

Constructor & Destructor [SET – 1]

- 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?

- 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?

3Consider 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.