SARDAR PATEL UNIVERSITY
Programme & Subject: B.Sc (Computer Science)
Semester: IV
Syllabus with Effect from: November/December-2012

Paper Code: US04ECSC01	Total Credit: 2
Title Of Paper: Basic of Linux Operating Systems	

Unit	Description in detail	Weighting (%)
I	**LINUX System** Introduction to Linux System & History Features of Linux Design principles Introduction to File System	25%
II	**Process and Memory management** **Process management** Fork/Exec process model Process and threads **Scheduling** Kernel synchronization **Memory management** Management of physical memory Virtual memory	25%
III	**Basic Commands** login, logout, date, cal, man, pwd, who, who am i, dir, ls, cd, mkdir, rmdir Use of Wild card characters and 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 Grep, cut, paste, find sort commands with example	25%
IV	**Introduction to 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	25%

Basic Text & Reference Books:-

- Andrew S. Tanenbaum: Operating System deign & Implementation, Prentice Hall International
- James Peterson and Abraham Silberschatz: Operating System Concept, Addition Wesley
- Linux Commands Instant reference – Bryan Pfaffenberger BPB Publication
- Advanced Linux Programming – Samuel, Techmedia Publications