

(Time: 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)**(15M)****(a) Multiple Choice Questions****(5M)**

- 1) By using which of the following attribute, HTML elements are transformed to HTML server controls?
 - a. runat="client"
 - b. runat="browser"
 - c. runat="HTML"
 - d. runat="server"
- 2) What is the last event of the page lifecycle?
 - a. Page_Load
 - b. Validate
 - c. Page_Unload
 - d. Page_Init
- 3) Which object can help you maintain data across all users?
 - a. Application object
 - b. Session object
 - c. Response object
 - d. Server object
- 4) Which of the following is not a part of the SqlConnection in the SqlConnection object?
 - a. Integrated Security
 - b. Data Source
 - c. Connection Status
 - d. Both a and b
- 5) On which of the following web servers are ASP.NET websites hosted?
 - a. Apache Tomcat
 - b. Internet Information Services (IIS)
 - c. Glassfish
 - d. Website Service Server

(b) Fill in the blanks**(5M)**

(Use these pool of options - Partial Class, client-side Language Interoperability, AdRotator, assembly)

- 1) _____ is the basic building block in .NET.
- 2) _____ is the ability of an application to interact with another application written in a different programming language.
- 3) Using _____ we can create a class definition in multiple files but it will be compiled as one class.

- 4) _____ web server control is used to display advertisements in ASP.NET a webpage.
- 5) Cookies are _____ state maintenance

(c) **Answer in 1 - 2 sentences****(5M)**

- 1) Which are the two properties in every ASP.NET Validation control?
- 2) List the main components of .NET Framework.
- 3) What is the use of the property ActiveViewIndex of the MultiView control?
- 4) What is ADO.NET?
- 5) What are the common pitfalls with Caching data?

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

- (a) What is CLR? List and explain the features of CLR.
- (b) Explain with an example the foreach loop in C#.
- (c) Write a note on assemblies in .NET.
- (d) List and explain the different type of File types in an ASP.NET web application project.
- (e) Briefly describe the Partial Classes in NET. Demonstrate with an example.
- (f) What is a Global.asax file in ASP.NET? Explain the different events in it.

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

- (a) Write a note on ASP.Net Page Life Cycle.
- (b) Which are different validation controls in ASP.NET? Explain any 2 with an example.
- (c) List and explain the client-side state management objects in an ASP.NET website.
- (d) What is AdRotator? Explain in brief about the Advertisement file used in the AdRotator control.
- (e) Explain the SiteMapPath control in detail.
- (f) How to implement views in a Multiview control. Write syntax for the below scenario:

Implement 2 Views in a MultiView control.

View 1 should have one Label and one Button control and View 2 should have 2 TextBox controls and two Button controls. Also demonstrate how to switch between View 1 and View 2.

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

- (a) Write a brief note on the Data Provider Model?
- (b) Write the difference between Single-Value Data Binding and Multi-Value Data Binding in ADO.NET.
- (c) What is the use of GridView data control? Write a code to display all the records from the Employee in the GridView control.
- (d) What are the two types of Caching? Explain anyone with an example.
- (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) (15M)

- (a) What do you mean by Value Type and Reference Type? Give an example for each.
- (b) What is the concept of master pages and content pages in ASP.NET? Demonstrate how to connect them with an example.
- (c) Explain the following XML classes:
 - a. XmlTextWriter
 - b. XmlTextReader
- (d) Write a note on HtmlInput class.
- (e) Explain the concept of Timed Refreshes with respect to AJAX in ASP.NET.

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