

JAVA PROGRAMMING

QUESTION PAPER

Dated:21.11.2023

Section A

Full Marks: 50

A) Multiple Choice Questions (15 marks)

1. What does OOP stand for?

- a) Object-Oriented Programming
- b) Object-Oriented Protocol
- c) Operator Oriented Programming
- d) Operational Object Programming

2. Which keyword is used for the inheritance of classes in Java?

- a) extends
- b) implements
- c) inherits
- d) derives

3. In Java, what is the default value of the data type 'int'?

- a) 0.0
- b) 0
- c) null
- d) "null"

4. Which of the following is a logical operator in Java?

- a) ++
- b) ||

- c) ::
- d) **

5. What will be the output of the following code snippet?

```
int x = 5;  
int y = 2;  
System.out.println(x / y);
```

- a) 2.5
- b) 2**
- c) 2.0
- d) 2.5 (integer division)

6. If $X=12, Y=9*3$; What will it print if we use Int data type as $(X*Y)$

- a) 223
- b) 324**
- c) $12*9*3$
- d) 1293

7. The 'else' statement is associated with which control structure?

- a) for loop
- b) switch statement
- c) if statement**
- d) while loop

8. What is the purpose of the 'break' statement in Java?

- a) Exit the program

b) Exit the loop or switch statement

c) Skip the current iteration of a loop

d) Terminate a method

9. Which loop is suitable when the number of iterations is known in advance?

a) while loop

b) do-while loop

c) for loop

d) switch loop

10. What is the output of the following code snippet?

```
int i = 1;
while (i < 5) {
    System.out.print(i + " ");
    i += 2;
}
```

a) 1 2 3 4

b) 1 3

c) 2 4

d) 1 2 3 4 5

Section B

B) Fill in the Blanks (5 marks)

11. The 'new' keyword is used to _____ objects in Java.
12. In Java, the data type used to store single characters is _____.
13. The ternary operator in Java is also known as the _____ operator.
14. The 'switch' statement in Java can be used with data types like _____.
15. A variable declared inside a method is called a _____ variable.

Section C

C) One-Sentence Answer Questions (10 marks)

16. Explain the concept of polymorphism in object-oriented programming.
17. Differentiate between '==' and '.equals()' methods in Java.
18. How do you declare a constant variable in Java, and why might you use it?
19. What is the purpose of the OOP ? Write its full form .
20. Briefly describe the difference between 'for' and 'while' loops in Java.

Section D

D) Programming Questions (20 marks)

21. Write a Java program to find the factorial of a given number.
22. Write a java program to find a spy number ?

Logic - A positive integer is called a spy number if the sum of the digits is equal to the product of the digits.

Example- 1124

Sum = 1+1+2+4=8

Product= 1*1*2*4=8