

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. What is .NET Framework? What is in the .net Framework?
- b. What is Method overloading? What are steps involved for selection of method in method overloading?
- c. What is difference between overriding method and hiding method?
- d. Write C# program to do the following: Initialise an array A with 10 element. Initialize an array B with 7 elements. Divide each element of array A with each element of array B that is $a[0]/b[0]$, $a[1]/b[2]$ etc. Implement the same to handle Divide by zero error and Index out of bound error.

2. Attempt any two of the following

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- a. Delegates in C# are used for Event Handling. Justify this statement with a relevant example program.
- b. What is the significance of Assemblies in .NET?
- c. List and explain the use of any five namespaces in C#.
- d. What is need of CSS in ASP.NET? explain the different types of CSS in ASP.NET.

3. Attempt any two of the following

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- a. Explain the text box web server control. List and explain any four text box attributes.
- b. What is the difference between check box and radio button control? What are the common attributes associated with this control.
- c. Explain any five properties of List box and Drop-down list controls.
- d. What is the difference between .aspx file and .cs file? Explain with an example for each.

4. Attempt any two of the following

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- a. In a web form the details of an employee is filled in after he/she is employed in the company. In the design there is text box to fill the first name, a text box to fill the last name, a text box to fill the surname, a text box to enter email address, a text box to enter the email address again to confirm the same, a text box to fill the age. What are the validation controls that have to be added for each field in the form.
- b. Explain the role of view state and session state in ASP.NET.
- c. What is significance of Master pages in ASP.NET? what is the name given to pages other than master pages? Explain in detail.
- d. Explain Menu and Treeview site navigation control.

5. Attempt any two of the following

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- a. What is the use of GridView control in ASP.NET?
- b. Explain formView control.
- c. Explain the term authentication with respect to ASP.NET security.
- d. What is the difference between authorisation and impersonation in terms of security in ASP.NET.

6. Attempt any two of the following

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- a. Explain the LINQ query syntax with an example query.
- b. Explain the terms Take, Skip, TakeWhile, First, FirstOrDefault, Last, LastOrDefault with respect to LINQ.
- c. Explain the use of UpdateProgress Control and Timer Control in AJAX.
- d. What are the different types of selectors present in JQuery? Explain.

