B.Sc. (Data Analytic)   (Sem.–2)

OBJECT ORIENTED PROGRAMMING USING C++

Subject Code : UGCA-1909
M.Code : 91983
Date of Examination : 22-12-2022

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) List any four modes of opening a file.

b) What do you mean by static function?

c) What is the use of *private* keyword in C++?

d) What is the dynamic initialization of objects?

e) What is a virtual base class?

f) What are the major advantages of an object-oriented programming paradigm?

g) Outline the main components of a C++ program.

h) What do you mean by function overloading?

i) What is array of objects?

j) What are the advantages of inheritance?

SECTION-B

2) Define a class "string" with members to initialize and determine the length of the string. Overload the operators '+' and '+=' for the class "string".

3) a) What types of functions are available in C++? Explain.

b) What is recursion? Write a recursive program to compute factorial of a number in C++.

4) Explain the concept of inheritance with the help of an example. Discuss various types of inheritance in C++.

5) a) What is an abstract class? When do we make it?

b) What do you mean by late binding? How it is useful in OOP?

6) Discuss various types of constructors with the help of an example in C++.

7) Write short notes on:

a) Data encapsulation

b) Destructors.

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.