

LESSON PLAN

Name of Facility : Sanjeev Kumar
Discipline : Computer Engineering
Semester : 3rd
Subject : Operating System

Week	Theory		Practical	
	Lecture Days	Topic (Include assignment /Test)	Practical Day	Topic
1st	1	Overview of operating system	1st	Demonstration of all the controls provided in window control panel.
	2	Definition of operating system		
	3	Types of operating system	2nd	
	4	Operating system services		
2nd	5	User operating system interface	3rd	Exercise on basics of window.
	6	System calls System programs		
	7	Types of system calls		
	8	Operating system structure virtual machine	4th	
3rd	9	Process management (principles and brief concept)	5 th	Installation of linux operating system.
	10	Process concept, process state , process control block,		
	11	Scheduling queues scheduler, job scheduler,		
	12	Context switch, operating on process, Interprocess communication,	6th	
4th	13	Shared memory systems message- process system, cpu scheduler,	7th	Usage of directory management commands of linux: is , cd, pwd, rmdir,
	14	Scheduling criteria, scheduling algorithms, pre-emptive and non pre-emptive.		
	15	First Come First Serve (FCFS), Shortest Job First (SJF), round robin(RR), multiprocessor scheduling, process synchronization.	8th	
5th	16	Test	9th	Usage of file management commands of linux: cat, chmod, cp, mv, pg, more, find
	17	1 seasonal		
	18	Deadlock,(principles and brief concept)	10th	
	19	Deadlock, condition for dead lock, methods for handling deadlocks		
6th	20	Dead prevention, Deadlock avoidance,	11th	Use the gernal

	21	Deadlock avoidance , deadlock detection, Recovery from deadlock.		purpose commands of linux: wc, od, lp, cal, date, who, whoami,.
	22	Test	12th	
7th	23	Memory management function (principles and brief concept) definition- logical and physical address space, swapping,	13 th	Using the simple filters; pr, head, tail, cut, paste, nl, sort.
	24	Memory allocation, contiguous memory allocation,	14th	
	25	fixed and variable partition,		
	26	Internal and external fragmentation and compaction		
8th	27	Paging-principle of operation, page allocation, Harware support for paging	15 th	Communicati on commands: new , write, talk, mseg, mail, wall
	28	Protection and sharing	16th	
	29	Disadvantages of paging, segmentation,		
	30	Virtual memory.		
9th	31	Revision	17 th	Write a shell programme that finds the factorial of a number.
	32	Test	18th	
	33	I/O Management funcation (principle and brief concept) dedicated devices, shared devices,		
	34	I/O Devices,		
10th	35	Storage devices	19 th	Write a shell programme that finds whether a given number is prime or not.
	36	Buffering, spooling	20th	
	37	Revision		
	38	Test		
11th	39	2nd sessional	21st	Write a shell programme to find the average of the three number.
	40	File management (principles and brief concept)	22nd	
	41	Types of filer system		
	42	Simple file system		
12th	43	Basic file system	23 rd	Write a shell program that will convert all the text of the file from lowercase to uppercise.
	44	Logical file system Physical file system		
	45	Various method of allocating disk space.	24th	
13th	46	Revision	25 th	
	47	Test	26th	
	48	Linux operating system History of Linux and unix		
	49	Linux overview, structure of Linux, Linux releases		

	50	Open Linux, Linux system requirements,		
14th	51	Linux commands and filters:		
	52	Mk dir cd, rmdir, pwd, is , who, whoami, date, cat, chmod, cp, mv, rm, pg, more, pr, tail, hesd, cut,		
	53	paste, nl, grep, we, sort, kill, write, talk, mseg, wall, merge, mail, news		
	54	Shell: concept of command options, input, output, redirection, pipes		
15th	55	Redirecting and piping with standard errors,		
	56	Revision		
	57	3 rd sessional		