Started on	Thursday, 21 November 2024, 8:10 PM
State	Finished
Completed on	Thursday, 21 November 2024, 8:38 PM
Time taken	27 mins 59 secs
Marks	4.00/13.00
Grade	**3.08** out of 10.00 (**30.77**%)

Question 1

Correct

Mark 1.00 out of 1.00

What will the following code print?

```
public class Array
{
   public static void main(String[] args)
   {

      int[] numbers = { 1, 2, 3, 4, 5};
      for (int i = 0; i < 5; i++)
         System.out.println(numbers[i-1]);
   }
}
```

a. It will raise an ArrayIndexOutofBoundsException ✔

b. 2
3
4
5

c. 1
2
3
4
5
Exception!

d. It will print some numbers and output an ArrayIndexOutofBoundsException

e. 0
1
2
3
4
5

Your answer is correct.

The correct answer is:
It will raise an ArrayIndexOutofBoundsException

Question **2**

Incorrect

Mark 0.00 out of 1.00

Which of these statements are true?

Please select 2 options.

Select one or more:

- [x] Instance methods may access local variables of static methods. ✖
- [x] A class may contain both static and non-static variables and both static and non-static methods. ✔
- [ ] All methods in a class are implicitly passed a 'this' parameter when called.
- [ ] Each object of a class has its own copy of each non-static member variable.
- [ ] A static method can call other non-static methods in the same class by using the 'this' keyword.

Your answer is incorrect.

The correct answers are: A class may contain both static and non-static variables and both static and non-static methods. , Each object of a class has its own copy of each non-static member variable.

Question **3**

Correct

Mark 1.00 out of 1.00

What is the value of *z* after the following code segment?

```
int z=5;
if(++z > 5 || ++z > 6) z++;
```

Select one:

- ○ 6
- ○ 8
- ◉ 7 ✔
- ○ 5

Your answer is correct.

The correct answer is: 7

Question 4

Correct

Mark 1.00 out of 1.00

Which of the following lines can be inserted at *// line 1* to make the program run?

```
// line 1
public class TestClass{
    public static void main(String[] args){
        PrintWriter pw = new PrintWriter(System.out);
        OutputStreamWriter osw  =  new OutputStreamWriter( System.out );
        pw.print("hello");
    }
}
```

Assume that *PrintWriter* and *OutputStreamWriter* are valid classes in *java.io* package.

Select one:

- include java.lang.System;
- import java.io.*; ✔
- import java.lang.*;
- import java.io.OutputStreamWriter;
- include java.io.*;

Your answer is correct.

The correct answer is: import java.io.*;

Question **5**

Incorrect

Mark 0.00 out of 1.00

Given the following code, what is output to the screen:

```
class X{
    private int x;

    X(int x){
        x=x;
    }
    public int getX(){
        return x;
    }
}
public class Test {
    public static void main(String[] args) {
        X x = new X(3);
        System.out.println(x.getX());
    }
}
```

Select one:

- A compiler error.
- 0
- 3 ✖
- A runtime error
- x

Your answer is incorrect.

The correct answer is: 0

Question **6**

Correct

Mark 1.00 out of 1.00

What will the following code print?

```
public class MyClass {

    public static void main(String[] args) {
        int i = 10_000_000;
        double j = 2_3.0_2;
        System.out.println(""+ i + " " + j);

    }

}
```

- a. 10000000 23.02 ✔
- b. 10E6 23
- c. 10000023.02
- d. 10000000 23
- e. Compile error

Your answer is correct.

The correct answer is:
10000000 23.02

Question **7**

Incorrect

Mark 0.00 out of 1.00

Which of these statements regarding local variables is true?

Select one:

- Local variables can only be declared as *public*.
- You cannot specify visibility (i.e. *public*, *private*) of local variables.
- Local variables always have package accessibility.
- Local variables can be declared as *private*. ✖
- There are no local variables in Java.

Your answer is incorrect.

The correct answer is: You cannot specify visibility (i.e. *public*, *private*) of local variables.

Question **8**

Incorrect

Mark 0.00 out of 1.00

Which of the following is true about the default constructor?

Select one:

- It is provided by the compiler only if the class and any of its super classes does not define any constructor ✖
- It is always public
- To define a default constructor, you must use the default keyword
- A default constructor is used to return a default value
- It takes no arguments

Your answer is incorrect.

The correct answer is: It takes no arguments

Question **9**

Incorrect

Mark 0.00 out of 1.00

What is output to the screen after the following code segment is executed:

```
public class Test {
    public static void main(String args[]) {
        int y=0;
        int x=9;

        if( (x > 5) | (++y > 1) ){}
        if( (x > 19) & (++y > 1) ){}
        System.out.println(y);
    }
}
```

Select one:

- 2
- y
- 1 ✖
- 0
- A compiler error.

Your answer is incorrect.

The correct answer is: 2

Question **10**

Incorrect

Mark 0.00 out of 1.00

What will the following method print?

```
public class CounterStatic {
    private static int count;

    public CounterStatic() {
        count++;
    }

    public int getCount() {
        return count;
    }

    public static int getCounter(){
        return count;
    }

    public static void main(String[] args) {
        CounterStatic counter1 = new CounterStatic();
        CounterStatic counter2 = new CounterStatic();
        CounterStatic counter3 = new CounterStatic();

        System.out.println(counter1.getCount());
        System.out.println(CounterStatic.getCounter());

    }
}
```

a. 3

b. 1 ✖

3

c. 1

d. 3

3

Your answer is incorrect.

The correct answer is:

3

3

Question **11**

Incorrect

Mark 0.00 out of 1.00

Which of the following is/are valid Customer objects?

```
public class Customer {

    private int accountNo;
    private String name;
    private double balance;
    private static int count;

    public Customer() {
        count++;
    }

    public Customer(String name, int accountNo, double balance) {
        this.name = name;
        this.accountNo = accountNo;
        this.balance = balance;
        count++;
    }
```

Select one or more:

- [ ] a. Customer customerTree = new Customer("Thiago", "345", 100);
- [x] b. Customer customerOne = new Customer(); ✔
- [ ] c. Customer customerFour = new Customer("James", 123, 100, 0);
- [ ] d. Customer customerTwo = new Customer("Kate", 345, 0);

Your answer is incorrect.

The correct answers are:
Customer customerOne = new Customer();,

Customer customerTwo = new Customer("Kate", 345, 0);

Question **12**

Incorrect

Mark 0.00 out of 1.00

Which statements concerning conversion are true?

Please select 4 options.

Select one or more:

- Conversion from char to long does not need a cast. ✔
- Conversion from short to char needs a cast. ✔ The reverse is also true. Because their ranges are not compatible.
- Conversion from int to float needs a cast. ✖ No. Because a float can hold any value of int. Note that opposite is not true because of loss of precision.
- Conversion from byte, char or short to int, long or float does not need a cast.
- Conversion from byte to short does not need a cast. ✔

Your answer is incorrect.

The correct answers are: Conversion from char to long does not need a cast., Conversion from byte to short does not need a cast., Conversion from short to char needs a cast., Conversion from byte, char or short to int, long or float does not need a cast.

Question **13**

Incorrect

Mark 0.00 out of 1.00

Which of the following are valid declarations of the standard *main()* method?

Please select 2 options.

Select one or more:

- final static public void main (String[ ] arguments) { }
- public static void main (String args) { }
- public static void main (String[ ] args) { } ✔
- static void main(String args[ ]) { }
- public static int main(String args[ ]) {}

Your answer is incorrect.

The correct answers are: final static public void main (String[ ] arguments) { }, public static void main (String[ ] args) { }