R22 Regulation *Subject code: 4O7AB*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VII Semester Supplementary Examinations, October 2026

OBJECT ORIENTED PROGRAMMING THROUGH JAVA

(CE)

Maximum Marks: 60 Date:02.11.2026 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	BTL
1.a)	What is class and object?	1M	1	L1
b)	Define java byte code. Why java generates byte code?	1M	1	L1
c)	What is a package?	1M	2	L1
d)	What is Serialization?	1M	2	L1
e)	What is the difference between error and exception in java?	1M	3	L1
f)	What is multithreading?	1M	3	L4
g)	Define Random class with syntax.	1M	4	L4
h)	Write the difference between Array List and LinkedList.	1M	4	L1
i)	What are the components of AWT?	1M	5	L2
j)	What is an event and event handler.	1M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
2	Develop a Java class that applies all data types and control statements.	10M	1	L2
	OR			
3	Build a java syntax to illustrate the inheritance in java.	10M	1	L4
4	Analyze how access protection modifiers (public, private, protected, default) influence class and method visibility across packages in Java.	10M	2	L3
	OR			
5	a) List and explain in detail about Nested interfaces. b) Analyze how methods support polymorphism.	5M 5M	2	L1 L2
6	Make use of try, catch keyword in handling exceptions and explain it	10M	3	L2
	OR			
7	Demonstrates thread creation and its progression through various lifecycle stages.	10M	3	L5

8	Analyze Java Collections Framework, delineating its structure and components.	10M	4	L3
	OR			
9	a) Analyze and differentiate various Collection interfaces in Java. b) Functionally differentiate between List and Set in Java.	5M 5M	4	L1 L2
10	Explain different layout managers in java.	10M	5	L2
	OR			
11	Apply mouse event handling techniques to handle mouse events.	10M	5	L2