

(3 Hours)

[Total Marks: 100]

- 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 two of the following:** 10
 a. Explain the .NET Framework.
 b. Write a short note on Assembly.
 c. Explain the RangeValidator control.
 d. Write a program to check whether the entered number is palindrome number or not.
2. **Attempt any three of the following:** 15
 a. Explain the components of Assembly.
 b. Write a short note on CIL and JIT Compiler.
 c. What is Namespace? Explain any four Namespaces.
 d. Write the naming rules and conventions of the variable.
 e. Explain Garbage Collector.
 f. Write a program that places double quotation marks around each word in a string.
3. **Attempt any three of the following:** 15
 a. Write a short note on Delegate.
 b. Explain the different types of Collections in .NET.
 c. Explain the Comparison and Logical operators in C#.
 d. Explain List Box control with any four properties.
 e. What is the use of the menus and toolbars in Windows Application? Explain.
 f. Explain the TextBox control with any four Properties
4. **Attempt any three of the following:** 15
 a. Explain the ASP.NET Life Cycle.
 b. Write a short note on Themes.
 c. What is CSS selector? Explain any four selectors present in CSS.
 d. Explain the global.asax files in ASP.NET application.
 e. What is CSS? Explain the Inline and Embedded CSS.
 f. Write a short note on Server side State management.
5. **Attempt any three of the following:** 15
 a. Explain the Menu navigation control with its properties.
 b. Explain the Master Page and Content Page.
 c. Explain the TreeView site navigation control
 d. Explain the different Access Modifiers.
 e. What is the use of Compare validator? Explain it along with its properties.
 f. What is regular expression? Explain regex patterns.
6. **Attempt any three of the following:** 15
 a. Explain ADO.NET objects.
 b. List all the steps in order to access a database through ADO.NET.
 c. What are the different ways to implement LINQ.

- d. What is Authentication? Explain its different types.
- e. Write a short note on Authorization.
- f. List and explain any four different query operators in LINQ

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

15

- a. Write a short note on JQuery.
- b. What is ASP.NET AJAX? Explain the working of AJAX.
- c. What are the different types of selectors present in JQuery.
- d. Explain DOM manipulation methods in JQuery.
- e. Explain the Timer control with its attributes.
- f. Explain the use of UpdateProgress control in AJAX.