

(2½ Hours)

[Total Marks: 75]

- N. B.: (1) All questions are compulsory.  
 (2) Make suitable assumptions wherever necessary and state the assumptions made.  
 (3) Answers to the same question must be written together.  
 (4) Numbers to the right indicate marks.  
 (5) Draw neat labeled diagrams wherever necessary.  
 (6) Use of Non-programmable calculators is allowed.

**1. Attempt any three of the following:**

- What is namespace? Explain with the help of an example.
- Explain jagged array with an example.
- What is .NET Framework? Explain its architecture in brief.
- Write a program in C# to demonstrate multiple inheritance using interfaces.
- Explain various types of constructors in C#.
- What is delegate? Explain multicast delegate with an example.

**2. Attempt any three of the following:**

- What is the difference between ListBox and Drop Down List? List and explain any three common properties of these controls.
- Explain AdRotator control with an example.
- List and explain any four types of validation controls used in ASP.NET.
- Explain Calendar control with an example in ASP.NET.
- Write short note on Page class.
- Explain SiteMapPath control in ASP.NET

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**3. Attempt any three of the following:**

- What is user-defined exception? Explain with example.
- What is debugging. Explain the process of debugging in detail.
- Write short note on cookies in ASP.NET.
- What is ViewState in ASP.NET? State its Advantages and Disadvantages.
- Create a web application to demonstrate use of Master Page with applying styles and themes for page beautification. Write necessary steps with code for the same.
- Explain the four most important selectors present in CSS.

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**4. Attempt any three of the following:**

- List and Explain ADO.NET objects
- What is DataReader in ADO.NET? Explain with an example.
- Explain SqlDataSource in ADO.NET.
- What is a GridView control? Explain with an example
- What are the application services provided in ASP.NET? Explain.
- Differentiate between FormView and DetailsView in ASP.NET.

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**5. Attempt any three of the following:**

- Explain XmlTextReader and XmlTextWriter with an example.
- What is XElement? Explain with an example.
- What do you mean by authentication? Explain its types.
- What do you mean by Impersonation in ASP.NET? Explain.
- Explain ASP.NET AJAX Control Toolkit.
- Create a web application to demonstrate the use of HTMLEditorExtender Ajax Control. Write the code of default.aspx and required property settings for the same.

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