

(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. 15
- 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

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

- What is user-defined exception? Explain with example. 15
- 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.

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

- List and Explain ADO.NET objects 15
- 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.

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

- Explain XmlTextReader and XmlTextWriter with an example. 15
- 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 HTML editor Extender Ajax Control. Write the code of default.aspx and required property settings for the same.