

(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:** 15
- Write a short note on Jagged arrays in C#.
  - What is namespace? Explain with the help of an example.
  - Explain .NET architecture in brief with a neat diagram.
  - Write a C# program to implement the concept of interfaces.
  - What are constructors in C#? Explain in brief: Copy constructors, Default constructors and Parameterized constructors.
  - Write a C# program to perform addition and subtraction of two integers using a concept of delegates.
2. **Attempt any three of the following:** 15
- Compare the below controls: ListBox and Drop Down List. Also 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 the below properties: SelectionMode , SelectedDate and SelectedDates.
  - What is Page Tracing in asp.net?
  - Explain Sitemap Path control in ASP.NET.
3. **Attempt any three of the following:** 15
- What is user-defined exception? Explain with example the concept of user-defined exception.
  - Describe session state variables in asp.net.
  - What is state management? Explain persistent cookies.
  - Describe the features and benefits of master pages in asp.net.
  - What is a theme? How does it work?
  - What are the three different ways to use styles on web pages? Explain various category of style setting in New Style dialog box.
4. **Attempt any three of the following:** 15
- What is data binding? Explain repeated value data binding with example.
  - Explain FormView and DetailsView along with their similarities and differences. What do you mean by ItemTemplate?

- c. Explain the following properties of GridView control.  
AutoGenerateColumns  
DataSource  
AllowSorting
- d. Explain various style properties of GridView control.
- e. Describe asp.net provider model and direct data access method.
- f. What is data adapter? Write a snippet code that fills data in data controls using data adapter.

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

15

- a. Explain different types of authentication in asp.net.
- b. Explain the structure of xml file along with an example.
- c. What is the use of XMLTextWriter class? Explain various methods of this class.
- d. Define the term: Authorization. How to add authorization rules in web.config file?
- e. How does Update Progress control of AJAX works?
- f. Explain timer control of asp.net along with a small example.

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