www.ululu.in

CS-604: LINUX ADMINISTRATION

Teaching and Examination Scheme:

Teaching Scheme			Credits	Marks			Duration of End Semester Examination
L	T	P/D	C	Sessional	End Semester Exams	Total	
2	2	0	3	40	60	100	3Hrs

COURSE OBJECTIVE:

The course should enable the students to provide general introduction to Linux server, imparting knowledge on user administration and to give an introduction to process and shell programming.

COURSE CONTENT:

UNIT	CONTENT	No. Hr
I	**Installing Linux as a Server:** Linux distributions, open source software and GNU, difference between windows and linux, installing linux in a server configuration, GNOME and KDE- X windows system, managing software. **Linux Administration:** Managing users, user text files-user management tools, command line, boot loaders, file systems, compiling linux kernel, linux security.	7
II	**Internet Services:** DNS, FTP-Mechanics-installing and customizing the server, setting up web server using apache, SMTP- install, configure and run postfix server, POP and IMAP, SSH- public key cryptography, creating a secure tunnel.	6
III	**Intranet Services:** NFS- enable and configure NFS server and client, NIS- configuring master and secondary NIS server and client, NIS tools, SAMBA-administration, printing-install cups-add and manage print jobs, DHCP, virtualization.	6
IV	**Linux Process Control:** Linux process environment, login processes, parent child relationship, process variable, process monitoring, invoking foreground and background processes, terminating process, daemons. **Shell Programming:** Introduction, shell scripts, executing shell scripts, creating scripts, simple examples.	7

Following practicals are to be performed in tutorials:

1. Installation Linux operating system.
2. To study basic Linux Commands.
3. To study and create various types of files in linux.
4. To study vi and vim editors
5. To study user, group, owner and access permissions of a file.

Dean
H.P. Technical University
Hamirpur - 177001

www.ululu.in - Download All Subject Notes and Sample Papers

www.ululu.in

6. Study of Bash shell, Bourne shell and C shell in linux operating system
7. Study Shell scripting in Linux.
8. To study various filters in Linux.
9. Administration of LINUX Operating System.
10. Introduction to variables in shell scripting.
11. Introduction of various constructs in shell scripting.
12. Write the program to mount the various devices (i.e. floppy, CD-Rom etc).
13. To study Process synchronization.

Textbooks:

1. Wale Soyinka, ***"Linux Administration A Beginners Guide"***, Tata McGraw Hill.
2. Mc Kinnon, ***"Installing and Administrating Linux"***, Wiley.

Reference Books:

1. Richard Peterson, ***"Linux: The complete Reference"***, Tata McGraw Hill.
2. Mark G. Sobell, ***"Practical Guide to Fedora and Red Hat Enterprise Linux"***, Prentice Hall.
3. www.linuxhomenetworking.com
4. www.linux.org
5. www.linux.com