Hall Ticket Number:

November, 2019 **Common to CSE and IT**

Third Semester **Object Oriented Programming**

Time: Three Hours **Maximum :** 60 Marks

Answer Question No.1 compulsorily. (1X12 = 12 Marks)
Answer ONE question from each unit. (4X12=48 Marks)

1 Answer all questions (1X12=12 Marks)
  a) Why Data Types are Important?
  b) Define Literals? Explain with an Example.
  c) Define Encapsulation.
  d) Define Indexer.
  e) What is Enumeration?
  f) Define Abstract Method.
  g) Mention the difference ways to generate an Exception.
  h) What is Contra variance?
  i) What is a Sealed Class in C#?
  j) Define a Name Space.
  k) List various predefined non- generic Collections.
  l) What is inheritance?

UNIT I

2 a) Explain Bit Wise Operators with Examples. 6M
  b) Explain the Method Parameters Keywords in C# namely "ref" and "out" with suitable Examples. 6M
(OR)
3 a) Define an Array? Demonstrate a Two Dimensional Array 6M
  b) Explain method overloading with example. 6M

UNIT II

4 a) Define Operator Overloading? Write a Program that overloads Binary Operators. 6M
  b) Explain Multi level, Hierarchical Inheritances with an Example. 6M
(OR)
5 a) Write a Program that implements multiple inheritance. 6M
  b) Define Boxing and Unboxing with Suitable Examples 6M

UNIT III

6 a) Illustrate How Multiple Exceptions are handled in C# programming with suitable Examples. 6M
  b) Demonstrate BinaryReader and BinaryWriter with an Example Program. 6M
(OR)
7 a) What is a Delegate? Illustrate how to define a Delegate Type in C#. 6M
  b) Explain how to pass arguments to an Anonymous Method. 6M

UNIT IV

8 a) Write a C# Program that uses a generic Class with two type Parameters. 6M
  b) What is Stack Class? Demonstrate with Suitable Example. 6M
(OR)
9 a) Write a C# Program to demonstrate non-generic collection class ArrayList 6M
  b) Discuss about Enumerators in C# with Example Programs. 6M

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SHORT SCHEME

PART-A

Answer Question No.1 compulsorily.   (1X12 = 12 Marks)

1)

    a) Definition of Data Types and its importance   [1M]

    b) Definition of Literals with an Example.   [1M]

    c) Definition of Encapsulation   [1M]

    d) Definition of Indexer   [1M]

    e) Definition of Enumeration with Syntax   [1M]

    f) Definition of Abstract Method with Syntax   [1M]

    g) Explain difference ways to generate an Exception   [1M]

    h) Definition of Contra Variance   [1M]

    i) Definition of Sealed Class   [1M]

    j) Definition of a Name Space?   [1M]

    k) List out predefined non- generic Collections.   [1M]

    l) Explain the two differences between IComparer and IEqualityComparer.   [1M]

Answer ONE question from each unit.   (4X12=48 Marks)

UNIT-I

2 a) Definition of Bitwise Operators and their syntax   [2M]

    Example Program   [4M]

  b) Explain the Method Parameters Keywords in C# namely "ref" and "out"   [3M]

    Example Programs   [3M]

(OR)

3 a) Definition of Array and Explain Two Dimensional Array with syntax   [3M]

    Example Program   [3M]

  b) Explain any 3 differences Optimal Arguments and overloading   [2*3=6M]

UNIT-II

4 a) Definition of Operator Overloading?   .   [2M]

    Program for overloads Binary Operators   [4M]

  b) Explain multi level and Hierarchical Inheritances   [3M]

    Example Programs   [3M]

(OR)

5 a) Definition of One Dimensional Indexer   [2M]

    Program that creates a One Dimensional Indexer.   [4M]

  b) Definition of Boxing and Unboxing with syntaxes   [3M]

    Example Programs   [3M]

UNIT-III

6 a) Multiple Exception Explanation   [2M]
   Example Program   [4M]
  b) Definition of BinaryReader and BinaryWriter with syntaxes   [3M]
   Example Programs   [3M]

(OR)

7 a) Definition of Delegate?   [2M]
   How to define a Delegate Type in C#.   [4M]
  b) Explain how to pass arguments to an Anonymous Method.   [6M]

UNIT-IV

8 a) uses a generic Class with two type Parameters.   [2M]
   Program   [4M]
  b) Definition of Stack Class   [2M]
   Example Program   [4M]

(OR)

9 a) Use of   non-generic collection class ArrayList   [2M]
   Example Program   [4M]
  b) Definition of Enumerators in C#   [2M]
   Example Program   [4M]