

1.

Assuming the declaration of `int x = 0;`, which of the following code snippets will compile without any errors?

Please select 3 options

☐ `while (false) { x=3; }`

☐ `if (false) { x=3; }`

☐ `do{ x = 3; } while(false);`

☐ `for( int i = 0; i< 0; i++) x = 3;`

2.

What will the following method return if called with an argument of 7?

```
public int transformNumber(int n)
{
    int radix = 2;
    int output = 0;
    output += radix*n;
    radix = output/radix;
    if(output<14)
    {
        return output;
    }
    else
    {
        output = output*radix/2;
        return output;
    }
    else
    {
        return output/2;
    }
}
```

[See Hint](#)

Please select 1 option

☐ 7

☐ 14

☐ 49

☐ Compilation fails.

3.

What will it print when the following code compiled and run?

```
public class TestClass
{
    public static int switchTest(int k)
    {
        int j = 1;
        switch(k)
        {
            case 1: j++;
            case 2: j++;
            case 3: j++;
            case 4: j++;
            case 5: j++;
            default : j++;
        }
        return j + k;
    }
    public static void main(String[] args)
    {
        System.out.println( switchTest(4) );
    }
}
```

[See Hint](#)

Please select 1 option

- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9

4.

Given the code fragment:

```
public static void main(String[] args) {
    int[] balances1 = new int[2];
    balances1[0] = 10;
    balances1[1] = 20;

    int[] balances2 = balances1;
    balances2[0] = 0;

    System.out.print(balances1 == balances2);
}
```

What is the result?

Note: You will see real exam questions written in the same format. The question, "what is the result" implies "what is the result of compilation and execution of the given code" assuming that it exists in a valid context such as a class. It does not mean that the code will compile as it is or that it does not have compilation issues.

Please select 1 option

- ☐ true
- ☐ false
- ☐ compilation failure
- ☐ exception at run time

5.

Which of the following statements are used to implement a boolean conditional statement in Java?

Please select 2 options

- ☐ if
- ☐ else-if
- ☐ else
- ☐ if-then-else
- ☐ switch
- ☐ for

6.

Which of the following statements concerning the switch construct are true?

Please select 3 options

- ☐ A character literal can be used as a value for a case label.
- ☐ A 'long' cannot be used as a switch variable.
- ☐ An empty switch block is a valid construct.
- ☐ A switch block must have a default label.
- ☐ If present, the default label must be the last of all the labels.

7.

What is the result of executing the following fragment of code:

```
boolean b1 = false;
boolean b2 = false;
if (b2 = b1 != b2)
{
    System.out.println("true");
} else
{
    System.out.println("false");
}
```

Please select 1 option

- ☐ Compile time error.
- ☐ It will print true;
- ☐ It will print false;
- ☐ Runtime error.
- ☐ It will print nothing.

8.

Consider the following class :

```
public class Test
{
    public static void main(String[] args)
    {
        if (args[0].equals("open"))
            if (args[1].equals("someone"))
                System.out.println("Hello!");
            else System.out.println("Go away "+ args[1]);
    }
}
```

Which of the following statements are true if the above program is run with the command line :

java Test closed

Please select 1 option

- ☐ It will throw `ArrayIndexOutOfBoundsException` at runtime.
- ☐ It will end without exceptions and will print nothing.
- ☐ It will print Go away
- ☐ It will print Go away and then will throw an `ArrayIndexOutOfBoundsException`.
- ☐ None of the above.

9.

Given the code fragment:

```
int[] balances1 = new int[]{ 10, 20 };
int[] balances2 = balances1;
balances1 = new int[]{ 100 };
System.out.print(balances1 == balances2);
```

What is the result?

Note: You will see real exam questions written in the same format. The question, "what is the result" implies "what is the result of compilation and execution of the given code" assuming that it exists in a valid context such as a class. It does not mean that the code will compile as it is or that it does not have compilation issues.

Please select 1 option

- ☐ true
- ☐ false
- ☐ compilation failure
- ☐ exception at run time

10.

What will the following code print?

```
boolean flag = true;
if(flag = false){
    System.out.println("1");
}else if(flag){
    System.out.println("2");
}else if(!flag){
    System.out.println("3");
}else System.out.println("4");
```

[See Hint](#)

Please select 1 option

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ Compilation error.