COURSE: (CL-1004) OBJECT ORIENTED PROGRAMMING LAB

LAB TASK # 11
WEIGHTAGE: 2

NOTE:
Only submit .cpp file of each question in a folder. Anyone who submits any other format file will get straight **ZERO.** Each question should have a separate .cpp file. Copy Paste or other UFM will also get **ZERO**. Use the following format for naming the folder Roll#_Name (P18-1234_NAME).

Q No.1: Answer the questions (i) and (iii) after going through the following class:

```
class Seminar
{
   int time;
public:
   Seminar()        //Function 1
   {
      time = 30;
      cout << "Seminar starts now" << endl;
   }
   void lecture()       //Function 2
   {
      cout << "Lectures in the seminar on" << endl;
   }
   Seminar(int duration)        //Function 3
   {
      time = duration;
      cout << "Seminar starts now" << endl;
   }
   ~Seminar()       //Function 4
   {
      cout << "Thanks" << endl;
   }
};
```

i. Write statements in C++ that would execute Function 1 and Function 3 of class Seminar.

ii. In Object Oriented Programming, what is Function 4 referred as and when does it get invoked/called?

iii. In Object Oriented Programming, which concept is illustrated by Function 1 and Function 3 together?

Q No.2: Answer the questions (i) and (ii) after going through the following class:

```
class Test
{
   char paper[20];
   int marks;
public:
   Test ()    // Function 1
   {
      strcpy (paper, "Computer");
      marks = 0;
   }
   Test (char p[])    // Function 2
   {
      strcpy(paper, p);
      marks = 0;
   }
   Test (int m)    // Function 3
   {
      strcpy(paper,"Computer");
      marks = m;
   }
   Test (char p[], int m)    // Function 4
   {
      strcpy (paper, p);
      marks = m;
   }
};
```

i. Write statements in C++ that would execute Function 1, Function 2, Function 3 and Function 4 of class Test.

ii. Which feature of Object Oriented Programming is demonstrated using Function 1, Function 2, Function 3 and Function 4 together in the above class Test?

Q No.3: Consider the definition of the following class:

```
class Sample
{
private:
   int x;
   double y;
```

```
public :
   Sample(); //Constructor 1
   Sample(int); //Constructor 2
   Sample(int, int); //Constructor 3
   Sample(int, double); //Constructor 4
};
```

i. Write the definition of the constructor 1 so that the private member variables are initialized to 0.

ii. Write the definition of the constructor 2 so that the private member variable x is initialized according to the value of the parameter, and the private member variable y is initialized to 0.

iii. Write the definition of the constructors 3 and 4 so that the private member variables are initialized according to the values of the parameters.