



MARRI LAXMAN REDDY

INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(AN AUTONOMOUS INSTITUTION)

(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)

Accredited by NBA and NAAC with 'A' Grade & Recognized Under Section 2(f) & 12(B) of the UGC act, 1956

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

2440577 OPERATING SYSTEMS LAB

B. Tech. II Year-II Sem

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COURSE OUTCOMES - CO'S

- Explain the different architectures used in designing the various operating systems.
- Solve the problems of process scheduling, inter-process communication and multithreading models.
- Apply deadlock avoidance algorithm and synchronization techniques such as producer-consumer to solve problems in real time applications.
- Choose the memory allocation algorithms and page replacement algorithms for effective utilization of resources.
- Make use of different file allocation and file accessing methods for efficient utilization of storage

LIST OF EXPERIMENTS:

1. Write C programs to simulate the following CPU Scheduling algorithms
a) FCFS b) SJF c) Round Robin d) priority
2. Write programs using the I/O system calls of UNIX/LINUX operating system
(open, read, write, close, fcntl, seek, stat, opendir, readdir)
3. Write a C program to simulate Bankers Algorithm for Deadlock Avoidance and Prevention.
4. Write a C program to implement the Producer – Consumer problem using semaphores using UNIX/LINUX system calls.
5. Write C programs to illustrate the following IPC mechanisms
a) Pipes b) FIFOs c) Message Queues d) Shared Memory
6. Write C programs to simulate the following memory management techniques
a) Paging b) Segmentation