Roll No. ▢▢▢▢▢▢▢▢▢▢▢▢   Total No. of Pages : 02

Total No. of Questions : 09

M.Sc.(Computer Science) (2015 & 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.