



R20 Regulation **Subject code:3P4FD**
TKR COLLEGE OF ENGINEERING AND TECHNOLOGY
(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech IV Semester Supplementary Examinations, July 2024

JAVA PROGRAMMING
(IT)

Maximum Marks: 70

Date:31.07.2024 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) | | CO | Bloom Tx |
|--|---|----|----------|
| 1 | Define Polymorphism. | 1 | L1 |
| 2 | Distinguish between procedural language and OOPs. | 1 | L1 |
| 3 | Define Character Streams. | 2 | L1 |
| 4 | What is Serialization? | 2 | L1 |
| 5 | Define Exception. | 3 | L1 |
| 6 | Define Multithreading. | 3 | L1 |
| 7 | Define Java collection Frame work. | 4 | L1 |
| 8 | Define enumeration with syntax. | 4 | L1 |
| 9 | Define Applet. | 5 | L1 |
| 10 | Define adapter class. | 5 | L1 |

Part-B

| Answer All the following questions. (5X10M=50Marks) | | | |
|---|--|---|----|
| 11 | a) Explain about String class with example program. (5M) b) Explain about this reference with a program. (5M) | 1 | L2 |
| OR | | | |
| 12 | a) Explain in detail about OOPs concepts. (5M) b) What is Array? Explain different types of array and also discuss its advantages. (5M) | 1 | L2 |
| 13 | a) Explain Byte Streams with an example program. (5M) b) Explain about Enumerations with example program. (5M) | 2 | L2 |
| OR | | | |
| 14 | Discuss in detail about creating and importing packages. Write java program to demonstrate creating package and importing package. (10M) | 2 | L2 |
| 15 | a) Distinguish between Checked and Unchecked exceptions? (5M) b) Explain try, catch, and finally keywords with an example. (5M) | 3 | L2 |
| OR | | | |

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|----|--|---|----|
| 16 | Discuss the need of thread synchronization. How is it achieved in Java programming? Explain with a suitable program. (10M) | 3 | L2 |
| 17 | a) What is Scanner class? Explain with an example. (5M) b) Explain briefly about Vector class with an example. (5M) | 4 | L2 |
| | OR | | |
| 18 | a) What is hash table? Explain with an example. (5M) b) Demonstrate about stack class with an example. (5M) | 4 | L2 |
| 19 | a) Discuss in detail about FlowLayout with an example. (5M) b) Explain AWT hierarchy briefly. (5M) | 5 | L2 |
| | OR | | |
| 20 | a) Develop a java program for simple applet? (5M) b) Compare and Contrast differences between applets and applications (5M) | 5 | L2 |