Java Question with Answer:-

Note:

- **All Questions are based on Java 7 or earlier versions.**
- **Questions are having three level as Beginner, Intermediate and Complex.**

Question : 1	Level : Beginner

Question: What is the exact output of this code?

```
class A {

}

public class B{
        void m1(){
                System.out.println("This is method of Class B");
        }
}

public class C{
        public static void main(String[] args){
                B objB = new B();
                System.out.print("This is Class C");
                objB.m1();

        }
}
```

Output :-

A. **This is method of Class B**
B. **This is Class C.**
C. **This is Class C, This is method of Class B.**
D. **Compilation Error.**

Answer: C
Explanation:

→When we Run the code initially B object will be created and then it will print “This is Class C” and when created object call’s m1() method. Then “This is method of Class B” will be printed.

Question : 2	Level : Beginner

Question: What is the output of this code?

Note: Save this code as GlobalClass.java, Compile it and execute it.

```
class A {
	public static void main(String[] args) {
		System.out.print("This is Class A");
	}
}

class B {
	public static void main(String[] args) {
		System.out.print("This is Class B");
	}
}

class C {
	public static void main(String[] args) {
		System.out.print("This is Class C");
	}
}

class D {

}
```


Output :-

A. **In a Class, Cannot be define more than one Main method.**
B. **Code successfully compile and Execute.**
C. **NoClassDefFoundError.**
D. **None of the above.**

Answer : B
Explanation :

Every class Has its own main() and generates each and every .class file from the above program.

Question : 3	Level : Intermediate

Question: What is the output of this code?

```
public class DemoTestArrays {
        public static void main(String[] args) {
                int arrOne[] = { 1, 2, 3, 4, 5 };
                int arrTwo[] = { 0, 0, 0, 0, 0 };

                for (int i = 0; i < arrOne.length; i++) {
                        arrTwo[i] = arrOne[arrOne.length - i - 1];
                }

                System.out.println(Arrays.toString(arrTwo));
        }
}
```

Output :-

A. [0, 0, 0, 0, 0].
B. [5, 4, 3, 2, 1].
C. [1, 2, 3, 4, 5].
D. Runtime Error.

Answer : B
Explanation :

There are Two Array Declarations arrOne[] and arrTwo[],
arrOne[] is initialized and by using for loop, we are assigning the Values in arrTwo[] in Reverse Order.

Question : 4	Level : Intermediate

Question: What is the output of this code?

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

                String[] elements = { "AAA", "BBB", "CCC" };
                String first = (elements.length > 0) ? elements[0] : null;
                System.out.println(first);
        }
}
```

Output :-

A. **BBB.**
B. **CCC.**
C. **AAA.**
D. **Runtime Error.**

Answer : C
Explanation :

In the Above Program,
we are using Ternary Operator, in this if the condition is True then it will print first block or
else it will print second block.
So, in the above statement length of array is greater than '0', so it will print specified index from the Array.

Question : 5	Level : Intermediate

Question: Is there a destructor for Java?

A. **No, Because Java is a garbage collected language, you cannot predict when (or even if) an object will be destroyed.**

B. **Yes, Java is quite mature as a language and memory leak can be fixed.**

C. **Java objects are heap allocated and garbage collected, that's why destructor used in java.**

D. **None of the above.**

Answer : A
Explanation :

In place of destructor java provides the garbage collector.

Question : 6	Level : Beginner

Question: Read carefully below code and identify the correct answer?

```
public class ClassMain {

	public static void main(String[] args) {
		String main = "main is incorrect defined";
		System.out.println(main);
	}
}
```

A. **Yes, it compiles and execute because, the character sequence "main" is an identifier.**

B. **No, because main is a keyword/reserve word in java.**

C. **It does not compile.**

D. **In Java, Main keyword is not used twice.**

Answer : A

Question : 7	Level : Beginner

Question: Read the given below code and identify correct Output?

```
class MyProgram {
        int count = 0;

        public static void main(String[] args) {
                System.out.println(count);
        }
}
```

Output :-

A. **null.**
B. **0.**
C. **Error.**
D. **None of the above.**

Answer : C
Explanation :

In the above program we get compile time Error because,
We can't Access non-static variables from static area.

Question : 8	Level : Beginner

Question: How many Objects created in the below code?

```
class X {
        X() {
                System.out.println(this.hashCode());
        }
}

class Y extends X {
        Y() {
                System.out.println(this.hashCode());
        }
}

public class TestClass {
        public static void main(String[] args) {
                Y y = new Y();
                System.out.println(y.hashCode());
        }
}
```

Output :-

A. **3.**
B. **2.**
C. **1.**
D. **None of the above.**

Answer : C
Explanation :

Question : 9	Level : Intermediate

Question: What is the correct output of the given code?

```
public class Test {
	public static double calculation(double a, double b) {
		if (a == b) {
			return 0;
		} else {
			return 2 / (a - b);
		}
	}

	public static void main(String[] args) {
		double d1 = Double.MIN_VALUE;
		double d2 = 2.0 * Double.MIN_VALUE;
		System.out.println("Result: " + calculation(d1, d2));
	}
}
```

Output :-

A. 0.0
B. 0
C. Error
D. -Infinity

Answer : D
Explanation :

Question : 10	Level : Intermediate

Question: What is the correct answer of the below code?

```
public class Test {
        public static void main(String[] args) {
                int j = 0;
                if ((8 > 4) | (j++ == 7))
                        System.out.println("j = " + j);
        }
}
```

Output :-

A. 0
B. 1
C. 2
D. ArithmeticException (Divided by zero)

Answer : 1
Explanation :

In if Statement condition (8 > 4) Satisfied and in condition (j++ == 7), j value got incremented, And it will print j value as '1'.

Question : 11	Level : Beginner

Question: What is the output of below code?

```
public class Test {
        public static void main(String[] args) {
                int[] array = { 1, 2, 3, 4, 5 };

                int sum = 0;

                for (int i : array)
                        sum += ++i;

                System.out.println(--sum);
        }
}
```

Output :-

A. 15
B. 16
C. 20
D. 19

Answer : D
Explanation :

In for loop values of 'i' will be pre-Incremented and added with sum = 0 and loop will be repeated until the last index of Array values, at the end of loop sum value is '20'.
While printing the sum value it got pre-Decremented and printed, the value is '19'

Question : 12	Level : Beginner

Question: Find Out the correct output of the given code?

```
public class MathTest {

        public void main(String[] args) {

                int x = 10 * 10 - 10;

                System.out.println(++x);
        }

}
```

Output :-

A. 0
B. 90
C. 91
D. Runtime Error

Answer : D
Explanation :

In java Programming, Main must be declared as static.
Main method should be declared as :
public static void main(String[] args)

Question : 13	Level : Beginner

Question: Can we create a user defined immutable class, pick the correct option?

Output :-

A. **Make the class as final and**
B. **Make the data members as private and final.**
C. **Both A and B are Correct**
D. **None of the above**

Answer : C
Explanation :

Immutable means once an object is created, we can't change its content.
So, we need to declare class as final and all data members as private and final.

Question : 14	Level : Beginner

Question: How to define Vector class??

Output :-

A. **Synchronized and Non-serialized**
B. **Non-Synchronized and Serialized.**
C. **Both A and B are Correct**
D. **None of the above**

Answer : D
Explanation :

Vector class in collection interface is both Synchronized and Serializable.

Question : 15	Level : Beginner

Question: What is the output of the below code?

```
public class TestString1 {
        public static void main(String[] args) {
                String str = "420";
                str += 42;
                System.out.print(str);
        }
}
```

Output :-

A. 420
B. 42042.
C. Compilation fails
D. An exception is thrown at runtime

Answer : B
Explanation :

The addition of String value and Integer value returns String Value as it operates as String Concatenation

Question : 16	Level : Beginner

Question: What is the output of the below code?

```
class Test {
        public static void main(String[] args) {
                int x = 0;
                int y = 10;
                do {
                        y--;
                        ++x;
                } while (x < 5);
                System.out.print(x + "," + y);
        }
}
```

Output :-

A. 5, 6
B. 5, 5.
C. 6, 5
D. **Error**

Answer : B
Explanation :

While loop Executes until condition (x < 5) returns false.

Question : 17	Level : Beginner

Question: What is the output of the below code?

```
class Test {
        public static void main(String[] args) {
                int x = 0;
                int y = 10;
                do {
                        y--;
                        ++x;
                } while (x < 5);
                System.out.print(x + "," + y);
        }
}
```

Output :-

A. 5, 6
B. 5, 5.
C. 6, 5
D. **Error**

Answer : B
Explanation :

While loop Executes until condition (x < 5) returns false.

Question : 18	Level : Beginner

Question: What definition exactly match for abstract class? ?

Output :-

A.
```
public abstract class A {
        public Bark speak();
}
```

B.
```
public abstract class A {
        public Bark speak() {
        }
}
```

C.
```
public class A {
        public abstract Bark speak();
}
```

D.
```
public class A abstract{
        public abstract Bark speak();
}
```


Answer : A
Explanation :

In abstract class, class must be declared as abstract and it can have abstract and non-abstract Methods.

Question : 19	Level : Beginner

Question: Read the below code and pick correct option?

```
class LoopTestDemo {
        public static void main(String[] args) {
                int x = 12;
                while (x < 10) {
                        x--;
                }
                System.out.print(x);
        }
}
```

Output :-

A. 11
B. 10
C. 12
D. 9

Answer : C
Expanation :

Condition in while loop returns false and it won't execute loop.
Directly it prints x value '12'.

Question : 20	Level : Beginner

Question: Read the below code and pick correct option?

```
class BitwiseTestDemo {
        public static void main(String[] args) {
                int x = 5;
                int y = 7;
                System.out.print(((y * 2) % x));
                System.out.print(" " + (y % x));
        }
}
```

Output :-

A. 6, 8
B. 7, 9
C. 4, 6
D. 4, 2

Answer : D
Explanation :

After performing above operations, it prints 4 & 2.

Question : 21	Level : Intermediate

Question: Read the below code and pick correct option?

```
class TestFormatSpecifier {

        static final long num = 343L;

        static long testMethod(long num) {
                System.out.print(++num + " ");
                return ++num;
        }

        public static void main(String[] args) {
                System.out.print(num + " ");
                final long num = 340L;
                new TestString1().testMethod(num);
                System.out.println(num);
        }
}
```

Output :-

A. 343 340 342
B. 343 341 342
C. 343 341 340
D. An exception is thrown at runtime

Answer : None of the Above
Explantion:

An Error Thrown at Compiletime

```
TestFormatSpecifier.java:13: error: cannot find symbol
      new TestString1().testMethod(num);
                       ^
 symbol:   method testMethod(long)
 location: class TestString1
1 error
```

Question : 22	Level : Intermediate

Question: Read the below code and pick correct option?

```
public class TestBooleanDemo {
        public static void main(String[] args) {
                int x = 5;
                boolean b1 = true;
                boolean b2 = false;

                if ((x == 4) && !b2)
                        System.out.print("1 ");
                System.out.print("2 ");
                if ((b2 = true) && b1)
                        System.out.print("3 ");
        }
}
```

Output :-

A. 2, 3
B. 1, 2
C. 3, 2
D. An exception is thrown at runtime

Answer : A
Explanation :

First condition is not satisfied and it prints ‘2’ and in second condition we are assigning new Value for b2 as true and condition satisfied then it prints ‘3’.

Question : 23	Level : Intermediate

Question: Read the below code and pick correct option?

```
public class Test {
        public void main(String[] args) {
                int x = 6;
                Test test = new Test();
                test.doSomething(x);
                System.out.print(" main x = " + x);
        }

        void doSomething(int x) {
                System.out.print(" method x = " + x++);
        }
}
```

Output :-

A. **An exception is thrown at runtime**
B. **method x = 6, main x = 6**
C. **method x = 6 main x = 7**
D. **method x = 7 main x = 6**

Answer :A
Explanation :

In java Programming, Main must be declared as static.
Main method should be declared as :
public static void main(String[] args)

Question : 24	Level : Intermediate

Question: Read the below code and pick correct option?

```
class TernanryTestDemo {
        public static void main(String[] args) {
                int i = 42;
                String str = (i < 40) ? "Computer" : (i > 50) ? "Java" : "Everything";
                System.out.println(str);
        }
}
```

Output :-

A. **An exception is thrown at runtime**
B. **Computer**
C. **Java**
D. **Everything**

Answer : D
Explanation :

In the above program, It is a Ternary Operator,
The condition is not satisfied and it will go to second block and there also condition is not satisfied
So, it prints “Everything”.

Question : 25	Level : Intermediate

Question: Read the below code and pick correct option?

```
class TernanryTestDemo {
        public static void main(String[] args) {
                int i = 42;
                String str = (i < 40) ? "Computer" : (i > 50) ? "Java" : "Everything";
                System.out.println(str);
        }
}
```

Output :-

A. **An exception is thrown at runtime**
B. **Computer**
C. **Java**
D. **Everything**

Answer : D
Explanation :

In the above program, It is a Ternary Operator,
The condition is not satisfied and it will go to second block and there also condition is not satisfied
So, it prints “Everything”.

Question : 26	Level : Beginner

Question: Read the below code and pick correct option?

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

                Float valuePie = new Float(3.14f);
                try {
                        if (valuePie > 3)
                                System.out.print("Pie value is greater than 3"+", ");

                        else
                                System.out.print("Pie value is not greater than 3"+", ");
                } catch (Exception e) {
                        e.printStackTrace();
                } finally {
                        System.out.println ("Have a nice day.");
                }
        }
}
```

Output :-

A. **Pie value is not greater than 3, Have a nice day.**
B. **Pie value is greater than 3, Have a nice day.**
C. **Pie value is not greater than 3.**
D. **An exception is thrown at runtime.**

Answer : B
Explanation :

In the above program, valuePie is 3.14f,
In try block if condition returns true then it prints “Pie value is greater than 3” and it prints finally block "Have a nice day."

Question : 27	Level : Beginner

Question: Read the below code and pick correct option?

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

                int a = 8;
                System.out.println ("" + (int) ((a < 8) ? 9.9 : 9));
        }
}
```

Output :-

A. 9.9
B. 0.
C. 9.
D. Error.

Answer : C
Explanation :

In ternary operator, condition is not satisfied and returns false, then it will go for second block and print '9'

Question : 28	Level : Beginner

Question: Read the below code and pick correct option?

```
class TestDoubleDemo {

        public static long round(double a) {
           if (a != 0x1.fffffffffffffp-2) {

              return (long)Math.floor(a + 0.5d);
           } else {
              return 0;
           }
        }
        public static void main(String[] args) {
                TestDoubleDemo t = new TestDoubleDemo();
                t.round(2.5);
        }
}
```

Output :-

A. 3
B. 0.
C. -1.
D. None of the above.

Answer : D
Explanation :

It won't print any values.

Question : 29	Level : Beginner

Question: Create a parent class as below

```
class A {
        private int a = 0;

}
```

Which one is tightly encapsulated in the below options

Output :-

A.
```
class B extends A {
    int a = 0;
}
```

B.
```
class C extends A {
    private int a = 0;
}
```

C.
```
class B extends A {
    static int a = 0;
}
```

D.
```
class C extends A {
     final int a = 0;
}
```


Answer : B
Explanation :

Class is said to be tightly encapsulated if and only if all the data variables of that class and its Inherited classes declared as private,
And in the above example only Option B is satisfied.

Question : 30	Level : Beginner

Question: Cyclic inheritance allowed in Java or Not??

```
class A extends B {
        // some methods
}

class B extends A {
        // some methods
}
```

A. **No, Not Allowed.**

B. **Yes, Definitely Allowed.**

C. **With Some condition, Allowed**

D. **None of the Above**

Answer : A
Explanation :

Cyclic inheritance is not Allowed in java because class acts as both super class and sub class at Same time.
If we try to execute cyclic inheritance we will get compile time error

CE: Cyclic inheritance involving.

Question : 31	Level : Beginner

Question: Read the below code and find correct output?

```
public class Main {

	public static void main(String[] args) {
		Integer x = 400, y = 400;
		if (x == y)
			System.out.println("Number is Same");
		else
			System.out.println("Number is Not Same");
	}
}
```

A. **Number is Same**

B. **Number is Not Same**

C. **Runtime Exception**

D. **None of the Above**

Answer : B
Explanation :

(==) operator is for reference comparison and (.equals) for content comparison,
So, in the above programs wrapper class Integer creates two objects in “String Constant Pool”
With references x and y,
So, (x == y) checks both objects reference and returns false and prints else statement
“Number is Not Same”