

**0944 - DIPLOMA IN INFORMATION TECHNOLOGY & ENGINEERING**  
**SEMESTER -IV**  
**094442 - WINDOWS AND LINUX OPERATING SYSTEM**

**RATIONALE**

The knowledge of this subject will enable the students to understand the concepts of Linux and its potential. The students will also get hand on experience of linux after undergoing this course.

**DETAILED CONTENTS**

**Linux Operating System**

**1. Introduction**

History of Linux and Unix, Linux Overview, Linux releases, open linux

**2. Linux Commands and Filters**

Mkdir, CD, rmdir, pwd, ls, who, whoami, cat, more, fail, head, concept of, mv, chmod, grep, wc, comm., split, sort, diff, kill, write, wall, merge, mail, news

**3. Shell**

The command line special characters and file arguments, standard input/output and redirection, pipes, redirecting and piping with standard errors, shell scripts, jobs.

**4. Linux file Structure**

Linux files, file structure, listing displaying and printing files, managing directories, file and directory operations.

**5. Vi Editor**

Vi editing commands, advanced Vi editing commands, line editing commands, options in Vi.

**6. System Administration**

System management, managing users, installing and managing devices, floppy disk management, file system administration, backups.

Windows Network Operating System

**7. Introduction**

Windows operating system - its features and capabilities; comparison with OS hardware requirements for Windows 98, 2000 XP, Millennium,NT.

**8. Control Program and Control Panel**

Customizing desktop, installing, removing programs, managing your files and folders (creating, renaming, deleting, moving, copying etc.)

**LIST OF PRACTICALS**

**Installing Linux**

1. Creating and managing user accounts
2. Practice on Linux commands
3. Practice on vi commands
4. Write and execute at least 10 programmes in Linux using shells such as
  - Factorial of numbers
  - Even/odd numbers

- Fibonacci series
  - Prime numbers
  - Arrange of numbers
  - Reverse of numbers
  - Lower case to upper case
  - Greatest of three numbers etc.
5. Installing and configuring X-windows
  6. Create file and folder
  7. Searching a file
  8. Installation of device drivers
  9. Creating user accounts
  10. Customizing desktop
  11. Setting monitor resolution

### **RECOMMENDED BOOKS**

1. Linux – The Complete Reference by Richard Peterson, Tata McGraw Hill, New Delhi
2. Linux – Install and Configuration Black Book by Die Anneblanc and Issac Yates, IDG Books India Private Ltd., Delhi
3. Unleashed Linux by Tech Media Publishers.