OOP Section (E) **Quiz 5**
Name: **06-Dec-2022**
Roll No. :

Q1. What would be the output produced by executing the following C++ code? [5+5]

S no.	Question	Output

1.1	#include <iostream>
	using namespace std;
	
	class A{
	protected:
	const int a;
	int test;
	public:
	A(): a(7){
	test = a;
	test = 4;
	
	}
	void show(){
	cout << test + 6 << endl;
	}
	};
	class B: virtual public A
	{
	public:
	void showA(){
	test = test + a;
	cout << a << endl;
	}
	};
	
	class C: virtual public A{
	public:
	};
	
	class D: public B, public C{
	public:
	void update(){
	B::showA();
	test = 9 + a;
	A::show();
	}
	};
	int main(){
	D dobj;
		7
		
		22
		
		7
		
		10
		
		29
		
		(1 mark for each)
		
		The output should be in the sequence. For example if a student wrote:
		
		7
		
		24
		
		9
		
		10
		
		29
		
		Then he will receive only 3 marks for 7, 10 and 29 because they were in sequence.

	dobj.update();
	dobj.showA();
	A aobj;
	aobj.show();
	dobj.show();
	
	return 0;
	}	

1.2	#include <iostream>
	using namespace std;
	class A
	{
	public:
	A(int k){
	cout<<k + 5<<endl;}
	
	A() {
	cout << "A's constructor" << endl;
	}
	~A(){
	cout<<"A's destructor"<<endl;} };
	
	class B: public A
	{
	public:
	B():A(9.5){ cout << "Hello" << endl;}
	B(int b){
	cout << "B's parameterized constructor " << b << endl;
	}
	~B(){
	cout<<"B's destructor"<<endl;} };
	
	class C: public B
	{
	public:
	C():B(5){ }
	~C(){
	cout<<"C's destructor"<<endl;} };
	
	class D: public B, public C
	{
	public:
	D(){
	cout<<"D"<<endl;}};
	
	int main()
	{
	D obj; return 0;
	}
		14
		Hello
		A's constructor
		B's parameterized
		constructor 5
		D
		C's destructor
		B's destructor
		A's destructor
		B's destructor
		A's destructor
		
		(0.5 marks for each)
		
		The output should be in sequence