



R22 Regulation

Subject code: 4E3FD

# TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

## B.Tech III Semester Regular/Supplementary Examinations, December 2024

### Object Oriented Programming Through Java (Information Technology)

Maximum Marks: 60

Date:06.12.2024

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 the significance of Java byte code?	1	Understand
b)	List the applications of object – oriented programming.	1	Remember
c)	List any four unchecked exceptions.	2	Remember
d)	Write about Exception Handling in JAVA?	2	Understand
e)	Define character streams.	3	Understand
f)	What is Object serialization in Java?	3	Remember
g)	Write the subclasses of JButton class?	4	Remember
h)	What is the purpose of Listener in event driven programing?	4	Remember
i)	Differentiate Mutex and Semaphore.	5	Analyze
j)	How does Java supports inter thread communication?	5	Remember
Part-B		CO	Bloom Tx
Answer All the following questions. (5X10M=50Marks)			
2	Examine Detail about inheritance in java with its types [10M]	1	Understand
OR			
3	Develop a Java program to find the sum of two complex numbers using copy constructor. [10M]	1	Apply
4	a Explain in detail about throw and throws statement with an example. [5M]	2	Understand
	b Explain nested try statements with an example. [5M]	2	Understand
OR			
5	a List any five methods of Arrays class. [5M]	2	Remember
	b Develop a java program to show working of user defined Generic class. [5M]	2	Apply
6	Explain the support provided by File class for file management and demonstrate random access file operations with examples. [10M]	3	Understand
OR			
7	Develop a java program using FileInputStream and FileOutputStream to read data from one file to another. [10M]	3	Apply

8	a. Examine detail about AWT Hierarchy. [10M]		4	Apply
	OR			
9	a Explain different types of JDBC drivers. [5M]		4	Understand
	b Develop a Java Swing program to implement Border Layout. [5M]		4	Apply
10	a Develop a Java program to implement join( ) method in multithreading. [5M]		5	Apply
	b Explain the Thread life cycle in Java. [5M]		5	Understand
	OR			
11	a Explain Daemon Threads with an example. [5M]		5	Understand
	b Develop a Java program to explain Thread priorities. [5M]		5	Apply