

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 labelled diagrams** wherever **necessary**.

(6) Use of **Non-programmable** calculators is **allowed**.

1. Attempt any two of the following

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- a. Explain the similarities and differences between Interfaces and Abstract classes
- b. Write a short note on Assembly.
- c. Give syntax of for each oop. Explain with example.
- d. Write a program using overloaded constructors.

2. Attempt any two of the following

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- a. Explain Boxing and Unboxing with reference to value type and reference type.
- b. Explain the four most important selectors present in CSS.
- c. Explain the different types of CSS present in ASP.NET.
- d. Write a program using any five Methods/Property of ArrayList Class.

3. Attempt any two of the following

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- a. What is the difference between List Box and Drop-Down Lists? List and explain any three common properties of these controls.
- b. Explain any five Methods/Property of List Item collection objects.
- c. List and explain the comparison and logical operators in c#.
- d. What is the difference between buttons, Link Buttons and Image Buttons? Explain any three common button attributes.

4. Attempt any two of the following

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- a. Write a program to create a new cookie with the name " Username" and add it to the HttpResponse object on the click of a button. Set the expiry date of the cookie to One year from Now.
- b. What is the use of MasterPages in ASP.NET? How a Content page can be added to a Master Page.
- c. Explain TreeView and Menu site navigation controls.
- d. What is the use of Compare Validator? Explain it along with its properties.

5. Attempt any two of the following

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- a. Explain DetailsView Control.
- b. What do you mean by authentication? Explain its types.
- c. Explain the difference between DataReader and DataAdapter in ADO.NET.
- d. What is the difference between Listview and Gridview control. Explain the ListView control.

6. Attempt any two of the following

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- a. Create a string array of names. Write a LINQ query to display all names from the array that contain the letter "S" and order them in ascending order. Display the query result in Label.
- b. Explain the Standard Query operators "Select", "From", "orderby" and "Where" in LINQ.
- c. Explain the use of UpdateProgress control in AJAX.
- d. Write a program using jQuery that hides a paragraph on click of a button.

7. Attempt any three of the following

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- a. What is Method Overriding? Give an example of it.
- b. Create a delegate with two int parameters and a return type. Create a class with two delegate methods multiply and divide. Write a program to implement the delegate.
- c. Give general form of switch statement. Explain with example.
- d. Explain the three layer architecture of ASP.NET.
- e. What is ViewState? How we can work with ViewState in ASP.NET.
- f. What is AJAX? How is the processing of web page without AJAX different from the processing of web page with AJAX?

