



R22 Regulation

Subject code: 4E4EA

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech IV Semester Regular Examinations, July 2024

OBJECT ORIENTED PROGRAMMING THROUGH JAVA

(Common to CSE & CSE(AI&ML))

Maximum Marks: 60

Date:18.07.2024 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 meant by Object Oriented Programming?	CO1	BL1
b)	List out the type of Arrays.	CO1	BL1
c)	Mention the benefits of Stream oriented I/O.	CO2	BL1
d)	Give the significance of the CLASSPATH environment variable in creating/using a package.	CO2	BL2
e)	What is the need for thread?	CO3	BL1
f)	Differentiate exception and error.	CO3	BL2
g)	What is a Java Priority queue?	CO4	BL1
h)	Name two algorithms provided by the Collections class.	CO4	BL1
i)	What is the advantage of Grid Bag Layout over other layout managers?	CO5	BL2
j)	Is AWT platform dependent or not.	CO5	BL2
Part-B			
Answer All the following questions. (5X10M=50Marks)			
2	Define inheritance. List different types of inheritance and explain the multilevel inheritance in java with suitable example program. [10]	CO1	BL3
OR			
3	a) Discuss about protected members in Java with example. [5] b) Explain in detail about method overriding in java with an example. [5]	CO1	BL3
4	Define package. List and explain different types of packages with suitable examples. [10]	CO2	BL3
OR			
5	Discuss briefly about the following features: a) Byte streams input/output. [5] b) Character streams input/output. [5]	CO2	BL3
6	Define exception. List java's exceptions. Write a JAVA program to generate and handle division by zero arithmetic exception. [10]	CO3	BL5

	OR		
7	a) Differentiate multithreading and multitasking. [5] b) Describe the properties of thread in detail. [5]	CO3	BL4
8	a) Distinguish various collection classes and interfaces. [5] b) Explain the process of accessing collection through iterator. [5]	CO4	BL4
	OR		
9	Describe additional utility classes such as StringTokenizer, Date, Calendar, Random and Scanner. [10]	CO4	BL3
10	Explain the Delegation Event Model in Java. Describe the components involved in event handling, including event sources, event listeners, and event classes. [10]	CO5	BL3
	OR		
11	a) What is a Layout manager? Explain different types of Layout managers. [5] b) Write a program to create a frame window that responds to mouse events. [5]	CO5	BL5