MANGALORE UNIVERSITY
DEPARTMENT OF COMPUTER SCIENCE
MSc COMPUTER SCIENCE

CSE 466 : LINUX ENVIRONMENT SYSTEMS

Hours/Week: 4   I.A.   Marks: 30
Credits : 4   Exam. Marks: 70

Course Outcomes:

CO1:   Understanding the basic set of commands and utilities in Linux/UNIX systems.
CO2:   To learn to develop software for Linux/UNIX systems.
CO3:   To learn the C language and get experience programming in C.
CO4:   To learn the important Linux/UNIX library functions and system calls.
CO5:   To understand the inner workings of UNIX-like operating systems.
CO6:   To obtain a foundation for an advanced course in operating systems.

UNIT-I   12 Hrs.

Logging In and Logging Out, Anatomy of Linux OS, Directory Structure, /usr Directory, File Types: User datafiles, System data files, Executable files. Naming files and directories, Spawning Processes. **Shell:** Creating User Account, Shell Program, bash shell, Changing shell prompt. **Commands:** Basic Syntax for a command, Exploring the Home Directory, ls, mkdir, rmdir, stat, cat, rm, mv, cp

UNIT-II   12 Hrs.

Editor: Vi editor. **Hooking up Hardware Devices:** Formatting a Floppy Disk**,** Gathering important system information. Backing Up and restoring the File **System:** Simple Backup, gzip, gunzip, tar. **Printing files:** Print Spool directory, Sending files to Printer.

UNIT-III   12 Hrs.

Sharing Files with other Users: Maintaining User Accounts, Changing Password, Creating Group Accounts, Granting Access to files, Changing File Ownership, Protecting Files, Making a File Read-Only. Working with Processes**:** Types of processes, ps Command, Creating process, killing process, free command and top utility.

UNIT-IV   12 Hrs.

Managing Disk Space: df, du commands, Creating Additional Free Disk Space, Locating Unused Files, Setting System Clock. Communication Utilities: who, who am i, finger, mesg, write, wall, talk, Creating a message of the day. X Window System, Graphical User Interfaces: KDE and GNOME Desktop Environment.

REFERENCE BOOKS:
1. Craig and Coletta Witherspoon, SAMS Teach Yourself Linux, First Edition, SAMS Publication, 2007.
2. Richard Petersen, Red Hat Linux - The Complete Reference Second Edition McGraw-Hill, 2002