

1C8111

Roll No.?

Total No. of Pages: **2****1C8111****MCA I-Sem. (Main / Back) Exam., -2025****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 questions 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. NIL2. NIL**PART - A****[10×2=20]****(Word limit 25)**

- Q.1 Define class.
- Q.2 What are Enumerators?
- Q.3 Define objects.
- Q.4 What is polymorphism?
- Q.5 What is inheritance?
- Q.6 Define manipulators.
- Q.7 What is friend function?

- Q.8 What is overloading?
Q.9 Define Destructors.
Q.10 Define virtual functions.

[5×4=20]

PART - B

(Word limit 100)

- Q.1 Write all the characteristics of OOP.
Q.2 Explain various operators in C++.
Q.3 What do you mean by dynamic binding? How it is useful in OOP?
Q.4 Distinguish between Overloaded functions and Function templates.
Q.5 Describe various classes available for file operations.

[3×10=30]

PART - C

(Attempt any three questions)

- Q.1 What is constructor? List some special properties of the constructor functions.
Q.2 What are the different forms of inheritance? Give example for each.
Q.3 Write a program that reads a text file and creates another file that is identical except that every sequence of consecutive blank spaces is replaced by a single space.
Q.4 Explain with the help of an example why templates are used in programming.
Q.5 What is operator function? Describe the syntax of an operator function.