

National University of Computer and Emerging Sciences, Lahore Campus



Course: OOP
Program: BS(Computer Science)
Duration: 10 Minutes
Paper Date: 14-March-2023
Section: BCS-2H
Exam: Quiz-2

Course Code: CS217
Semester: Spring 2023
Total Marks: 10
Page(s): 1
Roll No.
Name:

Instruction/Notes: • Negative marks will be awarded for any suspicious activity found during/in the quiz.

Question: For the code segment given below, determine output/exception. In case of exception highlight the exact line that will throw the exception.

```

#include<iostream>
using namespace std;

class A
{
private:
    int* a;
public:
    A(int _a = 0)
    {
        cout<<"A() Called for
"<<_a<<".\n";
        a = new int;
        *a=_a;
    }
    void Print()
    {
        cout<<"a =\t"<<*a<<endl;
    }
    A(const A& rhs)
    {
        cout<<"Copy Constructor
Called.\n";
    }
    void operator=(const A& rhs)
    {
        cout<<"Assignment Operator Called.\n";
    }
}
    
```

```

~A()
{
    if(a != 0){
        cout<<"~A() Called for
"<<*a<<".\n";
        delete a;
    }
}

void SetA(int _a)
{
    *a = _a;
}

};

void main()
{
    A obj1(5);
    {
        A obj2 = obj1;
        obj2.SetA(10);
        obj2.Print();
    }
    obj1.Print();
}
    
```

Output/Error: