

CBCS SCHEME

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15CS564

Fifth Semester B.E. Degree Examination, Dec.2023/Jan.2024 Dot Net Framework for Application Development

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Explain general structure of C# program with suitable example. (06 Marks)
- b. Define exception. List any four built in classes to handle exception. (04 Marks)
- c. Write a C# program to generate Fibonacci series upto 'n'. Read 'n' from console device. (06 Marks)

OR

- 2 a. List the different types of operators in C#. Explain any one type of operation in brief. (05 Marks)
- b. Define method. List and explain different method parameters. (05 Marks)
- c. Write a C# program to read two arguments as parameter and return four output values as addition, subtraction, product and division as output parameter from a method. (06 Marks)

Module-2

- 3 a. Demonstrate Boxing and unboxing with code snippets. (06 Marks)
- b. Discuss two different operators to cast data safely in C#. Give examples. (06 Marks)
- c. Differentiate between class and structure. (04 Marks)

OR

- 4 a. What is a jagged array? Write a C# program to create a jagged array, populate this array with values and to display contents of the same. (06 Marks)
- b. Demonstrate ref and out parameters with suitable examples for each. (10 Marks)

Module-3

- 5 a. Explain the concept of params array with programming example. (06 Marks)
- b. Define Inheritance. Explain how to create a derived class that inherits features from a base class, with an example program. (06 Marks)
- c. Explain Abstract class and Abstract method, with an example. (04 Marks)

OR

- 6 a. Explain how to manage system resources by using Garbage collector. (06 Marks)
- b. Explain how to implement interface in a class with programming example. (06 Marks)
- c. Explain Sealed classes and Sealed methods in brief. (04 Marks)

Module-4

- 7 a. Define property. List and explain with example different types of properties. (06 Marks)
- b. Compare Indexers and arrays with example. (06 Marks)
- c. Write an algorithm to insert an item into an ordered binary tree. (04 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

OR

- 8 a. Explain the stack <J> collection class with example. (08 Marks)
b. List and explain different operators used to access and manipulate individual bits in 'int' type. (08 Marks)

Module-5

- 9 a. What is LINQ? With suitable example, explain ordering, grouping and aggregating data. (10 Marks)
b. Explain overloading of increment and decrement operations in C#. (06 Marks)

OR

- 10 a. Demonstrate defining an enumerator by using an iterator. (08 Marks)
b. Explain the concept of declaring an event, subscribing to an event, unsubscribing from an event and raising an event in C#. (08 Marks)
