitespace character.
 - a. \s
 - b. \S
 - c. \w
 - d. \W
- 2) What is the last event of the page lifecycle?
 - a. Page_Load
 - b. Validate
 - c. Page_Unload
 - d. Page_Init
- 3) Which of the following is not a part of the ConnectionString in the SqlConnection object?
 - a. Integrated Security
 - b. Data Source
 - c. Connection Status
 - d. Both a and b
- 4) Identify the underlying html element of LABEL control
 - a. <div>
 - b. <p>
 - c. <label>
 - d.
- 5) The most commonly used State Management technique, that is inserted at the end of URL, is _____
 - a. CrossPage Posting
 - b. Session State
 - c. QueryString
 - d. Cookies

(b) Fill in the blanks with appropriate keywords by selecting the correct option from the given pool of options.**(5)**

(App_Code, skin, decimal, Bin, Tick, UpdateProgress, Interval, double, ProgressBar)

- 1) The _____ folder in ASP.NET contains source code files that are dynamically compiled for use in your application.
- 2) The _____ datatype supports 128-bit fixed-point fractional number that supports up to 28 significant digits.
- 3) The _____ event of a Timer is triggered when the maximum number of milliseconds are elapsed.
- 4) Atleast one _____ file should be contained in the Themes folder.
- 5) The _____ control allows you to show a message when an AJAX based page is being updated.

(c) Answer the following in 1-2 lines:**(5)**

- 1) What is MSIL?
- 2) Give the syntax of declaring a one dimensional integer array in C# and initialize its elements to 1,2,3,4,5.
- 3) Give the significance of GridView Control.
- 4) State any two LINQ data providers.
- 5) What is ViewState?

Q. 2 Attempt the following (Any THREE) (15)

- (a) State and explain various components of .Net framework.
- (b) Explain the working of foreach loop in C# and provide example.
- (c) Write a note on assemblies in .NET.
- (d) Explain various ASP.NET file types.
- (e) Briefly describe the Partial Classes and their syntax with a suitable example.
- (f) State and explain the important events of Global.asax file.

Q. 3 Attempt the following (Any THREE) (15)

- (a) Write a note on ASP.Net Page Life Cycle.
- (b) Explain at least 5 generic properties of web control.
- (c) With the help of an example, explain how data can be stored and retrieved from a session variable.
- (d) What is AdRotator? Write XML file which is created for the AdRotator Control.
- (e) Explain the SiteMapPath control in detail.
- (f) What is the use of MasterPages in ASP.NET? How a Content page can be added to a Master Page.

Q. 4 Attempt the following (Any THREE) (15)

- (a) Write a brief note on the Data Provider Model? Explain various ADO.NET namespaces.
- (b) Write the difference between Single-Value Data Binding and Multi-Value Data Binding in ADO.NET.
- (c) Write C# function to create an XML file given below using ASP.net:-

```
<college>
  <student id='123'>
    <name>Madhuri Talekar</name>
    <marks>44</marks>
  </student>
  <student id='123'>
    <name>Juhi Mehta</name>
    <marks>49</marks>
  </student>
</college>
```

- (d) Write a short note on Caching.
- (e) Explain the concept of Partial Refreshes with respect to AJAX in ASP.NET.
- (f) Write a short note on SqlCommand class in ADO.NET.

Q. 5 Attempt the following (Any THREE) (15)

- (a) Give the structure of web.config file. Also state its advantages.
- (b) Differentiate between Value Types and Reference Types.
- (c) Explain the following XML classes:
 - i. XmlTextWriter
 - ii. XmlTextReader
- (d) Explain the important properties of the BaseValidator class.
- (e) What is LINQ? Explain the syntax of LINQ giving suitable examples.
