Roll No. | | | | | | | | | | | | **Total No. of Pages : 02**

Total No. of Questions : 07

B.Sc. (G&WD) (Sem.–2)

OBJECT ORIENTED PROGRAMMING USING C++

Subject Code : UGCA-1909

M.Code : 77730

Date of Examination : 17-12-2022

Time : 3 Hrs. **Max. Marks : 60**

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. Write briefly :

a) Late binding

b) Multiple Constructors

c) Copy Constructor

d) Array of objects

e) Procedure oriented language

f) Pure virtual function

g) Early binding

h) Abstract classes

i) Objects

j) Destructor.

SECTION-B

2. Create a class named Shape with a function that prints “This is a shape”. Create another class named Polygon inheriting the Shape class with the same function that prints “Polygon is a shape”. Create two other classes named Rectangle and Triangle having the same function which prints "Rectangle is a polygon" and "Triangle is a polygon" respectively. Again, make another class named Square having the same function which prints “Square is a rectangle”. Now, try calling the function by the object of each of these classes.

3. Draw the inheritance hierarchy for hybrid inheritance and write the related code. Take any suitable example of your choice.

4. What is the concept of dynamic initialization of objects? Why is it required? Explain.

5. What are the steps to compile and. execute a C++ program? Take any program as example.

6. What are the basic components of a C++ program and explain the program structure using any example.

7. What are abstract classes? What is their role in polymorphism? Explain with example.

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.