

Roll No. .



Total No. of Pages : 02

Total No. of Questions : 07

BCA (Sem.-2)  
**OBJECT ORIENTED PROGRAMMING USING C++**

Subject Code : UGCA-1909

M.Code : 77417

Date of Examination: 28-05-2025

Max. Marks : 60

Time : 3 Hrs.

**INSTRUCTIONS TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

**SECTION-A**

1. Explain briefly :

a) Distinguish between Dynamic binding and message passing

b) Explain use of friend function with the help of suitable example

c) What is the need of inheritance?

d) Write difference between object oriented programming and procedure oriented programming

e) Define polymorphism.

f) Explain how to write a file?

g) State the use of scope resolution operator and its use in C++.

h) What is virtual keyword used for?

i) What are rules for overloading operators?

j) Explain early binding.

## SECTION - B

2. a) Discuss member functions  
b) When is an object created and what is its lifetime?
3. What is inheritance? What are different types of inheritance? Explain multiple inheritances with example.
4. a) What do you mean by type conversion? Give an example of basic to object conversion.  
b) Explain abstract classes.
5. Explain Virtual functions with example. What is the difference between static & dynamic binding?
6. a) What is difference in multiple and multilevel inheritance?  
b) What function can be used to open a file in C++?
7. What do you mean by operator overloading and method overloading? Write a distance class which contains data members of distance in meters, centimeters and millimeters. The class must have overloaded operators for addition + and subtraction- respectively.

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