R18 Regulation *Subject code:2O5DF*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech V Semester Supplementary Examinations, April 2026

OOPS THROUGH JAVA

(ECE)

Maximum Marks: 70 Date: 24.04.2026 Duration: 3 hours

Note: **1.This question paper contains two parts A and B.**
2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
3. Part B consists of 5 Units. Answer any one full question from each unit.
4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks (10X2M=20 Marks)		Marks	CO	BTL
1	Define an Object.	2M	1	L1
2	State the features of object-oriented programming.	2M	1	L1
3	When do we declare a class or method final.	2M	2	L1
4	What is meant by interface?	2M	2	L1
5	In how many ways a thread can be created.	2M	3	L1
6	Write the usage of try and catch.	2M	3	L1
7	What is java collection framework?	2M	4	L1
8	Define ArrayList with syntax.	2M	4	L1
9	Write about Adapter classes.	2M	5	L1
10	What are the limitations of AWT?	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	Discuss the advantages and disadvantages of Object-Oriented Programming.	10M	1	L2
	OR			
12	Write a java program to simulate the operation of numerical calculator to perform the functions Addition (+), Subtraction (-), Multiplication (*) and Division (/).	10M	1	L2
13	What are the states in the lifecycle of a Thread.	10M	2	L2
	OR			
14	How many ways are possible in java to create multiple threaded programs? Discuss the differences between them.	10M	2	L2
15	What are the different ways to handle exceptions? Explain.	10M	3	L2
	OR			
16	How Hashtable can change the iterator? Explain.	10M	3	L2
17	What is the Collection framework in Java? What are the main differences between array and collection?	10M	4	L2

	OR			
18	a) Discuss the practices related to Java Collections Framework. b) What is Comparable and Comparator interface?	5M 5M	4	L2
19	List and explain different types of Layout managers with suitable examples.	10M	5	L2
	OR			
20	a) Discuss about different applet display methods in brief. b) Write a java program to design a scientific calculator using AWT.	5M 5M	5	L2