



Regulation R18

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

Subject code: ~~2PSET~~ 2050 E

B.Tech V Semester Supplementary Examinations, June/July 2023

Operating Systems

(ECE)

Maximum Marks: 70

Date: 04.07.2023 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 10 Questions. Answer any five questions.  
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 Give one reason why caches are useful.
- 2 Write about bootstrap program
- 3 Define protection and security
- 4 Specify the system calls fork(), exec()
- 5 Write about semaphores
- 6 Define processor affinity
- 7 What are different ways of handling deadlocks
- 8 Define thrashing
- 9 What is Raw in file system implementation
- 10 Specify access matrix

Part-B

Answer any five from the following questions.

(5 X 10=50 Marks)

- 11 Describe different types of system architectures. [10]  
OR
- 12 Explain the various types of operating systems structures. [10]
- 13 Briefly explain the dining philosopher's problem and its solution. [10]  
OR
- 14 Describe the FCFS scheduling algorithm with suitable example. [10]
- 15 Explain the various methods which we apply for recovery from deadlocks. [10]  
OR
- 16 Write a short note on a) Hierarchical paging and b) Hashed page table [5+5]
- 17 Describe the concept of demand paging. [10]  
OR
- 18 Explain the concept of virtual memory on windows. [10]
- 19 a) Explain the access methods of files. [5]  
b) Briefly outline the directory overview. [5]  
OR
- 20 Explain the concept of goals of protection. [10]