

Lesson Plan

Name of the Faculty : MS. Bharti(Ass. PROFESSOR)

Discipline : MCA

Semester : 5TH

Subject : Linux And Shell Programming

(MCA-651)

Lesson Plan Duration : 15 weeks (from july, 2018 to november 2018)

Work Load (Lecture/Practical) per week (in hours):Lecture: 3

Week	Theory		Practical	
	Lecture Day	Topic(including Assignment/Test)	Practical Day	Topic
1st	1 st	Basic Features, Advantages, Installing requirement, Partitioning the Hard drive for Linux		
	2 nd	Installing the Linux system, System startup and shut-down process, init and run levels. Basic architecture of Unix/Linux system, Kernel, Shell.		
	3 rd	Linux File system-Boot block, super block, Inode table, data blocks, file storage, file access,		
	T1	Tutorial---review of lectures		
2nd	4 th	Linux standard directories. Commands for files and directories, creating and viewing files using cat		
	5 th	file comparisons – cmp&comm, View files, disk related commands, checking disk free spaces.		
	6 th	Assignment on above topics/ Test 1		
	T2	Tutorial---problem/review of lectures		
3rd	7 th	Essential linux commands,		

		Understanding shells, Processes in linux-process fundamentals		
	8 th	connecting processes with pipes, tee, Redirecting input output, manual help, Background processing, managing multiple processes		
	T3	Tutorial---problem/ review of lectures		
	9 th	changing process priority with nice, scheduling of processes at, cron, batch, time, kill, ps		
4th	10 th	who, sleep, Printing commands, find, sort, touch, file, file related commands- ws, sat, cut, dd, etc.		
	11 th	Mathematical commands- bc, expr, factor, units. Creating and editing files with vi, joe& vim editor		
	12 th	Assignment on above topics/ Test 2		
	T4	Tutorial---problem/review of lectures		
5th	13 th	System administration: Common administrative tasks, identifying administrative files: configuration and log files, Role of system administrator		
	14 th	Managing user accounts- adding & deleting users, changing permissions and ownerships, Creating and managing groups, modifying group attributes, Temporary disable user's accounts		
	15 th	creating and mounting file system, checking and monitoring system performance file security & Permissions, becoming super user using su. Getting system information with uname		
	T5	Tutorial---problem/review		

		of lectures		
6th	16 th	host name, disk partitions & sizes, users, kernel. Backup and restore files		
	17 th	Configure X-windows desktop, starting & using X desktop		
	18 th	Assignment on above topics/ Test 3		
7th	19 th	KDE & Gnome graphical interfaces, changing X settings.		
	20 th	installing and removing packages with rpm command.		
	21 st	reconfiguration hardware with kudzu		
	T6	Tutorial---problem/review of lectures		
8th	22 nd	Tutorial---problem/review of lectures		
	23 rd	disk partitions & sizes, users, kernel		
	24 th	Assignment on above topics/ Test 4		
	T7	Tutorial---problem/review of lectures		
9th	25 th	Backup and restore files, reconfiguration hardware with kudzu		
	26 th	installing and removing packages with rpm command.		
	27 th	installing and removing packages with rpm command.		
	T8	Tutorial---problem/review of lectures		
10th	28 th	Configure X-windows desktop, starting & using X desktop.		
	29 th	KDE & Gnome graphical interfaces, changing X settings.		
	30 th	Assignment on above topics/ Test5		
	T9	Tutorial---problem/review of lectures		

11th	31 st	Basic of shell programming,		
	32 nd	Various types of shell available in Linux		
	33 rd	comparisons between various shells		
	T10	Tutorial---problem/review of lectures		
12th	34 th	shell programming in bash, read command,		
	35 th	conditional and looping statements		
	36 th	case statements, parameter passing and arguments		
	T11	Tutorial---problem/review of lectures		
13th	37 th	Shell variables, system shell variables, shell keywords		
	38 th	Creating Shell programs for automate system tasks.		
	39 th	Assignment on above topics/ Test6		
	T12	Tutorial---problem/ review of lectures		
14th	40 th	Simple filter commands – pr, head, tail, cut, paste, sort, uniq, tr		
	41 st	Filter using regular expressions – grep, egrep, and sed.		
	42 nd	awk programming – report printing with awk		
15th	43 rd	Problem session		
	44 th	Problem session		
	45 th	Problem session		

IMPORTANT DATES (KEY DATES)

(Ms.Bharti)

Ass. PROFESSOR