

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 neatly labeled diagrams wherever necessary.
- 6) Use of Non-programmable calculators is allowed.

1. Attempt any two of the following.

- a. What are boxing and unboxing? How is it achieved?
- b. What is type conversion? Explain implicit and explicit type conversion with suitable example
- c. What is a user defined exception? Explain with Syntax
- d. Differentiate between abstract class and interface

2. Attempt any two of the following.

- a. What is the difference between private assembly and shared assembly?
- b. Short note on JIT (Just In Time) compiler
- c. What is an event? What are the differences between delegate and event?
- d. What is garbage collection? Explain three types of generations in garbage collection.

3. Attempt any two of the following.

- a. Differentiate between HTML server controls and web server controls
- b. Explain the following properties/events of checkbox control
 - i. ID
 - ii. AccessKey
 - iii. Text
 - iv. Checked
 - v. CheckedChanged()
- c. What is the difference between inline code and code behind in asp.net?
- d. Explain the implicit and explicit conversion of data types with examples

4. Attempt any two of the following.

- a. What is ViewState? Where is the ViewState stored after the page postback?
- b. Explain the relationship between master page and content page
- c. Define the steps to set up validation control in an ASP.NET web page
- d. Explain Response.Redirect() and Server.Transfer() methods in ASP.NET.

5. Attempt any two of the following.

- a. Explain the various authentication mechanisms in ASP.NET
- b. What is ListView control? List the features provided by ListView control
- c. Differentiate between DataSet() and DataReader().
- d. Explain the properties and methods of Command Object

6. Attempt any two of the following.

- a. What role does the ScriptManager play? Explain the UpdatePanel Control
- b. Explain the jQuery syntax and Document Ready Event with the example
- c. Explain DOM manipulation methods in jQuery.
- d. Write and explain the basic syntax of a LINQ query in C#.

7. Attempt *any three* of the following.

- a. Explain for each loop? How is it different from for loop?
- b. Explain working with CSS using Visual Studio Developer.
- c. What are the event handlers that we can have in global.ajax file?
- d. What is website navigation? Explain structure of web.sitemap file with suitable example
- e. Explain DataAdapter with its properties and methods.
- f. What is AJAX? What are the advantages and disadvantages of AJAX?

