Question - 1
Operator- Loops

SCORE: **25 points**

```
class comma_operator
{
    public static void main(String args[])
    {
        int sum = 0 ;
        for ( int i = 0 , j = 0 ; i < 5 & j < 5 ;
++i, j = i + 1 )
            sum += i;
        System.out.println(sum);
    }
}
```

○ 5

◉ 6

○ 14

○ Compile Error

Question - 2
Equals

SCORE: **25 points**

```
public class Q2 {
    public static void main(String args[])
    {
        String str1 = new String( "Hello World"
);
        String str2 = new String( "Hello World"
);
        String str3 = "Hello World" ;
        String str4 = "Hello World" ;
        int a = 0 , b = 0 , c = 0 ;
        if (str3 == str4)
            a = 1 ;
        else
            a = 2 ;
        if (str1.equals(str3))
            b = 1 ;
        else
            b = 2 ;
        if (str1 == str4)
            c = 1 ;else
            c = 2 ;
        System.out.println( "a= " + a + " b= " +
b + " c= " + c);
    }
}aΩ2↑bΩ1↑cΩ2
```

? Help

○ a=2 b=1 c=2

○ a=2 b=2 c=2

○ a=1 b=2 c=1

● a=1 b=1 c=2

Question - 3
constructor

SCORE: **25 points**

Which of the following can be used to define a constructor for this class,
given the following code:
public class Test {
...
}

○ public void Test() {...}

● public Test() {...}

○ public static Test() {...}

○ public static void Test() {...}

Question - 4
Static

SCORE: **25 points**

```
class Test {
    void aMethod(){
        static int b = 10;
        System.out.println(++b);
    }

     public static void main(String[] args) {
         Test t = new Test();
         t.aMethod();
     }
}
```

○ 10

○ throw Exception

● Compile Error

○ 11

Question - 5
Inheritance-Overriding

SCORE: **25 points**

What happens if a class defines a method with the same name and parameters as a method in its superclass?

○ The compiler automatically renames the subclass method.

◉

The program runs since because overriding methods is allowed

○ The program throws a DuplicateMethod exception.

○ The compiler shows a DuplicateMethod error.

Question - 6
Array

SCORE: **25 points**

```
class Test6 {
    int a[] = new int[4];
    void aMethod()
    {
        int b = 0 , index;
        a[a[b]] = a[b] = b = 2;
        index = 2;
        System.out.println(a[index]);
    }

    public static void main(String[] args) {
        Test6 q = new Test6();
        q.aMethod();
    }
}
```

○ throw IndexOutOfBoundsException

○ Compiler Error

◉ 0

○ 2

Question - 7
Array

SCORE: **50 points**

Given an array containing n distinct numbers taken from `0, 1, 2, ..., n`, find the one that is missing from the array.
Example 1:

```
Input: [3,0,1]
Output: 2
```

Example 2:

```
Input: [9,6,4,2,3,5,7,0,1]
Output: 8
```