



R22 Regulation

Subject code: 4E3FD

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech III Semester Supplementary Examinations, July 2024

**OBJECT ORIENTED PROGRAMMING THROUGH JAVA**  
(INFORMATION TECHNOLOGY)

Maximum Marks: 60

Date:23.07.2024 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)	What is inheritance?	CO1	L1
b)	Compare print() and println() methods in Java.	CO1	L1
c)	What is a Collection Class?	CO2	L1
d)	Explain how run time errors is differ from logical errors in Java?	CO2	L1
e)	Illustrate any four character stream class.	CO3	L1
f)	Define Serialization mechanism.	CO3	L1
g)	List out the methods available in applet life cycle.	CO4	L1
h)	What is an adapter class?	CO4	L1
i)	Classify the different ways in which a thread can enter the waiting state.	CO5	L1
j)	Describe how to set the priority to threads?	CO5	L1
Part-B			
Answer All the following questions. (5X10M=50Marks)			
2	a. Illustrate the primitive data types available in Java and explain. b. What is polymorphism? Explain different types of polymorphisms with examples. [5+5]	CO1	L2
OR			
3	a. Demonstrate a java method to find minimum value in given two values. b. What is the purpose of constructor in Java programming? [5+5]	CO1	L2
4	a. Identify the advantages of using Exception handling mechanism in a program. b. Construct a java program that demonstrates how certain exception types are not allowed to be thrown. [5+5]	CO2	L2
OR			
5	a. Develop a java program with nested try statements for handling exception. b. How to create a user defined exception? [5+5]	CO2	L2
6	a. Summarize the concept of File Input Stream and File Output Stream in java.		L2

	b. Distinguish between Byte Stream Classes and Character Stream Classes. [5+5]	CO3	
	OR		
7	a. Illustrate Serialization mechanism with suitable example. b. Explain File operations in java. [5+5]	CO3	L2
8	a. Develop a program to create a frame window that responds to key strokes. b. List and explain different types of Layout managers with suitable examples. [5+5]	CO4	L2
	OR		
9	a. Construct a simple applet to display a smiley picture using Graphics class methods. b. Write a short note on delegation event model. [5+5]	CO4	L2
10	a. Explain what is inter-thread communication? List out the methods used for it. b. Write a program to create four threads using Runnable interface. [5+5]	CO5	L2
	OR		
11	a. Describe the lifecycle of thread in Java with an example b. With an example, demonstrate the concept of thread synchronization. [5+5]	CO5	L2