Day 1 Assessment

Section 1: Operator Precedence and Evaluation

Question 1:

Java

int x = 15;

x += x++ + ++x;

What is the final value of x?

A.) 43

B.) 35

C.) 47

D.) 46

Question 2:

Java

int a = 10, b = 5;

int c = a-- - --b + ++a;

What is the final value of c?

A.) 14

B.) 16

C.) 12

D.) 17

Question 3:

Java

double result = 20 / 4 * 2.5 + 3 % 2;

What is the value of result?

A.) 12

B.) 11

C.) 13.5

D.) C.T.E (Compile-Time Error)

Question 4:

Java

int m = 8, n = 5;

m *= n += 3;

What are the values of m and n?

A.) m = 64, n = 8

B.) m = 54, n = 9

C.) m = 65, n = 10

D.) None of the above

Question 5:

Java

int p = 15;

p += p -= p *= 2;

What is the value of p?

A.) 11

B.) 0

C.) 10

D.) 14

Question 6:

Java

double x = 10.5;

x *= x += x /= 2;

What is the value of x?

A.) 313.43

B.) 115.45

C.) 165.375

D.) None of the above

Question 7:

Java

int i = 5;

int j = i++ + ++i + i-- + --i;

What is the value of i and j?

A.) i = 5, j = 24

B.) i = 6, j = 27

C.) i = 7, j = 11

D.) C.T.E (Compile-Time Error)

Question 8:

Java

int a = 8;

int b = ++a + a++ + --a + a--;

What are the values of a and b?

A.) a = 36, b = 9

B.) a = 12, b = 44

C.) a = 8, b = 36

D.) a = 8, b = 37

Question 9:

Java

int x = 3, y = 4;

int z = ++x * y-- + x++ * ++y;

What are the values of x, y, and z?

A.) x = 5, y = 4, z = 32

B.) x = 4, y = 6, z = 35

C.) x = 3, y = 8, z = 43

D.) None of the above

Section 2: Boolean Logic

Question 10:

Java

boolean a = true, b = false;

boolean c = !a || b && a || !b;

What is the value of c?

A.) true

B.) false

C.) C.T.E (Compile-Time Error)

D.) None of the above

Question 11:

Java

boolean p = true, q = true, r = false;

boolean s = !(p || q) && r || !(p && r);

What is the value of s?

A.) true

B.) false

C.) C.T.E (Compile-Time Error)

D.) None of the above

Question 12:

Java

boolean x = true, y = false;

boolean z = !(x && !y) || (!x || y);

What is the value of z?

A.) true

B.) false

C.) C.T.E (Compile-Time Error)

D.) None of the above

Section 3: Mixed Operators and Complex Expressions

Question 13:

Java

int a = 10, b = 5;

boolean result = (a++ > --b) && (++a > b--);

What are the values of a, b, and result?

A.) a = 11, b = 12, result = false

B.) a = 12, b = 3, result = true

C.) a = 10, b = 4, true

D.) None of the above

Question 14:

Java

int x = 8, y = 3;

int z = x++ * --y + y++ * x--;

What are the values of x, y, and z?

A.) 8, 3, 34

B.) 3, 4, 12

C.) 9, 4, 34

D.) 8, 3, 35

Question 15:

Java

int m = 15, n = 10;

boolean flag = (m -= 5) >= (n += 3) && (m += 2) < (n *= 2);

What are the values of m, n, and flag?

A.) 12, 26, false

B.) 10, 13, false

C.) 12, 25, true

D.) None of the above

Question 16:

Java

int a = 8, b = 3;

double result = (--a * ++b) + (a-- % ++b);

What are the values of a, b, and result?

A.) 4, 5, 25

B.) 6, 5, 28

C.) 6, 5, 28.0

D.) 6, 5, 30.0

Question 17:

Java

int m = 12, n = 5;

double result = m++ / --n + ++m % n++;

What are the values of m, n, and result?

A.) 14, 5, 5.0

B.) 14, 6, 14.0

C.) 14, 6, 14 (This implies an int result, but the variable is double)

D.) None of the above

Question 18:

Java

boolean x = true, y = false;

boolean z = !(x || y && !x) || (y && x || !y);

What is the value of z?

A.) false

B.) true

C.) C.T.E (Compile-Time Error)

D.) None of the above

Question 19:

Java

boolean p = true, q = true, r = false;

boolean result = (p || q && r) && (!p || !q) || (q && !r);

What is the value of result?

A.) false

B.) true

C.) C.T.E (Compile-Time Error)

D.) None of the above

Question 20:

Java

int m = 30, n = 20;

int p = m-- + ++n - m++ * --n;

What are the values of m, p, n?

A.) 30, 20, 521

B.) 30, 19, -520

C.) 30, 19, -529

D.) 30, 19, -529

Question 21:

Java

int a = 3;

int b = 4;

boolean result = (a || b) && (b <= a);

What is the value of result?

A.) true

B.) false

C.) C.T.E (Compile-Time Error)

D.) None of the above

Question 22:

Java

int x = 8, y = 5, z = 3;

double result = x++ * --y + ++z * y-- - --x * ++z / y++;

What are the values of x, y, z, result?

A.) 8, 5, 4, 34.67

B.) 8, 6, 33, 67

C.) 8, 5, 33, 67

D.) 8, 5, 4, 33.67

Question 23:

Java

int m = 10, n = 20, p = 15;

int result = (m > n ? m++ : n--) + (n > p ? n++ : p++) * (p > m ? p-- : m++);

What are the values of m, n, and p?

A.) 11, 14, 20, 305

B.) 12, 14, 24, 303

C.) 10, 20, 14, 305

D.) 10, 11, 14, 305

Section 4: Java Fundamentals

Question 24:

Java

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

What is the value of x?

A.) 0

B.) C.T.E (Compile-Time Error)

C.) None of the above

Question 25:

Java

```java
class _Program1
{
    public static void main(String[] args)
    {
        int System = 1;
        String laptopType = "Business Laptop";


        System.out.println(System);
        System.out.println(laptopType);
    }
}
```

Trace the output:

A.) 1, Business Laptop

B.) C.T.E (Compile-Time Error)

C.) None of the above

Question 26:

The data types that are accepted by the switch statement?

A.) String, char, long

B.) int, short, float

C.) double, boolean, byte

D.) String, char, int

Question 27:

What are the keywords used to implement a SWITCH case in Java language?

A.) switch, case

B.) default

C.) break

D.) All of the above

Question 28:

Number of Primitive Data types in Java are?

A.) 8

B.) 7

C.) 6

D.) 9

Question 29:

Which of these selection statements test only for equality?

A.) if

B.) switch

C.) if & switch

D.) All of the above

Question 30:

What are tokens?

A. What are tokens?

B. Tokens are notes used to print the data

C. Tokens is a smallest unit of Java programming language

D. None of the above

Question 31:

What are the types of tokens?

A. Variables, JDK, JRE

B. Variables, Methods, Initializers

C. Both A and B

D. Keywords, Identifiers, Literals