R18 Regulation | Subject code: 2O5DE

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech V Semester Supplementary Examinations, July 2024

OPERATING SYSTEMS

(ECE)

Maximum Marks: 70 Date:30.07.2024 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.
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 an operating system.	
2	Define system call.	
3	Define short term scheduler.	
4	Define semaphore.	
5	Write the strategies of memory management?	
6	Define Swapping	
7	Define demand paging.	
8	What is file sharing?	
9	List the goals of protection?	
10	Write the main differences between capability lists and access lists?	
	Part-B	
Answer All the following questions.		(5 X 10M=50Marks)
11	A. State and explain the basic functions or services of an operating system? [5] B. Explain the differences between multiprogramming and time-sharing systems? [5]	
	OR	
12	Define an operating system? State and explain the basic functions and services of an operating system? [10]	
13	A .Discuss inter process communication with the help of communication models. [5] B. Discuss about classical problems of synchronization. [5]	
	OR	
14	What is the important feature of critical section? State the Readers writers' problem and give solution using semaphore. [10]	

15	A. Explain in detail about resource allocation graph with example. [5] B. Describe about deadlock prevention. [5]
	OR
16	Discuss Paging and structure of page table in detail. [10]
17	Explain thrashing, what are the causes of thrashing with an example. [10]
	OR
18	List the various system calls for file operations with examples. [10]
19	Illustrate the File system Implementation and Free space management. [10]
	OR
20	A Give overview of mass storage structure in detail. [5] B. Describe about efficiency and performance of secondary storage. [5]