

# CBCS SCHEME

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17CS564

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

Time: 3 hrs.

Max. Marks: 100

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

### Module-1

- 1 a. What is Namespace? How namespace is used to solve name – clashing problem. Explain with example. (06 Marks)
- b. Explain the following with examples : (06 Marks)
- i) Statements                      ii) Identifiers                      iii) Keywords.
- c. Write a C# program to find first 'N' Fibonacci Numbers. (08 Marks)

OR

- 2 a. Define Scope of variable. Explain the following with example : (10 Marks)
- i) Local scope    ii) Class scope.
- b. Write a C# program for adding two numbers using try and catch for the following exception (10 Marks)
- i) Format exception                      ii) Overflow exception.

### Module-2

- 3 a. Define Constructors. Explain constructor overloading with programming example. (06 Marks)
- b. Describe the Static class, Static method and data with an example. (06 Marks)
- c. Explain value type and reference type and boxing and unboxing with programming example. (08 Marks)

OR

- 4 a. Briefly explain “ref” and “out” keywords with examples. (05 Marks)
- b. Define Enumerations with Syntax. Write C# program that display month name and its numeric value using enum. (07 Marks)
- c. Describe the structures and jagged arrays with examples. (08 Marks)

### Module-3

- 5 a. Define a Params arrays. List out the restrictions on params array with suitable example. (10 Marks)
- b. What is the need for a virtual functions? Explain with example. (10 Marks)

OR

- 6 a. Write a C# program to demonstrate multiple interfaces. (08 Marks)
- b. Write a C# program to demonstrate garbage collector. (08 Marks)
- c. Explain in detail dispose method and IDisposable interface. (04 Marks)

### Module-4

- 7 a. How would you enforce encapsulation using read and write properties in C#? Explain in detail. (10 Marks)
- b. Define an Indexer. List and explain set of operators provided by C# which can be used to access and manipulate the individual bits in an integer value. (10 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. Build a C# program to implement stack <T> collection class. (10 Marks)  
b. Develop a C# program to construct a binary tree using generics. (10 Marks)

**Module-5**

- 9 a. Explain implementation of an enumerator by using iterator. (06 Marks)  
b. Define Delegate. Explain the use of delegate in C# with an programming example. (06 Marks)  
c. Explain Declaring , Subscribing , Unsubscribing and Raising with respect to an event. (08 Marks)

OR

- 10 a. Define LINQ. Explain LINQ to selecting, filtering and ordering data with an example. (10 Marks)  
b. Explain Operator overloading constraints. Write a C# program for operator + overloading. (10 Marks)

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