Seat No. _____

HX-10

B. Sc. (Sem. II) (CBCS) (WEF-2019) Examination

May - 2023

Computer Application

(CA-201 : Advanced C and Object Oriented Programming Using C++ (2019))

Time : $2\frac{1}{2}$ / Total Marks : **70**

1 (A) Attempt following questions : **4**

(1) LIFO stands for _____.

(2) Collection of node is called _____.

(3) List out SEARCHING techniques.

(4) Stack Use _____ approach.

(B) Answer in brief : (Any one out of two) **2**

(1) What is Prefix?

(2) What is PUSH and POP in Stack?

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

(1) Explain 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 queue.

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 this keyword.

(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 initializes 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) Write a program to implement destructor in C++.

(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/Q.

(2) Explain Operator overloading.

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

(1) Explain C++ Stream.

(2) Write a program to implement polymorphism using C++.

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) Expiain File modes.
