1C8111

M.C.A. I - Sem. (Main / Back) Exam., - 2023
MCA – 102 Object Oriented Programming with C++

Time: 3 Hours

Maximum Marks: 70
Min. Passing Marks: 28

Instructions to Candidates:

Attempt all ten questions from Part A. All five questions from Part B and three questions out of five from Part C.

Schematic diagrams must be shown wherever necessary. Any data you feel missing may suitably be assumed and stated clearly. Units of quantities used /calculated must be stated clearly.

Use of following supporting material is permitted during examination. (Mentioned in form No. 205)

1. NIL _____   2. NIL _____

PART – A

[10×2=20]

(Answer should be given up to 25 words only)

All questions are compulsory

Q.1   What is type conversion?

Q.2   Differentiate between object and class.

Q.3   What is runtime polymorphism?

Q.4   What are Enumerator?

Q.5   Define Friend function.

Q.6   Write advantages of Friend function.

Q.7   Differentiate between structure & union.

Q.8   What is nesting of classes?

Q.9   What is the need of manipulator?

Q.10   Write different types of Inheritance.

PART – B   [5×4=20]

(Analytical/Problem solving questions)

Attempt all five questions

Q.1   Describe in detail object oriented paradigm.

Q.2   Explain various storage classes.

Q.3   Write a program to find whether the positive number entered by user is prime or not.

Q.4   Explain the concept of operator overloading with regards to overloading "<<" operator.

Q.5   Explain virtual function.

PART – C   [3×10=30]

(Descriptive/Analytical/Problem Solving/Design Questions)

Attempt any three questions

Q.1   Explain difference between static & late binding.

Q.2   Explain Multiple Inheritance with example.

Q.3   What is Abstract Base Class? Explain.

Q.4   Define the term Virtual Base Class and its implementation in C++. How it is used in function overriding.

Q.5   Write a program in C++ to implement array of objects, creating a class Employee and accepting displaying multiple datasets accepted by the user using array of objects.