Enrollment No: _____   Exam Seat No.: _____

C.U.SHAH UNIVERSITY
Winter Examination-2022

Subject Name: OOPs using C++

Subject Code: 5CS01CPC1   **Branch: M.C.A.**

Semester: 1   **Date: 17/03/2023**   **Time: 10:30 To 01:00**   **Marks: 70**

Instructions:
(1) Use of Programmable calculator & any other electronic instrument is prohibited.
(2) Instructions written on main answer book are strictly to be obeyed.
(3) Draw neat diagrams and figures (if necessary) at right places.
(4) Assume suitable data if needed.

SECTION-I

Que-1 Attempt all the following short questions.   **[7]**
1. Define the Term: Identifier
2. Define polymorphism.
3. What is keyword? Give some examples of it.
4. Write down syntax of if…else statement.
5. Give 2 differences between C and C++.
6. What is the role of destructor?
7. Define array.

Que-2 Attempt all questions.   **[14]**
1. Write a short note on basic concepts of OOPs.   [7]
2. Discuss class and object with syntax and example.   [7]

OR

Que-2 Attempt all questions.   **[14]**
1. What is constructor? Explain default and parameterized constructors with example.   [7]
2. Define inheritance. Discuss various types of inheritance. Give example of single
   inheritance.   [7]

Que-3 Attempt all questions.   **[14]**
1. What is function overloading? Explain with example.   [5]
2. Discuss public, private and protected access specifiers.   [5]
3. Explain friend function with example.   [4]

OR

Que-3 Attempt all questions. [14]
1. Write down any five differences between POP & OOP. [5]
2. Explain switch statement with example. [5]
3. Discuss for and while loop with syntax. [4]

SECTION-II

Que-4 Attempt all the following short questions. [7]
1. What is the role of Exception handling in C++?
2. What is the use of int & float data type?
3. List out arithmetic and relational operators.
4. Define the term: stream.
5. What is file?
6. Which header file is required to use manipulators?
7. Give any two ios class function names to format output.

Que-5 Attempt all questions. [14]
1. What is operator overloading? Explain unary operator overloading with example. [7]
2. What is pointer? Explain call by reference with example. [7]

OR

Que-5 Attempt all questions. [14]
1. Write a note on exception handling mechanism. [5]
2. What is namespace? Explain how to define a namespace. [5]
3. Describe various file open modes. [4]

Que-6 Attempt all questions. [14]
1. Discuss inline function with example. [7]
2. Explain method overriding with example. [7]

OR

Que-6 Attempt all questions. [14]
1. Write a CPP program to check whether entered number is prime or not using class. [7]
2. Write a CPP program to add two time objects by passing object as function argument. [7]