



R18 Regulation

Subject code:205DF

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech V Semester Supplementary Examinations, November 2025

OOPS THROUGH JAVA (ECE)

Maximum Marks: 70

Date: 12.11.2025

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	What is Object Oriented Programming? How it is different from Procedural concepts?	2M	1	L1
2	What is abstract class?	2M	1	L1
3	Write about packages in java?	2M	2	L1
4	what is meant by interface?	2M	2	L1
5	In how many ways a thread can be created. Explain?	2M	3	L1
6	Write the usage of try and catch?	2M	3	L1
7	Which methods of deque enable it to be used as a stack?	2M	4	L1
8	Make a comparison of List, array and ArrayList.	2M	4	L1
9	Give the AWT hierarchy.	2M	5	L1
10	What is an Event?	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)

		Marks	CO	BTL
11	a) What is the purpose of constructor in Java programming? b) What is the synchronization? What is the purpose of the Synchronized?	5M 5M	1	L2
OR				
12	a) Describe the structure of a typical Java program with an example. b) Write the significance of Java Virtual Machine.	5M 5M	1	L2
13	Discuss about the FileInputStream and FileOutputStream in java with examples.	10M	2	L2
OR				
14	a) Write an example program to show the calling sequence of constructors. b) How to create packages and use them in java?	5M 5M	2	L2
15	a) Write a program with nested try statements for handling exception. b) How to create a user defined exception.	5M 5M	3	L2
OR				
16	Write a program to create three threads in your program and context switch among the threads using sleep functions.	10M	3	L2

17	a) What is Java Collections Framework? List out some benefits of Collections framework and explain. b) What is the importance of hash Code() and equals() methods .	5M 5M	4	L2
OR				
18	a) What are the best practices related to Java Collections Framework? Discuss b) What is Comparable and Comparator interface? Differentiate between them.	5M 5M	4	L2
19	a) Explain various layout managers in JAVA. b) What are the different types of Event listeners supported by java.	5M 5M	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