

**N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI**

**END-OF-SEMESTER EXAMINATIONS : MAY – 2023**

**B.Sc. – COMPUTER TECHNOLOGY**

**MAXIMUM MARKS: 50**

**II SEMESTER**

**TIME : 3 HOURS**

**PART – III**

**CORE III: JAVA PROGRAMMING**

**SECTION – A**

**(10 X 1 = 10 MARKS)**

**ANSWER THE FOLLOWING QUESTIONS.**

**(K1)**

1. Which is the most significant feature of Java?  
a) Security      b) Portability      c) Scalability      d) High Performance
2. \_\_\_\_\_ are parameters that are supplied to the application program at the time of invoking it for execution.  
a) Command Line Arguments      b) JVM      c) Byte code      d) Values
3. Choose the operator which is having associativity from right to left.....  
a) <<      b) \*      c) ++      d) !=
4. Select the operator which is useful for making 2-way decisions.....  
a) .      b) ,      c) ;      d) ?:
5. Creating an object is referred to as \_\_\_\_\_ object.  
a) Instantiating      b) Declaring      c) Invoking      d) Accessing

**ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES.**

**(K2)**

6. Define finalization.
7. Infer the use of awt package.
8. List the two ways used to create thread.
9. Indicate the reason for defining finally block.
10. State the term stream.

**SECTION – B**

**(5 X 3 = 15 MARKS)**

**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.**

**(K3)**

11. a) List the applications of Object Oriented Programming.  
(OR)  
b) Show the role of JVM in compiling and running a JAVA program.
12. a) Describe narrowing and widening. Explain with suitable examples  
(OR)  
b) Develop a Java program to find the given number is ODD or EVEN

**(CONTD.....2)**

13. a) Apply decision making and looping to print the following pattern.

```

1
2 2
3 3 3
4 4 4 4.....

```

(OR)

- b) Compare Abstract and Final class  
14. a) Distinguish class and interface

(OR)

- b) Explain thread priority with suitable examples.  
15. a) Sketch the applet state transition diagram and describe each.

(OR)

- b) Describe any 5 file input stream methods from ByteStream classes

### SECTION – C

(5 X 5 = 25 MARKS)

**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.**

(K4/K5)

16. a) Outline how Inheritance and Polymorphism make Object Oriented Programming flexible.

(OR)

- b) Categorize any 5 Java statements.

17. a) Point out why typecasting is required in Programming.

(OR)

- b) A college gives grades to the students as follows. Find the grade of a student using switch statement.

Above 90%	A+
80 – 89.9%	A
70 – 79.9%	B
60 – 69.9%	C
50 – 59.9%	D
< 50%	Fail

18. a) Illustrate the types of looping statements.

(OR)

- b) Summarize inheritance and its types.

19. a) Construct a JAVA program to implement interface.

(OR)

- b) Summarize the steps to create user-defined package.

20. a) Explain the tasks performed in Exception Handling.

(OR)

- b) Construct a Java program using Random Access File.