

LESSON PLAN

Name of Faculty : ANJU BALA
Discipline : COMPUTER ENGINEERING
Semester : 3rd
Subject : OPERATING SYSTEM

Week	Theory		Practical	
	Lecture Days	Topic (Include assignment /Test)	Prac tical Day	Topic
1st	1	Overview of operating system	1st	Demonstration of all the controls provided in window control panel.
	2	Definition of operating system	2nd	
	3	Types of operating system and operating system services		
2nd	1	User operating system interface	3rd	Exercise on basics of window.
	2	System calls System programs	4th	
	3	Types of system calls and operating system structure virtual machine		
3rd	1	Process management (principles and brief concept)	5th	Installation of linux operating system.
	2	Process concept, process state , process control block,	6th	
	3	Scheduling queues scheduler, job scheduler and context switch, operating on process, Interprocess communication		
4th	1	Shared memory systems message- process system, cpu scheduler,	7th	Usage of directory management commands of linux: is , cd, pwd, rmdir,
	2	Scheduling criteria, scheduling algorithms, pre-emptive and non pre-emptive.	8th	
	3	First Come First Serve (FCFS), Shortest Job First (SJF), round robin(RR), multiprocessor scheduling, process synchronization.		
5th	1	Test	9th	Usage of file management commands of linux: cat, chmod, cp, mv, pg, more, find
	2	1 seasonal		
	3	Deadlock(principles and brief concept) and Deadlock, condition for deadlock, methods for handling deadlocks	10th	
6th	1	Dead prevention, Deadlock avoidance,	11th	Use the germal

	2	Deadlock avoidance , deadlock detection, Recovery from deadlock.	12th	purpose commands of linux: wc, od, lp, cal, date, who, whoami,.
	3	Test		
7th	1	Memory management function (principles and brief concept) definition- logical and physical address space, swapping.	13th	Using the simple filters; pr, head, tail, cut, paste, nl, sort.
	2	Memory allocation. contiguous memory allocation,		
	3	fixed and variable partition, Internal and external fragmentation and compaction	14th	
8th	1	Paging-principle of operation, page allocation, Hardware support for paging	15th	Communication commands: new, write, talk, mseg, mail, wali
	2	Protection and sharing		
	3	merge Disadvantages of paging, segmentation and Virtual memory	16th	
9th	1	Revision	17th	Write a shell programme that finds the factorial of a number.
	2	Test		
	3	I/O Management function (principle and brief concept), dedicated devices, shared devices, and I/O Devices	18th	
10th	1	Storage devices	19th	Write a shell programme that finds whether a given number is prime or not.
	2	Buffering, spooling		
	3	Revision and Test	20th	
11th	1	2nd sessional	21st	Write a shell programme to find the average of the three number.
	2	File management (principles and brief concept)		
	3	Types of file system and Simple file system.	22nd	
12th	1	Basic file system	23rd	Write a shell program that will convert all the text of the file from lowercase to uppercase.
	2	Logical file system Physical file system		
	3	Various method of allocating disk space.	24th	
13th	1	Revision	25th	
	2	Test		
	3	Linux operating system, History of Linux and Unix and Linux overview, structure of Linux, Linux releases		

		Open Linux, Linux system requirements, Linux commands and filters:		
14th	1			
	2	Mk dir cd, rmdir, pwd, is , who, whoami, date, cat, chmod, cp, mv, rm, pg, more, pr, tail, head, cut,		
	3	paste, nl, grep, wc, sort, kill, write, talk, mseg, wall, merge, mail, news and Shell: concept of command options, input, output, redirection, pipes		
15th	1	Redirecting and piping with standard errors,		
	2	Revision		
	3	3 rd sessional		