LESSON PLAN

NAME OF THE FACULTY: - Amita

DISCIPLINE: - Computer Engineering

SEMESTER:- 3rd

SUBJECT— Operating System

Lesson Plan Duration: - 15 weeks

Work Load (Lecture/Practical) per week (In hours): Lecture 03, Practical -03

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)	5th	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 oflinux: cat, chmod, cp, mv, pg, more,find
	17	1st sessional		
	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 general

	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,	13th	Using the simple filters; pr, head, tail, cut, paste, nl, sort.
	24	Memory allocation, contiguous memory allocation,		
	25	fixed and variable partition,	14th	
	26	Internal and external fragmentation and compaction		
8th	27	Paging-principle of operation, page allocation, Hardware support for paging	15th	Communication commands: new , write, talk, mseg, mail, wall
	28	Protection and sharing		
	29	Disadvantages of paging, segmentation,		
	30	Virtual memory.	16th	
9th	31	Revision	17th	Write a shell programme that finds the factorial of a number.
	32	Test		
	33	I/O Management funcation (principle and brief concept) dedicated devices, shared devices,	18th	
	34	I/O Devices,		
10th	35	Storage devices	19th	Write a shell programme that finds whether a given number is prime or not.
	36	Buffering, spooling		
	37	Revision	20th	
	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)		
	41	Types of filer system	22nd	
	42	Simple file system		
12th	43	Basic file system	23rd	Write a shell program that will convert all the text of the file from lowercase to uppercase.
	44	Logical file system Physical file system		
	45	Various method of allocating disk space.	24th	
13th	46	Revision	25th	
	47	Test		
	48	Linux operating system History of Linux and unix		
	49	Linux overview, structure of Linux, Linux releases	26th	

	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	3rd sessional		