



R20 Regulation

Subject code:306DE

**TKR COLLEGE OF ENGINEERING AND TECHNOLOGY**

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

**B.Tech VI Semester Regular Examinations, June/July 2023**

**OOPs through JAVA**

(Electronics and Communication Engineering)

**Maximum Marks: 70**

**Date:05.07.2023 Duration: 3 hours**

- Note:**
1. This question paper contains two parts A and B.
  2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
  3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
  4. Each question carries 10 marks and may have a, b, c, d as sub questions.

**Part-A**

All the following questions carry equal marks

(10x2M=20 Marks)

- 1 Define the basic characteristics of object oriented programming.
- 2 What is inheritance?
- 3 What is the significance of the CLASSPATH in creating/using a package?
- 4 What is the use of auto boxing in java?
- 5 Define exception.
- 6 Differentiate between a thread and a process.
- 7 What is a Java Priority queue?
- 8 Differentiate between Iterator and for-each.
- 9 What are the limitations of AWT ?
- 10 What is an adapter class?

**Part-B**

Answer All the following questions.

(5X10M=50Marks)

- 11 Explain the significance of public, protected and private access specifiers in inheritance. [10]  
OR
- 12 A. List the primitive data types available in Java and explain.  
B. What is polymorphism? Explain different types of polymorphisms with examples. [5+5]
- 13 Explain the process of defining and creating a package with suitable examples. [10]  
OR
- 14 How to design and implement an interface in Java? Give an example. [10]
- 15 What is exception handling? Explain an example of exception handling in the case of division by zero. [10]  
OR
- 16 A. Draw and explain life cycle of a thread?  
B. With an example, demonstrate the concept of thread synchronization. [5+5]
- 17 Differentiate between ArrayList and a Vector? Why ArrayList is faster than Vector? Explain. [10]  
OR
- 18 Explain the process of accessing collection through iterator. [10]

19 List and explain different types of Layout managers with suitable examples. [10]

OR

20 A. List the event classes and Listener Interfaces?

B. Discuss about Delegation event model in detail? [5+5]