LESSON PLAN

NAME OF FACULTY : MADHU MADHAN
DISCIPLINE   : Computer Engg.
SEMESTER   : 3rd

SUBJECT   : Operating system LESSON PLAN DURATION : 15
WORK LOAD (LECTURE/ PRACTICAL) : LECTURES -3   , PRACTICALS - 4

WEE K	THEOR Y		PRACTIC AL	
	LECTUR E DAY	TOPIC	PRACTICA L DAY	TOPIC
1st	1	Definition of Operating Systems, Types of Operating Systems	1st	Demonstration of all the controls provided in windows control panel.
	2	Operating System Services		
	3	User operating system interface		
2nd	4	System Calls, Types of System Calls	2nd	Exercise on Basics of windows.
	5	System Programs		
	6	Operating System Structure		
3rd	7	Virtual Machine, Benefits of Virtual Machine	3rd	Installation of Linux Operating System
	8	Process Management, Process concept		
	9	Process State, Process Control Block		
4th	10	Scheduling Queues, Scheduler	4th	Usage of directory management commands of Linux: ls, cd, pwd, mkdir, rmdir
	11	Process Scheduler		
	12	Job Scheduler, Context Switch		
5th	13	Operations on Processes,	5th	Usage of File Management commands of Linux: cat, chmod, cp, mv,
	14	Inter process Communication		
	15	Shared Memory Systems, Message-Passing Systems		
6th	16	CPU Scheduler Scheduling Criteria,	6th	Usage of File Management commands of Linux: rm, pg, more, find
	17	Scheduling Algorithms- Preemptive and Non Preemptive		
	18	First come first serve (FCFS),		
7th	19	Shortest Job first (SJF), Round Robin (RR)	7th	Use the general purpose commands of Linux: wc, od, lp, cal
	20	Multiprocessor scheduling, Process Synchronization		
	21	Definition of Deadlock		

8th	22	Conditions for Dead lock Methods for handling deadlocks,	8th		Use the general purpose commands of Linux: date, who, whoami
	23	Deadlock Prevention and Avoidance			
	24	Deadlock detection, Recovery from deadlock.			
9th	25	Memory Management Function Definition	9th		Using the simple filters: pr, head, tail
	26	Logical and Physical address Space			
	27	Swapping, Memory allocation			
10th	28	Contiguous Memory allocation Fixed and variable partition,	10th		Using the simple filters: cut, paste, nl, sort
	29	Internal and External fragmentation and Compaction			
	30	Paging – Principle of operation			
11th	31	Page allocation, Hardware support for paging	11th		Communication Commands: news, write, talk
	32	Protection and sharing			
	33	Disadvantages of paging			
12th	34	Segmentation, Virtual Memory	12th		Communication Commands: mseg, mail, wall
	35	I/O Management Functions - Dedicated Devices, Shared Devices			
	36	I/O Devices			
13th	37	Storage Devices, Buffering, Spooling	13th		Write a shell program that finds the factorial of a number.
	38	File Management - Types of File System			
	39	Simple file system			
14th	40	Basic file system, Logical file system	14th		Write a shell program that finds whether a given number is prime or not.
	41	Physical file system, Various Methods of Allocating Disk Space			
	42	History of Linux and Unix, Linux Overview			
15th	43	Structure of Linux, Linux releases, Open Linux, Linux System Requirements	15th		Write a shell program to find the average of three numbers.
	44	Linux Commands and Filters- : mkdir, cd,rmdir,pwd, ls, who, whoami, date			
	45	cat,chmod, cp, mv, rm,pg,more, pr, tail, head, cut, paste, nl, grep, wc, sort, kill			
16th	46	write, talk,mseg,wall, merge,mail, news	16th		Write a shell program that will convert all the text of the file from lowercase to uppercase .
	47	Shell: concepts of command options, input,output,redirection,pipes, redirecting and piping with standard errors			
	48	Shell scripts, vi editing commands			