



R18 Regulation

Subject code:206DC

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VI Semester Supplementary Examinations, November 2025

**OBJECT ORIENTED PROGRAMMING THROUGH JAVA
(ECE)**

Maximum Marks: 70

Date:15.11.2025

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 an Object? How to allocate memory for objects?	2M	1	L1
2	What is abstract class?	2M	1	L1
3	Write about packages in java?	2M	2	L1
4	Explain about nested interfaces?	2M	2	L1
5	What is synchronization and why is it important?	2M	3	L1
6	Write the usage of try and catch?	2M	3	L1
7	What is java collection framework?	2M	4	L1
8	Make a comparison of List, array and ArrayList.	2M	4	L1
9	Write about Inner Classes?	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) Discuss the advantages and disadvantages of Object-Oriented Programming. b) Write a java program to simulate the operation of numerical calculator to perform the functions Addition (+), Subtraction (-), Multiplication (*) and Division (/).	5M 5M	1	L2
OR				
12	a) Explain different java Buzzwords? b) Write a program to perform the following functions using classes, objects, constructors wherever necessary i) Read 5 subjects marks of 5 students ii) Calculate the total and print the result on the screen.	5M 5M	1	L2
13	Discuss about the FileInputStream and FileOutputStream in java with examples.	10M	2	L2
OR				
14	Write a program to demonstrate hierarchical and multiple inheritance using interfaces.	10M	2	L2

15	a) Illustrate different types of Built Exceptions in java? b) Write a java program to create own exceptions.	5M 5M	3	L2
OR				
16	a) Write about inter thread communication in java with an example. b) What is synchronization and why is it important?	5M 5M	3	L2
17	What is Java Collections Framework? List out some benefits of Collections framework and explain.	10M	4	L2
OR				
18	a) Explain the Bit Set and Calendar classes in detail. b) Discuss the differences between HashList and HashMap, Set and List.	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