

Q1

```

Class increment {
    public static void main (String args[]) {
        int g = 3;
        System.out.println(++g * 8);
    }
}

```

→

Option a) 32

Operator ++ has more preference than *, thus g becomes 4 and then multiple by 8 gives 32

Q2

What will be the output of the following java code?

```

Class Output {
    public static void main (String args[]) {
        double a, b, c;
        a = 3.0/0;
        b = 0/1.0;
        c = 0/0.0;
    }
}

```

```

System.out.println(a);
System.out.println(b);
System.out.println(c);
}
}

```

→

Option a) NaN

For floating point literals, we have constant value to represent (10/0.0) infinity either positive or negative and also have NaN (not a number for undefined like 0/0.0), but for the integral type, we don't have any constant that's why we get an arithmetic exception.

What will be the output of the following Java programs?

```
Class Variable_Scope
{
    public static void main (String args[])
    {
        int x;
        x = 5;
        int y = 6;
        System.out.println (x + " " + y);
    }
    System.out.println (x + " " + y);
}
```

Option a) Compilation error

What will be the error in the following Java code?

```
byte b = 50;
```

```
b = b * 50;
```

Option d) * operator has converted $b * 50$ into int, which can not be converted to byte without casting

While evaluating an expression containing int, bytes or shorts, the whole expression is converted to int then evaluated and the result is also of type int.

What will be the output of the following Java program?

class evaluate.

```
{
```

```
public static void main (String args[])
```

```
{
```

```
int arr[] = new int[] {0, 1, 2, 3, 4, 5, 6, 7, 8, 9};
```

```
int n = 6;
```

```
n = arr[arr[n]/2];
```

```
System.out.println (arr[n]/2);
```

```
}
```

```
}
```

Option b) 1

Array arr contain 10 element. n contain 6 thus in text line n is given value 3 printing $arr[3]/2$ i.e. $3/2 = 1$ because of int value, by int values there is

test, if this values would be float the result would be 1.5.

Q6) What will be the output of the following java program

```

class leftshift-operator {
    public static void main (String args[]) {
        byte x=64;
        int i;
        byte y;
        i=x<<2;
        y=(byte)(x<<2);
        System.out.print(i+" "+y);
    }
}

```

→ Option B) ~~64~~ 256 0

Q7) What will be the output of the following java program?

Class output

```

class {
    public static void main (String args[]) {
        int arr[] = {1, 2, 3, 4};
        for (int i=0; i<arr.length-2; i++)
            System.out.println (arr[i] + " ");
    }
}

```

→ Option d) 1 2 3

arr.length() is 5, So the loop is executed for three times



Q10) What will be the ^{output} of the following Java program?

```
Class abc  
{  
    Public Static void main (String args[]) {  
        if (args.length > 0)  
            System.out.println(args.length);  
    }  
}
```

→ Option a) The Snippet compiles and runs but does not print anything

As no argument is passed to the code, the length of args is 0, so the code will not print

Q11) What will be the output of the following Java program?

```
Class Aliigator  
{  
    Public Static void main (String args[]) {  
        int[] x = {1, 2, 3, 4, 5}, y = {6, 7, 8, 9};  
        int[] z = x;  
        System.out.println(y[2]);  
    }  
}
```

→ Option d) 7

Both x, and y, are pointing to the same array



Q12) What will be the output of the following java program?

```
class A {
```

```
    int i;
```

```
    void display()
```

```
{
```

```
        System.out.println(i);
```

```
}
```

```
}
```

```
class B extends A {
```

```
    int j;
```

```
    void display()
```

```
{
```

```
        System.out.println(j);
```

```
}
```

```
}
```

```
class method_overriding
```

```
{
```

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

```
        B obj = new B();
```

```
        obj.i = 1;
```

```
        obj.j = 2;
```

```
        obj.display();
```

```
    }
```

```
}
```

→ option b) 2

Class A & Class B both contain display() method. Class B inherits Class A. When display() method is called by object of Class B, display() method of Class B is executed rather than that of Class A.



Q(14) What will be the output of the following Java program?

Class recursion

{

int fun(int n)

{

if (n == 1)

return 1;

result = fun(n-1);

return result;

}

}

class Output

{

public static void main (String args[])

{

recursion obj = new recursion();

System.out.println(obj.fun(5));

}

}

→ Option a) 1

Q(15) What will be the output of the following Java code?

Class output

{

public static void main (String args[])

{

String c = "Hello i Love Java";

boolean var;

var = c.startsWith("hello");

System.out.println(var);

}

}



→

Option d) false

~~Starts~~ Starts With () method is Case Sensitive "hello" and "Hello" are treated differently, hence false is stored in var.

Q(17)

What will be the output of the following java program?
Class Output

```
{  
public static void main (String args[]) {  
    Integer i = new Integer (257);  
    byte x = i.byteValue ();  
    System.out.println (x);  
}  
}
```

→

Option c) 1

i.byteValue() method returns the value of wrapper i as a byte value. i is 257, range of byte is 256 therefore i value exceeds byte range by 1 hence 1 is returned and stored in x.

Q(18)

What will be the output of the following java program?

Class Output

```
{  
public static void main (String args[]) {  
    double x = 2.0;  
    double y = 3.0;  
    double z = Math.pow (x, y);  
    System.out.println (z);  
}
```


}

{

→ Option b) 8.0

$\text{Math.pow}(x, y)$ method returns value of y to the power x , i.e. x^y , $2.0^3.0 = 8.0$

Q(19) What will be the output of the following java program?

```
class Output
```

```
{
```

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

```
        double x = 3.14;
```

```
        int y = (int) Math.Ceil(x);
```

```
        System.out.println(y);
```

```
    }
```

```
}
```

→ Option c) 4

$\text{Ceil}(\text{double } x)$ returns the Smallest whole number greater or equal to variable

Q(21) What will be the output of the following java program?

```
import java.net.*;
```

```
class networking
```

```
{
```

```
    public static void main (String[] args) throws
```

```
        Exception {
```

```
        URL obj = new URL ("https://www.google.com");
```

```
        URLConnection obj1 = getConnection obj.openConnection();
```



```
int len = obj1.getConnectionLength();  
System.out.print(len);  
}  
}
```

→ Option a) 127

Q22) What will be the output of the following Java program?

```
import java.net.*;  
class Networking  
{  
    public static void main (String[] args) throws  
        MalformedURLException {  
        URL obj = new URL("https://www.google.com");  
        System.out.println(obj.toExternalForm());  
    }  
}
```

→ Option b) https://google.com

toExternalForm() is used to know the full URL of an URL object

Q23) What will be the output of the following Java code snippet?

```
import java.util.*;  
class ArrayList  
{  
    public static void main (String[] args) {  
        ArrayList obj = new ArrayList();  
    }  
}
```



```
public static void main (String args[])  
{  
    new newThread();  
}
```

→ Option b) false false

This program was previously done by using Run Interface, here we have used Thread class. This shows both the method are equivalent, we can use any of them to create a thread.

Q (30) What will be the output of the following Java program?

```
class String class  
{
```

```
    public static void main (String args[])  
    {  
        String obj = "I LIKE JAVA";  
        System.out.println(obj.length());  
    }  
}
```

→ option a) 11

Q (31) What will be the output of the following Java program?

```
class array_output  
{
```

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




```
int array_variable[] = new int[10];  
for (int i=0; i<10; i++)  
{  
    array_variable[i] = i;  
    System.out.print(array_variable[i] + " ");  
    i++;  
}
```

→ Option a) 0 2 6 8

When an array is declared using new operator then all of its elements are initialized to 0 automatically. for loop body is executed 5 times as whenever controls comes in the loop i value is incremented twice, first by i++ in body of loop then by ++i in increment condition of for loop

Q (34) What will be the output of the following java code?

```
class class array_output
```

```
{
```

```
    public static void main (String args[])
```

```
{
```

```
    int array_variable[][] = {{1, 2, 3}, {4, 5, 6}, {7, 8, 9}};
```

```
    int sum=0;
```

```
    for (int i=0; i<3; ++i)
```

```
    for (int j=0; j<3; ++j)
```

```
        sum = sum + array_variable[i][j];
```

```
    System.out.print (sum/5);
```

```
}
```

```
}
```

→ option b) 9

Q (38) What will be the output of the following Java program?

class output

{

~~public~~ static void main (String args[])

{

int x, y=1

x=10;

if (x != 10 && x/0 == 0)

System.out.println(y);

else

System.out.println(++y);

}

}

→ option d) Compilation error

main() method must be made public, without main() being public java ~~can~~ run time System will not be able to ~~be~~ access main() and will not be able to execute the code

Output:

\$ javac output.java

Error! Main method not found in class Output
please define the main method as:

public static void main (String args[])