

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

M.Sc.(Computer Science) (2019 & Onwards) (Sem.-1)

OOPS USING C++ & JAVA

Subject Code : MSC-102

M.Code : 70888

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTIONS-A, B, C & D contains TWO questions each carrying TEN marks each and students have to attempt any ONE question from each SECTION.
2. SECTION-E is COMPULSORY consisting of TEN questions carrying TWENTY marks in all.

SECTION-A

Q.1 Lists and explain the concepts of object oriented programming with suitable example. (10)

Q.2 Differentiate the following :

- a) procedure oriented and object oriented approach. (5)
- b) object and class . (5)

SECTION-B

Q.3 Explain the problem statement and analysis process using object with suitable example. (10)

Q.4 What are the links and associations? Explain with example. (5,5)

SECTION-C

Q.5 a) Explain data hiding with example. (3)

b) Write a C++ program to show the constructor overloading (7)

Q.6 a) How structure is different from class? (5)

b) Difference between reusable class and abstract class. (5)

SECTION-D

- Q.7 a) Why java is called truly object oriented? (4)
b) Explain the structure of java program. (6)
- Q.8 Write a java program to calculate factorial of a given number. (10)

SECTION-E

Q.9 Write short notes on the following :

- a) Dynamic binding
- b) Inheritance
- c) Object modelling
- d) Inline function
- e) Virtual function
- f) JVM
- g) Class
- h) Encapsulation
- i) Polymorphism
- j) Package

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.