



R22 Regulation

Subject code:4E4EA

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech IV Semester Supplementary Examinations, December 2024

**OBJECT ORIENTED PROGRAMMING THROUGH JAVA**  
(CSE & CSE(AI&ML))

Maximum Marks: 60

Date:03.11.2024

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		CO	Bloom Tx
All the following questions carry equal marks (10X1M=10 Marks)			
1.a)	Give the use of 'for' statement in Java with an example.	CO1	BL1
b)	Differentiate between print() and println() methods in Java.	CO1	BL2
c)	What are three types of I/O streams?	CO2	BL1
d)	Define interface.	CO2	BL1
e)	Define uncaught exception.	CO3	BL1
f)	What is the use of notify methods in multithreading?	CO3	BL2
g)	List the difference between ArrayList and LinkedList.	CO4	BL2
h)	What is a BitSet class?	CO4	BL1
i)	Is AWT platform dependent?	CO5	BL2
j)	Why are inner classes useful in event handling?	CO5	BL2
Part-B			Bloom Tx level
Answer All the following questions. (5X10M=50Marks)			
2	Explain about the key principles of Object-Oriented Programming with n examples. [10M]	CO1	BL3
OR			
3	a) How do we implement polymorphism in JAVA? Explain briefly. [5M] b) What is an array? How do you declare the array in java? Give examples. [5M]	CO1	BL3
4	Describe the process of importing packages in Java and analyze its impact on code readability and compilation. [10M]	CO2	BL4
OR			
5	Differentiate between interface and abstract class with examples. [10M]	CO2	BL4
6	a) What are the different ways to handle exceptions? Explain. [5M] b) How many ways are possible in java to create a thread? Discuss the differences between them. [5M]	CO3	BL4
OR			

7	a) Differentiate between multiprocessing and multithreading. [5M] b) Write a program that creates two threads. First thread prints the numbers from 1 to 100 and the other thread prints the numbers from 100 to 1. [5M]	CO3	BL4
8	a) Draw and explain Java Collections Framework? Discuss. [5M] b) What is Comparable and Comparator interface? Differentiate between them. [5M]	CO4	BL4
OR			
9	Write a program to read a file content and extract words using String Tokenizer class. Display the file if it contains the user query term/search key. [10M]	CO4	BL3
10	Explain the architecture and components of AWT in Java and discuss the major limitations of AWT. [10M]	CO5	BL3
OR			
11	a) Illustrate Border Layout, Grid Layout, and Grid Bag Layout for arranging AWT components. [5M] b) Write a short note on delegation event model. [5M]	CO5	BL3