

SARDAR PATEL UNIVERSITY
Programme & Subject: M.Sc – Information Technology (Integrated)
Semester: VI
Syllabus with Effect from: June - 2014

Paper Code: PS06CIIT04		Total Credit: 3
Title of Paper: Linux & Shell Programming		
Unit	Description in Detail	Weightage (%)
I	Introduction to Linux – I Introduction to Linux System & History Features of Linux Advantages and disadvantages of Linux Introduction to File System Memory Management	30%
II	Introduction to Linux– II Basic Commands: login, logout, date, man, pwd, who, whoami, dir, ls, cd mkdir, rmdir. Use of Wild card characters introduction to vi editor. Introduction to environment variable like HOME, PATH, PS1. Types of FAP, use of chmod command. Basic commands like cp, mv, rm, rev, file redirection. cut, paste, find sort commands with example.	
III	Shell Scripting Introduction to shell script: execution of it, shell script variable expr, test commands Control structure: if, if..else, case structure Iteration: while, for construct, break, continue, exit commands Examples	
IV	Advance Shell Scripting. Using advanced features of the shell Input/ Output Redirection The grep filter More utility programs The sed filter	

Basic Text & Reference Books:

- Das S.: Your UNIX – The Ultimate Guide, Tata McGraw-Hill, 2001. (fourth edition)
- Kernighan B. W. and Pike R. : The Unix Programming Environment, Prentice-Hall of India, 2003
- Prata S. : Advanced Unix – A Programmer’s Guide, BPB Publications, 1986.
- UNIX shell programming By Yashwant Kanetkar
- Nemeth E., Hein T., Snyder G.: Linux Administration Handbook, 2nd edition, Pearson Education/ PH PTR, 2007

