

Govt. Polytechnic Sundernagar
Lesson Planning (Theory)

Branch : Computer Engg
Subject: Linux Operating System
Teacher : Sonali Malhotra

Semester: Sixth
Session: March-July,2021
Classroom: EC-101

Sr.No	No of Lectures	Chapter Description	Detail Of Content	Reference Resource	Remarks
1	1-4 (4 hrs)	Unit-1 Open Source Software	Open Source Software (OSS), OSS advantages, free software, freeware, free and open source software (FOSS), public domain software, FSF, GPL, LGPL.	R1,R3	
2	5-12 (8 hrs)	Unit-2 Linux Operating System	History, features, applications, distributions, kernel, desktop environments : GNOME and KDE; architecture, boot loaders, bash shell	R1,R2,R3	
3	13-22 (10 hrs)	Unit-3 Managing Files and Directories	Rules for naming files and directories, FHS, file types, file permissions, Linux file management commands: cat, touch, head, tail, cp, rm, mv, more, less, pwd, mkdir, rmdir, ls, cd, chmod; use of wild card characters, standard input, output and error files; pipes and filters.	R2,R4	
4	23-30 (8 hrs)	Unit-4 Linux Networking	Networking terminology (basic concept only) : TCP/IP, IPv4 and IPv6 addresses, netmask, gateway, DNS, DHCP, ports; Linux networking commands : ifconfig, finger, ping, arp, netstat, host, traceroute, nmap, ssh, telnet, ftp.	R1,R2,R3	
5	31-44 (14 hrs)	Unit-5 Linux Administration	User management : users, groups, primary and secondary groups, Linux commands for user management : useradd, usermod, userdel, passwd, groupadd, groupmod, groupdel, groups, chown, chgrp; Disk management : manage disk partitions, format partitions, mount and unmount file systems; package management, configuration files: hosts, fstab, passwd, group, resolv.conf; Linux Servers : Telnet server, SSH server, FTP server, NFS server, proxy server, DHCP server, SAMBA.	R1,R2,R4	
6	45-56 (12 hrs)	Unit-6 Shell Programming	Linux shells, bash shell script, echo, read, variables : naming rules, readonly variable, unset variables, special variables (\$*, \$\$, \$#, \$?, \$n), environment variables, positional parameters, command substitution, flow control constructs - "if..then..fi" construct, "else" construct, "elif" construct, case, while construct, until, for, break and continue.	R3,R4	

Reference Resources:

R1--- Linux: The Complete Reference 6th Edition by Richard Petersen

R2--. The official Ubuntu book by Benjamin Mako Hill et al.

R3 – NIIT, Linux Operating Systems, Prentice-Hall Of India Pvt. Limited

R4-- www.tutorialpoints.com



Teacher's Signature

(Sonali Malhotra)



Signature of HOD