



R22 Regulation

Subject code: 407AB

# TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

**B.Tech VII Semester Regular Examinations, November 2025**

## OBJECT ORIENTED PROGRAMMING THROUGH JAVA

(CE)

Maximum Marks: 60

Date: 01.12.2025

Duration: 3 hours

- Note:
1. This question paper contains two parts A and B.
  2. Part A is compulsory which carries 10 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 (10X1M=10 Marks)		Marks	CO	BloomTx
1.a)	Java is platform independent language. Justify?	1M	1	L2
b)	Define Interface.	1M	1	L1
c)	Write about Object.	1M	2	L2
d)	Can a class belong to more than one package?	1M	2	L2
e)	How do you create multiple threads in a program?	1M	3	L2
f)	What happens when an exception is not caught?	1M	3	L1
g)	What are the main advantages of using the Collections Framework?	1M	4	L1
h)	How is a Vector different from an ArrayList?	1M	4	L2
i)	Differentiate between adapter classes and listener interfaces.	1M	5	L2
j)	Why are layout managers used in GUI design?	1M	5	L1

### Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BloomTx
2	Explain method overriding and method overloading with code examples.	10M	1	L2
OR				
3	Explain different parts of a Java program with an appropriate example.	10M	1	L2
4	Explain variables and methods in interfaces. What are the rules for interface variables?	10M	2	L3
OR				
5	Define a package. Explain the steps to create, compile, and use a user-defined package with an example.	10M	2	L2
6	Write a syntax that demonstrates the use of try, catch, and finally blocks.	10M	3	L2

	OR			
7	Describe the Java thread model and explain the lifecycle of a thread with a neat diagram.	10M	3	L2
8	Explain the architecture of the Java Collections Framework with a neat diagram.	10M	4	L2
	OR			
9	Write short notes on: a) StringTokenizer b) BitSet c) Formatter	4M 3M 3M	4	L3
10	Explain the following AWT components: (i). Labels (ii). Buttons (iii) Check box (iv). Choices (v). Text components.	10M	5	L5
	OR			
11	Explain multiple layout managers in GUI with neat diagrams.	10M	5	L2