



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.