



R17 Regulation

Subject code: 1P3EE

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY  
(Autonomous, Accredited by NAAC with 'A' Grade)

**B.Tech II Year I Semester Supplementary Examinations, February 2021**  
**Object Oriented Programming through Java**

(Computer Science & Engineering)

Maximum Marks: 70

Date: 01.03.2021 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.
  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 Write the structure of a java program.
- 2 What is abstract class? Give an example.
- 3 Define a package? What is its usage in java?
- 4 What is use of auto boxing in java?
- 5 Differentiate throw and throws keywords in java.
- 6 How to create thread groups?
- 7 List the legacy classes and interfaces in java collections.
- 8 What is the difference between ArrayList and Vector?
- 9 What are the limitation of AWT?
- 10 What is an Adapter class?

**Part-B**

Answer All the following questions.

(5x10M=50Marks)

- 11 A. What is java bytecode? What is JVM? Briefly explain how java is platform independent. (5M)  
B. What is constructor? What is the purpose of constructor in java explain with example?(5M)  
OR
- 12 A. Define array. How do you declare an array in java? Give examples.(5M)  
B. What is Polymorphism? Explain different types of polymorphisms in java with examples.(5M)
- 13 A. Describe different levels of access protection available in java with example.(5M)  
B. What are the methods available in character streams? Discuss. (5M)  
OR
- 14 A. Explain the process of defining and creating a package with suitable example.(5M)  
B. Write a program to demonstrate multiple inheritance using interfaces.(5M)
- 15 A. What is exception? Explain various built in exceptions in java with example.(5M)  
B. Explain how to implement multi-threading concept in java with suitable example.(5M)

OR

- 16 A. Write a program with nested try statements for handling exception in java. (5M)  
B. Write a program to create four threads using runnable interface.(5M)
- 17 A. Explain various interfaces used in collection framework.(5M)  
B. How a Hashtable can change the iterator? Explain.(5M)
- OR
- 18 A. What is the difference between Iterator and ListIterator? Explain different ways to iterate over a List with suitable example.(5M)  
B. Explain the following utility classes with syntax.(5M)  
i) String Tokenizer ii) Random iii) Scanner
- 19 A. Explain various Layout managers in Java.(5M)  
B. What are the sub classes of JButton class of swing package?(5M)
- OR
- 20 A. Write the applets to draw the cube and circle shapes?(5M)  
B. Write an applet code to demonstrate parameter passing to applet.(5M)