

Course Title: Programming II
Date: 13 /11 / 2013
No. of Questions: 3 Questions
Time: 90 minutes
Using Calculator (No)

University of Palestine



Mid Exam
2013-2014
Total Grade: 100

Instructor Name: Eng. Eman Alajrami
Student No.: _____
Student Name: _____
College Name: _____
Dep. / Specialist: _____
Using Dictionary (No)

First Question	No. of Branches (5)	40 Marks
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A) Choose the correct answer:

1. If we type: `system.out.println(a);` in the `main()` method, what will be the result?

`int a=12; //in the global space...`

```
void f() {  
    int a = 8;  
    a = a/2;  
}
```

- a. Other b. 12 c. 4 d. 0

2. What is the value of `a[99]` after these statements?

```
int[] a = new int[100];  
a[0] = 1;  
for (int i = 1; i < a.length; i++)  
    a[i] = 1 - a[i-1];
```

- (a) -2 (b) -1 (c) 0 (d) 1 (e) 2

B) Find and correct the error in each of the following program segments:

a) `final int MAX = 10;`
`MAX = 15;`

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b) Assume `int b[] = new int[10];`
`for (int i = 0; i <= b.length; i++)`
`b[i] = 1;`

.....
.....

c) Assume `int a[][] = { { 1, 2 }, { 3, 4 } };`
`a[1, 1] = 5;`

.....
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d)

```
public class C {  
    private int p;  
    public C() {  
        System.out.println("C's no-arg constructor invoked");  
        this(0);  
    }  
    public C(int p) {  
        p = p;  
    }  
    public void setP(int p) {  
        p = p;  
    }  
}
```

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C) What will be the return value if we call f(7);

```
int f(int v)
{
    if ((v == 1) || (v == 0))
        return 1;
    else if ((v%2) == 0)
        return f(v/2) + 2;
    else
        return f(v-1) + 3;
}
```

.....
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D) What is the output of the following program?

```
public class Foo {
    private static int i = 0;
    private static int j = 0;

    public static void main(String[] args) {
        int i = 2;
        int k = 3;
        {
            int j = 3;
            System.out.println("i + j is " + i + j);
        }
        k = i + j;
        System.out.println("k is " + k);
        System.out.println("j is " + j);
    }
}
```

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E) Read the following code:

Can you run the code without errors? if no find the error and correct it. What is the output of the code?
And what is the relation between class A and B?

```
class A {
    int data;

    public void f(int arg) { data = arg; }
    public int g() { return data; }
}

Public class B {
    A x;
}

public class Test{

public static void main(String args[]) {
    B obj;
    obj.x.f(20);
    system.out.println( obj.x.g());
    system.out.println (obj.g());
}
}
```

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