

Roll No.

Total No. of Pages : 02

Total No. of Questions : 07

B.Sc. (Data Analytic) (Sem.-2)
OBJECT ORIENTED PROGRAMMING USING C++

Subject Code : UGCA-1909

M.Code : 91983

Date of Examination : 08-07-22

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) What are the file streams?
- b) What do you mean by an abstract class?
- c) What is the use of *this* keyword in C++?
- d) What is a parametrized constructor?
- e) List any four file modes supported by C++.
- f) What is the use of protected keyword in inheritance?
- g) What do you mean by inline function?
- h) List the features of an object-oriented programming language.
- i) What is operator overloading?
- j) Outline the basic components of a C++ program.

SECTION-B

2. A bookshop maintains the inventory of books that are being sold at the shop. The list includes details such as author, title, price, publisher and stock position. Whenever a customer wants a book, the sales person inputs the title and author and the system searches the list and displays whether it is available or not. If it is not, an appropriate message is displayed. If it is, then the system displays the book details and requests for the number of copies required. If the requested copies are available, the total cost of the requested copies is displayed; otherwise, the message “Required copies not in stock” is displayed. Write a program to design the system and define a class called “books” with suitable member functions and constructors.
3. Differentiate between compile time polymorphism and run time polymorphism with an example.
4.
 - a) What is a function? How do you define a function in C++?
 - b) What is a virtual base class? When do we make it?
5.
 - a) What do you mean by dynamic binding? How it is useful in OOP?
 - b) Write a program to read two numbers from the keyboard and display the larger value on the screen.
6. Discuss the various types of inheritance in C++. Give examples to illustrate the use of each type of inheritance.
7. Write short notes on :
 - a) Data abstraction
 - b) Unary operators

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.