MANAGMENT DEVELOPMENT INSTITUTE
Diploma in Computer Science
Java I
Final Exam   Time: 2hrs

11th June 2024

SECTION 1

Answer all questions in this section. All questions carry equal marks.

Good Luck!

1. Java is said to be a static-typed language, meaning every variable must have a defined type.

   a. *True*

   b. Not always the case

   c. False

2. Exception helps programmers to catch errors.

   a. *At runtime*

   b. At compile time

   c. Both a and b

   d. None of the above

3. Every Java statement must end with a semicolon.

   a. *True*

   b. False

4. An expression statements that involve the use of an Arithmetic operator, are called.

   a. Boolean expression

   b. *Arithmetic expression*

   c. Math.floor

   d. None of the above

5. The ternary operator is interchangeably used with__

a. Switch statement

b. If and Else statement

c. Single statement

d. Print statement

6. The type of error that prevents a code from compiling is called.

   a. Syntax error

   b. Runtime error

   c. Logical error

   d. None of the above

7. A class in Java is said to be__

   a. A blueprint where objects are created from

   b. Place where Java codes are executed

   c. A file to write codes

   d. Statement end with a semicolon

8. A switch statement takes a single variable as a condition.

   a. True

   b. False

9. Consider the code snippet below and choose the right option:

```
System.out.println(Math.max(10, 9));
```

What will be printed from the above method call?

   a. 10

   b. 9

   c. 0

   d. 19

10. Study the code snippets below carefully and choose the right option.

```
int count = 5;
if(count <= 5){
    count++;
}
System.out.println(count)
```

   a. 5

   b. 6

   c. 0

d. 4

11. A data structure that has a fixed size and cannot be resized is said to be__ a. String

    b. Array

    c. ArrayList

    d. Char

12. The logical &&(AND) operation is said to be strict when comparing Boolean values and therefore, it will only execute when both sides are__

    a. True

    b. False

13. Which of the String methods is considered to be case sensitivity when comparing two String?

    a. `equalsIgnoreCase()`

    b. `equals()`

    c. `substring()`

    d. `length()`

14. Study the below code snippet carefully and choose the right option.

```
for(int i 0; i < 5; i++){
    System.out.println(i);

    if(i > 3)
        break;
}
```

What are the values of `i` that are going to be printed in the console?

    a. `1 2 3`

    b. `1 2 3 4`

    c. `0 1 2 3 4`

    d. `0 1 2 3 4 5`

15. What is the other name for logical operators?

    a. Boolean operators

    b. Arithmetic operators

    c. Unary operators

    d. lust

16. A function or method in programming are subroutine that executes a task when___

  a. Called

  b. Written

  c. Executed

  d. Run

17.

```java
int count = 1;
while(true){
    System.out.println("Hello World!")
    count++;

    if(count <= 7)
        break;
}
```

How many times will the above `while loop` print `Hello World!` to the console: a. 6

  times

  b. 0 time

  c. 7 times

  d. 8 times

18. Accessing elements from Arrays using___

  a. Names

  b. Number

  c. Index

  d. Points

19. Consider the code snippets below:

```java
String[] productList = {"banna", "bread", "milk", "sugar",
"apple", "egg"};
```

To print "milk" from the `productList`, pick the correct option:

  a. `System.out.println(productList[1])`

  b. `System.out.println(productList[2])`

  c. `System.out.println(productList[3])`

  d. `System.out.println(productList[0])`

20.
```
static int add(int val1, int val2){
        int ans = val1 + val2;
        return  ans;
    }
```

The above code snippets is a method that takes two__, commutes them, and returns `ans` which store the result:

  a. Variables

  b. Parameters

  c. Arguments

  d. Values

21. A `do-while` loop executes a code block before checking the condition. a. False

  b. True

22. Data Types in Java came along with the language as the default types.

  a. Primitive Data types

  b. Non-Primitive Data types

  c. Both a and c

  d. None of the above

23. A block `{}` can consist of one or more statements in it.

  a. True

  b. False

24. A static method in Java can be invoked or called without creating an instance of a class.

  a. True

  b. False

25. In Java, a method must have a return type.

  a. True

  b. False