

OBJECT ORIENTED PROGRAMMING LAB



LAB TASK 10

Submitted By

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Submitted to

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```

#include<iostream>
using namespace std;
class seminar{
private:
    int time;
public:
    seminar() {          //fun 1 constructor without parameter
        time=30;
        cout<<"Seminar start now"<<endl;
    }
    void lecture() {      //fun 2 method

        cout << "Lectures in the seminar on" << endl;
    }
    seminar(int duration) //Fun 3  constructor with parameter
    {
        time = duration;
        cout << "Seminar starts now" << endl;
    }
    ~seminar() //fun 4 (destructor)
    {
        cout << "Thanks" << endl;
    }
};

int main() {
    seminar s;          //function 1 calling
    seminar s1(23);      //function 3 calling
}

```

```

e Seminar start now
t Seminar starts now

```

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

Ans: The function 4 is referred to Destructor its calling automatically when the scope of object

is over means after every thing executing its excute then.

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

Ans: Polymorphism...This class is all about the constructors

Q 2:

```

#include<iostream>
#include<cstring>           //for the use of strcpy function
using namespace std;
class Test
{
private:
    char paper[20];
    int marks;
public:
    Test ()           // Function 1
    {
        strcpy (paper, "Computer");    //copied the character string two part
        marks = 0;                     //dest and src
                                        //dest ==Paper , src ==computer
    }
    Test (char p[])    // Function 2
    {
        strcpy(paper, p);              //if we cout paper we get value of 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;
    }
};

int main(){
    Test T1;           //function 1
    Test T2("value");  //function 2
    Test T3(3);         //function 3
    Test T4("value",3); //function 4
}

```

Process executed successfully

```

1  "E:\second semester\oop lab\labtask 10\q2.exe"
2
3
4  Process returned 0 (0x0)   execution time : 0.039 s
5  Press any key to continue.

```

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?

Ans : constructor overloading

Q3 :

```
q3.cpp  q3.cpp  q3.cpp  q3.cpp
#include<iostream>
using namespace std;
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
};

Sample::Sample() {
    x=0; //intitalize x and y equal to zero
    y=0;
}

Sample::Sample(int x) { //constructor with one argument
    this->x=x;
    y=0;
}

Sample::Sample(int x, int y) { //with both argument
    this->x=x;
    this->y=y;
}

Sample::Sample(int x, double y) { //like same but here we use double
    x=x;
    y=y;
}

int main() {
    Sample s; //for 1 calling
    Sample s1(5); //for 2
    Sample s2(5, 6); //for 3
    Sample s4(5, 5); //for 4
}
```