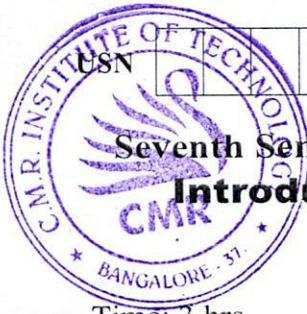


CBCS SCHEME

18CS754



Seventh Semester B.E./B.Tech. Degree Examination, Dec.2024/Jan.2025

Introduction to 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. Define method. Explain with syntax, how methods are declared and called in C#. Explain method overloading with an example program. (10 Marks)
- b. Write a C# program to find factorial of a given number using while AND for loops. (08 Marks)
- c. Define class scope and method scope. (02 Marks)

OR

- 2 a. Explain the need of handling exceptions in a C# program with syntax and explain the working of try, catch, throw and finally keywords used in exception handling. (10 Marks)
- b. Write a C# program to check whether a number is odd or even using methods. (06 Marks)
- c. Differentiate between break and continue statements with examples. (04 Marks)

Module-2

- 3 a. Explain different types of constructors with examples. (10 Marks)
- b. What is the need of access specifiers in C#. Explain public and private access specifiers in detail with examples. (10 Marks)

OR

- 4 a. Define Enum with syntax. Write a C# program to create a Enumeration type for months and display value of June as 6. (07 Marks)
- b. Explain boxing and unboxing in C# with examples. (08 Marks)
- c. Differentiate between structures and classes. (05 Marks)

Module-3

- 5 a. Define inheritance. Explain the use of new, virtual and override keywords in method overloading with suitable examples. (10 Marks)
- b. Differentiate between optional parameters and Params array. (03 Marks)
- c. Explain the use of extension methods in C# with programming example. (07 Marks)

OR

- 6 a. What is the use of interfaces in C#? How is it defined in C#? Demonstrate the implementation of interface with example. (10 Marks)
- b. What is method overriding? Explain abstract classes, abstract methods, sealed classes and sealed methods with examples. (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.

Module-4

- 7 a. Define indexer. List and explain set of operators provided by C# that you can use to access and manipulate the individual bits in an int. (07 Marks)
b. What is the use of generics in C#? write a C# program to swap two numbers using generic method. (08 Marks)
c. Explain read-only and write-only properties with examples. (05 Marks)

OR

- 8 a. Write recursive algorithm for
i) Inserting an item I into an ordered Binary Tree B.
ii) Display contents of a ordered Binary Tree, by visiting each node in sequence. (09 Marks)
b. Define collection class. List different collection classes with description for each and explain any one in detail. (08 Marks)
c. Differentiate between indexers and arrays. (03 Marks)

Module-5

- 9 a. What is LINQ? With suitable example, explain ordering, grouping and aggregating data. (10 Marks)
b. Define delegate. How is it declared in C#? Explain with a programming example the declaration and usage of delegates in C#. (10 Marks)

OR**CMRIT LIBRARY**
BANGALORE - 560 037

- 10 a. Write a C# program to implement '+' operator overloading. (10 Marks)
b. How do you subscribe and unsubscribe methods in C# for delegate types? Explain the same with programming example. (10 Marks)
