



DCD-10

Seat No. _____

**B. Sc. (Computer Application) (Sem. II) (CBCS)
(W.E.F. 2019) Examination**

July - 2022

**CA-201 : Advanced C & Object Oriented
Programming Using C++**

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- 1 (a) Attempt following questions : 4
- (1) FIFO stands for
 - (2) Collection of node is called _____
 - (3) List out SORTING techniques.
 - (4) Stack Use _____ approach.
- (b) Answer in brief : (Any one out of two) 2
- (1) What is Prefix and Postfix?
 - (2) What is PUSH and POP in Stack?
- (c) Answer in detail : (Any one out of two) 3
- (1) Explain Linear and Non-Linear data structure
 - (2) Write Bubble sort technique
- (d) Write a note on : (Any one out of two) 5
- (1) Explain Singly Linked List with example.
 - (2) Explain Stack
- 2 (a) Attempt following questions : 4
- (1) Wrapping a data into a single unit is called encapsulation (True/False)
 - (2) Function overloading is also called polymorphism (True/False)
 - (3) Write visibility modes in C++.
 - (4) _____ insertion operator in C++

- (b) Answer in brief : (Any one out of two) 2
- (1) Explain default argument in C++.
 - (2) Explain cin and cout.
- (c) Answer in detail : (Any one out of two) 3
- (1) Explain data types in C++.
 - (2) Explain scope resolution operator.
- (d) Write a note on : (Any one out of two) 5
- (1) Explain Class and Object
 - (2) Explain Array of objects with example
- 3** (a) Attempt following questions : 4
- (1) List out types of Inheritance.
 - (2) Constructor is a special member function that initialize when object created (True/False).
 - (3) _____ is used to destroy the objects that have been created by a constructor.
 - (4) Define base and derived class.
- (b) Answer in brief : (Any one out of two) 2
- (1) Explain Default constructor.
 - (2) Define abstract class
- (c) Answer in detail : (Any one out of two) 3
- (1) Explain Parameterized Constructor with example.
 - (2) Explain Destructor
- (d) Write a note on : (Any one out of two) 5
- (1) Explain multilevel inheritance with example
 - (2) Explain Virtual base class

- 4 (a) Attempt following questions : 4
- (1) List out types of polymorphism
 - (2) Define fill()
 - (3) Define setf()
 - (4) virtual void display() = 0; is called pure virtual function (True/False)
- (b) Answer in brief : (Any one out of two) 2
- (1) Explain getline() and write() functions in C++ Stream.
 - (2) Explain this pointer
- (c) Answer in detail : (Any one out of two) 3
- (1) Explain width() and precision() functions for formatted console I/O.
 - (2) Explain Operator overloading
- (d) Write a note on : (Any one out of two) 5
- (1) Explain C++ Stream.
 - (2) Explain Polymorphism
- 5 (a) Attempt following questions : 4
- (1) Define file
 - (2) Define ifstream class
 - (3) Define ios :: in
 - (4) Define logic and syntactic error
- (b) Answer in brief : (Any one out of two) 2
- (1) Explain try, catch and throw.
 - (2) Explain File stream classes

(c) Answer in detail : (Any one out of two) **3**

(1) Explain open() function in files

(2) Write a program for divide by zero exception in C++.

(d) Write a note on : (Any one out of two) **5**

(1) Explain Exception Handling Mechanism in C++

(2) Explain File modes.
