

C.U.SHAH UNIVERSITY

Summer Examination-2019

Subject Name : Object Oriented Programming

Subject Code : 4TE02OOP1

Branch: B.Tech (All)

Semester : 2

Date : 29/04/2019

Time : 02:30 To 05:30

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.

Q-1 Attempt the following questions: (14)

- a) Give definition of Encapsulation.
- b) Which operators cannot be overloaded?
- c) Write advantages of using Functions in your Program.
- d)tells the compiler that how many arguments are there in function and what is type of each argument.
- e) State whether true or false.
 - 1) We can use object as a function argument.
 - 2) By default member variables of class are public.
- f) Write output of following program.

```
int m=5;
void main( )
{
    int m=10;
    cout<<"\n Value of m = "<< ::m;
    cout<<"\n Value of m = "<< m;
    getch( );
}
```
- g) Write down syntax for binary operator overloading.
- h) What is abstract class?
- i) List unformatted I/O operations.
- j) Write a syntax to create a template for function.
- k) What is the use of destructor?
- l) What is containership?
- m) Give definition of polymorphism.
- n) Define Keyword.

Attempt any four questions from Q-2 to Q-8

Q-2 Attempt all questions (14)

- (a) List basic concepts of OOP. Explain any 4 in detail. (07)
- (b) Explain call by reference with example. (04)
- (c) What is the use of inline Function? Write a program to find area of circle using inline function. (03)



- Q-3** **Attempt all questions** (14)
- (a) Can we use array with object? If yes then write a C++ program that show array with object. If no then write reason for that. (07)
- (b) Define Identifier. Write down rules to define identifier. (04)
- (c) Write a note on this Pointer. (03)
- Q-4** **Attempt all questions** (14)
- (a) What is Constructor? List types of constructor and explain any 2 with example. (07)
- (b) Write down rules for defining operator overloading. Write a C++ Program for multiplication of two numbers using binary operator overloading with friend function. (07)
- Q-5** **Attempt all questions** (14)
- (a) Explain basic to class and class to basic type conversion with Example. (07)
- (b) Write a C++ Program that will determine the use of virtual function. (04)
- (c) Explain following I/O operations. (03)
- 1) getline()
2) setw()
3) precision()
- Q-6** **Attempt all questions** (14)
- (a) What is Inheritance? List types of inheritance. Explain any 2 with example. (07)
- (b) Give difference between OOP and POP. (04)
- (c) Give brief description about Template. (03)
- Q-7** **Attempt all questions** (14)
- (a) Write a note on C++ stream class. (04)
- (b) What is pure virtual function? (03)
- (c) Define a structure "book" having data members as book_name, book_id and book_price. Write a C++ program to get information of above book details and display the details. (07)
- Q-8** **Attempt all questions** (14)
- (a) Explain Friend Function with example. (07)



- (b) Write a C++ program to implement following Class hierarchy to get and display information using Inheritance concept: (07)

