



**K. K. Wagh Institute of Engineering Education & Research, Nashik**  
(An Autonomous Institute From A.Y. 2022-23)

SUMMER-2024	
Exam Seat No.:	
Academic Year:2023-2024	Semester:III
Class:SY	Program:B.Tech
Branch Code:ADS/COM/CSD	Pattern:2022
Name of Course:Programming Paradigms and Java Programming	Course Code:COM222005
Max. Marks:60	Duration:2.30 Hrs.

**Instructions:** Candidates should read carefully the instructions printed on the Question Paper and on the cover page of the Answer Book, which is provided for their use.

1. This question paper contains 2 pages.
2. Answer to each new question is to be started on a new page.
3. Assume suitable data wherever required, but justify it.
4. Draw the neat labelled diagrams, wherever necessary.
5. The last columns indicates the Course Outcome and level of Blooms Taxonomy of the Question/sub-question.

**Question No. 1 Attempt following Question**

- 1 Illustrate Proprietary and consensus standards. (6) CO1

**Question No. 2 Attempt following Question**

- 2 Write a java program to perform addition of elements in 3\*3 matrixes and display result. Accepts the elements from user (6) CO2

**Question No. 3 Attempt following Question**

- 3.a) With example explain types of constructor and its use in Java (6) CO3

**OR**

- 3.b) Write a short note on:Garbage collection and Finalize() method. (6) CO3

- 3.c) What are the advantages of using Inheritance?With example explain types of Inheritance (5) CO3

**OR**

- 3.d) Write a java program to add two integers and three integers by using the concept of method overloading. (5) CO3

- 3.e) Write a Java program to create an interface Shape with the getArea() method. Create two classes Rectangle and Triangle that implement the Shape interface. Implement the getArea() method for each of the two classes (5) CO3

**OR**

- 3.f) Illustrate use of Packages?How access protection is provided to packages? (5) CO3

**Question No. 4 Attempt following Question**

- 4.a) State with example the use of following built in exception in Java (6) CO4
- 1)IllegalArgument Exception
  - 2)NumberFormatException
  - 3) IndexOutOfBoundException

**OR**

- 4.b) Demonstrate how user defined Exceptions are created (6) CO4
- 4.c) Explain the concept synchronization in java with example. (5) CO4

**OR**

- 4.d) Explain threads lifecycle in detail. (5) CO4
- 4.e) With example illustrate the use of finally block in exception handling (5) CO4

**OR**

- 4.f) Explain the methods required for creating Threads (5) CO4

**Question No. 5 Attempt following Question**

- 5.a) Illustrate Basic building block of LISP (6) CO5

**OR**

- 5.b) How recursion is achieved in LISP? (6) CO5
- 5.c) List Features of LISP . (5) CO5

**OR**

- 5.d) Explain following predicates in LISP (5) CO5

- 1)atom
- 2)equal
- 3)evenp
- 4)listp
- 5)numberp

- 5.e) List and explain 3 elements of Prolog? (5) CO5

**OR**

- 5.f) Explain Facts in Prolog. (5) CO5

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