Zagazig University
Faculty of Computers and informatics
Course Name: Programming II (OOP)
Level: 1st, 2nd Term

Sample Midterm Exam (Model 1)

Date: 16/04/2022
Time: 1 Hour
No of Questions: 3
Full Points: 15

Name (Arabic): ....

Section: .... **Student ID**: ....

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10 1. What are the exact outputs of the following program?

```cpp
#include<iostream>
using namespace std;
class A {
private:
    int x;
public:
    A(int i) {x=i+3; cout << "Can" << endl; who(); }
    ~A() { cout << "Dad" << endl; who();}
    void who(void){ cout << "A: x = " << x << endl; }
};
class B : public A {
private:
    int x;
    A a;
public:
    B(int i) : a(i+22), A(i*4) {
        x = i;
        cout << "Cab" << endl;
        a.who();
    }
    B() : A(11), a(20) {
        x = 0;
        cout << "Cab" << endl;
        a.who();
    }
    ~B() { cout << "Dab" << endl; }
    void who(void) { cout << "B: x = " << x << endl; }
};
int main(void)
{
    B ob(4);
    return 0;
}
```

2 2. Multiple Choices Questions?

(**1**) Operator overloading is _____.
(A) making C++ operators work with objects.   (B) giving C++ operators more than they can handle.
(C) making new C++ operators.

3 3. Fill in Space:

(**1**) The ability of a function or operator to act in different ways on different data types is called _____.

Question:	1	2	3	Total
Points:	10	2	3	15
Score:				

BEST WISHES
Dr. Mahmmoud Mahdi