JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR
(Established by Govt. of A.P., ACT No.30 of 2008)
ANANTHAPURAMU – 515 002 (A.P) INDIA

MASTER OF COMPUTER APPLICATIONS

Course Code	OPERATING SYSTEMS LABORATORY	L	T	P	C
21F06206		0	0	4	2
	Semester	II			

Course Objectives:

- To understand the functionalities of various layers of OSI model
- To explain the difference between hardware, software; operating systems, programs
- and files.
- Identify the purpose of different software applications.

Course Outcomes (CO):

- Simulate and implement operating system concepts such as scheduling, deadlock management, file management and memory management.
- Able to implement C programs using Unix system calls

List of Experiments:

Week 1: Simulate the following CPU scheduling algorithms.
a) FCFS b) SJF c) Round Robin d) Priority.
Week 2: Write a C program to simulate producer-consumer problem using Semaphores
Week 3: Write a C program to simulate the concept of Dining-philosophers problem.
Week 4: Simulate MVT and MFT.
Week 5: Write a C program to simulate the following contiguous memory allocation Techniques
a) Worst fit b) Best fit c) First fit.
Week 6: Simulate all page replacement algorithms
a)FIFO b) LRU c) OPTIMAL
Week 7: Simulate all File Organization Techniques
a) Single level directory b) Two level directory
Week 8: Simulate all file allocation strategies
a) Sequential b) Indexed c) Linked.
Week 9: Simulate Bankers Algorithm for Dead Lock Avoidance.
Week 10: Simulate Bankers Algorithm for Dead Lock Prevention.
Week 11: Write a C program to simulate disk scheduling algorithms.
a) FCFS b) SCAN c) C-SCAN