Govt. College of Engineering & Technology, Bikaner

Department of Computer Science & Engineering

Lecture Plan: 3CS5 Fundamentals of Linux Shell Programming

Name of Faculty: Kartar Singh Siddharth

Unit	Topics	No. of Lectures
I	**Introduction: Logging in, changing password (passwd command only), man, xman, info commands to access on line help. Simple commands like ls, cp, mv, grep, head, tail, sort, uniq, diff, echo, date, which, whereis, whatis, who,** finger w (option and variations included).	4
	Directory commands, access permissions, changing access permissions for files and directories, hard & symbolic links. Environment and path setting.	2
II	**vi editor: Creating and editing files, features of vi, insertion deletion, searching, substitution operations, yank, put, delete commands, reading & writing files,** exrc file for setting parameters, advance editing techniques. **vim(improved vi).**	3
	Programming utilities: Compiling & linking C, C++ programs, make utility, **debugging C programs using gdb**, system call.	3
IV	**Shell: Meaning and purpose of shell, Introduction to types of shell. The command line, standard input and standard output, redirection, pipes, filters special characters for searching files and pathnames.**	2
	Bourne Again SHell: shell script-writing and executing, command separation & grouping, redirection, directory stack manipulation, **processes, parameters & variables, keyword variables.**	3
V	**Shell Programming: Control structures, the Here document, expanding NULL or USET variables, Builtins, functions, history, aliases, job control, filename substitution.** source code management- RCS and CVS. awk utility.	7
III	Introduction to X-window system: x-window as client/ server system, concept of window manager, remote computing & local displays, xinitrc file, customize X work environment and applications, customizing the fvwm window manager.	4
	Total	28

Topics mentioned in bold are covered so far as on 30/10/2015