

COURSE TITLE : **SERVER AND NETWORK ADMINISTRATION LAB**
COURSE CODE : **5269**
COURSE CATEGORY : **A**
PERIODS/WEEK : **4**
PERIODS/SEMESTER : **52**
CREDITS : **2**

COURSE SPECIFIC OUTCOMES:

1. To demonstrate the tasks of server administrator.
2. To use command line and shell.
3. To Use man pages and other documentation.
4. To use GNOME and edit text files with gedit.
5. To use vi editors.
6. To Configure the date and time, and configure a printer.
7. To demonstrate basic disk concepts and logical volume concepts.
8. To manage users and groups.
9. To demonstrate Linux file access mechanisms; manage file access from the GUI and the command line.
10. To Review the system log files and journal.
11. To configure web server and squid server
12. To learn and configure dhcp server samba and ftp
13. To learn the concept of IP addressing and subnetting.
14. To demonstrate basic network concepts; configure, manage, and test network settings.
15. To demonstrate the networking commands like hostname, ifconfig, finger, Ping, Traceroute, ARP, Route, Netstat etc...
16. To discuss network hardware such as NIC, hub, bridge, switch, router etc.
17. To illustrate experiments involving crimping of straight through, cross over cables and roll over cables and testing using LAN Tester
18. To design physical LAN Configuration and testing
19. To practice Basic router configuration
20. To apply and practice static routing and dynamic routing using RIP

TEXT BOOK:

1. Behrouz A. Forouzan, Richard F. Gilberg, "*Unix and shell Programming.*", Cengage Learning
2. SumitabhaDas, "*Unix the ultimate guide*", TMH. 2nd Edition.
3. Behrouz & Forouzan "*Introduction to Data Communications & Networking*" –Mc Graw Hill

REFERENCES:

1. Kernighan and Pike, "*Unix programming environment*", PHI. / Pearson Education
2. Graham Glass, King Ables, "*Unix for programmers and users*", 3rd edition, Pearson

Education

3. Maurice J. Bach, "*The Design of the Unix Operating System*", First Edition, Pearson Education, 1999
4. A.S. Tanenbaum, "*Computer Networks*" - PHI
5. William Stallings, "*Data and Computer Communication*" - Pearson Education Asia