



R20 Regulation

Subject code: 3P4FD

# TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

**B.Tech IV Semester Supplementary Examinations, December 2025**

## JAVA PROGRAMMING

(IT)

Maximum Marks: 70

Date: 30.12.2025

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	Define Polymorphism.	2M	1	L1
2	Distinguish between procedural language and OOPs?	2M	1	L1
3	How to create packages and import packages?	2M	2	L1
4	What is Serialization?	2M	2	L1
5	Explain the usage of try and catch briefly.	2M	3	L1
6	Distinguish between process and thread.	2M	3	L1
7	Define Java collection Frame work.	2M	4	L1
8	Define enumeration with syntax.	2M	4	L1
9	Define Applet.	2M	5	L1
10	Define adapter class.	2M	5	L1

### Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	Discuss about the method overloading and constructor overloading with an example.	10M	1	L2
OR				
12	Explain inheritance and types of inheritance. Write a java program to demonstrate multilevel inheritance.	10M	1	L2
13	a) Discuss how interfaces are defined and implemented. Explain with an example program. b) Explain Access specifiers in java.	5M 5M	2	L2
OR				
14	Discuss in detail about creating and importing packages. Write java program to demonstrate creating package and importing package.	10M	2	L2
15	a) Explain the usage of throw keyword? Explain with an example b) Develop a program to illustrate the use of multiple catch blocks for a try block.	5M 5M	3	L2
OR				

16	Discuss the need of thread synchronization. How is it achieved in Java programming? Explain with a suitable program.	10M	3	L2
17	a) What is Scanner class? Explain with an example. b) Discuss about ListIterator with an example.	5M 5M	4	L2
	OR			
18	a) What is hash table? Explain with an example. b) Demonstrate about stack class with an example.	5M 5M	4	L2
19	a) Explain in brief about Events, Event sources and Event classes. b) Discuss in detail about BorderLayout with an example.	5M 5M	5	L2
	OR			
20	a) Develop a java program for simple applet? b) Compare and Contrast differences between applets and applications	5M 5M	5	L2