1.   **What is the output of the following code snippet?**

```
int a = 5;
int b = 3;
int c = a-- + ++b * 2 - 7;
System.out.println(c);
```

○ 4

○ 5

◉ 6

○ 7

2.   **What will be the value of x after the following code snippet?**

```
int x = 12;
x %= 5;
```

○ 3

◉ 2

○ 5

○ 7

3.   **Which of the following operators is used to perform bitwise AND in Java?**

◉ &

○ &&

○ |

○ ^

4.

What is the result of the expression

```
int a = 10;
int b = a;
a += 5;
```

◉ b is assigned the value 10

○ b is assigned the value 15

○ b is assigned the value 5

○ An errror occurs due to incorrect syntax

5.   **which of the following is not be used as variable name or class name in java**

○ identifiers

- ◉ **keywords**
- ○ **literal**
- ○ **operators**

6. **What is the syntax of a ternary operator in Java**

- ○ `expression ? value1 : value2`
- ◉ `condition ? true-value : false-value`
- ○ `if (condition) ? value1 : value2`
- ○ `value1 ? value2 : expression`

7. **What does** `%n` **do in a format string?**

- ○ Prints the current line number
- ◉ Inserts a new line character.
- ○ Prints a percent sign.
- ○ Prints a tab character.

8. **What does the format specifier** `%2s` **do when used with** `printf()` **?**

- ○ Prints the value as a floating-point number with 2 decimal places.
- ◉ Prints the value as a string, taking up at least 2 characters of space.
- ○ Prints the value as an integer with at least 2 digits.
- ○ Prints the value with 2 leading spaces.

9. **Which symbol is used to indicate a format specifier in a format string?**

- ◉ %
- ○ $
- ○ &
- ○ #

10. **what will be the output of the following snippet**
```java
public class Main {
   public static void main(String[] args) {
      int x = 5;
      System.out.println(x > 2 ? (x < 4 ? 10 : 8) : 7);
   }
}
```

- ◉ 8
- ○ 7
- ○ 10
- ○ compilation error

11. **Which of these have highest precedence?**

○ 0

⦿ ++

○ *

○ >>

12. **Given an arithmetic expression**
(a + b - c) * (e / f) - (g - h / i),
what is the equivalent post order notation for the expression?

   ○ *-+abc/ef-g/hi

   ○ ab+c-ef/*ghi/--

   ⦿ *ab-+c/ef-g/hi

   ○ ab+c-ef/*g-h/i-

13. **Which of these can be returned by the operator &?**

   ○ Integer

   ○ Character

   ○ Boolean

   ⦿ Integer or Boolean

14. **.What will be the output of the below code?**
public static void main(String args[]) {
int age;
System.out.println(age);
}

   ○ 0

   ○ garbage value

   ⦿ compilation error : variable needs to be initialized before use

   ○ 214748364

15. **Which of the following is not a primitive data type in Java?**

   ○ int

   ○ float

   ○ boolean

   ⦿ String

16. **Which of the following data types is used to store a single-precision floating-point number in Java?**

   ⦿ float

   ○ double

- ○ decimal
- ○ real

17. Which data type should be used to store whole numbers that can range from -2^31 to 2^31-1?

- ○ byte
- ● int
- ○ long
- ○ short

18. Which of the following is the correct way to declare a variable in Java?

- ○ var x;
- ○ variable x;
- ● int x;
- ○ x=int;

19. What will be the output of the below program?
```
public class Demo {
  public static void main(String[] args) {
    int k = 2;
    switch (k) {
    case 'a':
      System.out.println("Welcome");
    case 2:
      System.out.println("To");
    case 'b':
      System.out.println("Infosys");
      break;
    default:
      System.out.println("Hello");
    }
  }
}
```

- ○ Welcome To Infosys Hello
- ● To Infosys
- ○ To
- ○ Hello

20. What is the purpose of the `default` case in a `switch` statement?

- ● To handle the default condition when no other cases match
- ○ To define a condition that is always true
- ○ To indicate the end of the switch statement
- ○ To handle exceptions

21. **How can you handle multiple conditions efficiently in Java?**

○ Using the `if-else` statement

○ Using only the `if` statement

◉ Using the `switch` statement

○ Using only the ternary operator (? :).

22. **Which of the following is not a conditional statement in Java?**

○ if

◉ when

○ switch

○ else

23. **.What will be the output of the below code?**
public static void main(String args[]) {
   int i = 10;
   if(i) {
      System.out.println("Hello");
   }
   else {
      System.out.println("Bye");
   }
}

○ Hello

○ runtime error

○ Bye

◉ compilation error: cannot convert from int to boolean

24. **What will be the output of the below program?**
public class Demo {
   public static void main(String[] args) {
      int num1 = 25;
      int num2 = 34;
      if (num1 / 3 >= num2 / 4) {
         num1 = num1 + 1;
      } else {
         num2 = num2 + 1;
      }
      System.out.println(num1 + "," + num2);
   }
}

○ 25,35

○ 25,34

○ 26,34

○ 26,36

25. Choose the correct option based on the code snippet given below.

```java
public class Demo {
    public static void main(String[] args) {
        float f = 12;
        switch (f) { // Line 1
        case 10 + 1: // Line 2
            System.out.println("Twelve");
        case 0: // Line 3
            System.out.println("Zero");
        case (int) 12.0:
            System.out.println("Decimal");
        default:
            System.out.println("Default");
        }
    }
}
```

○ Compiles successfully without any error

○ Compilation error in Line 3 "Cannot use 0 in case"

○ Compilation error in Line 2 "Cannot use operator in case"

◉ Compilation error in Line 1 "Cannot use float type in switch"