



R22 Regulation **Subject code: 4E3FD**
TKR COLLEGE OF ENGINEERING AND TECHNOLOGY
(Autonomous, Accredited by NAAC with 'A+' Grade)
B.Tech III Semester Regular Examinations, February 2024
OBJECT ORIENTED PROGRAMMING THROUGH JAVA
(INFORMATION TECHNOLOGY)

Maximum Marks: 60

Date: 21.02.2024 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)	Define a Package? What is its use in java? Explain.	CO1	R
b)	What is abstract class? Give example.	CO1	R
c)	Show the difference between error and an exception?	CO2	U
d)	Illustrate the benefit of Generics in Collections Framework?	CO2	U
e)	List the any five-byte stream class.	CO3	R
f)	Briefly explain Reading and Writing Binary Data.	CO3	R
g)	Write short note on AWT hierarchy.	CO4	R
h)	Summarize the need of applet classes to be declared as public?	CO4	U
i)	Show the different states in thread.	CO5	U
j)	Outline the basic idea to achieve thread synchronization in Java.	CO5	U
Part-B			
Answer All the following questions. (5X10M=50Marks)			Bloom Tx level
2	a. Explain inheritance and how does it help to create new classes quickly. b. Describe different levels of access protection available in Java. [5+5]	CO1	U
OR			
3	a. Explain the polymorphism and overloading with an example. b. Discuss about precedence of operators and associativity. [5+5]	CO1	U
4	a. Differentiate between Checked and Un Checked Exceptions with examples. b. What are the different ways to handle exceptions? Explain. [5+5]	CO2	U
OR			
5	a. Summarize Java's built in exceptions. b. Write a java program that illustrates the application of multiple catch statements. [5+5]	CO2	U
6	a. Construct a Java program to read characters from the console.		

	b. Identify the methods available in the Character Streams? Discuss. [5+5]	CO3	Ap
	OR		
7	a. Develop a program to read and count the characters from files. b. Discuss about Object Serialization File format with simple example. [5+5]	CO3	Ap
8	a. Relate different applet display methods in brief. b. What are the various components of Swing? Explain. [5+5]	CO4	U
	OR		
9	a. Discuss about applet? Explain the life cycle of Applet with a neat sketch. b. Write the applets to draw the Cube and Circle shapes [5+5]	CO4	U
10	a. How many ways are possible in java to create multiple threaded programs? Discuss the differences between them. b. Examine about Dead Lock Handling with simple example. [5+5]	CO5	An
	OR		
11	a. Analyze Daemon thread and its properties. 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. [5+5]	CO5	An