B.Sc. (Information Technology)
SEM - III

SUBJECT: SYSTEM PROGRAMMING

TUTORIAL

Assignment 1

1) Explain UNIX architecture in detail with diagram? Explain Kernel-Shell-User relationship in UNIX.
2) Explain following commands in UNIX with syntax and one example of each.
   who, more, cat, grep, man, date, echo, wc, cp, diff

Assignment 2

1) Explain the concept of redirection and piping in UNIX.
2) Explain three different permissions of UNIX file? Explain how file and directory permissions can be changed.

Assignment 3

1) Explain different modes of operations in vi editor. Explain how to start and stop vi editor?
2) What is process? Explain the mechanism of process creation in UNIX.

Assignment 4

1) Write a short note on inode entries in UNIX. Also explain inode data block addressing.
2) Explain following system calls with syntax.
   Open(), read(), lseek(), getcwd(), chdir(), link(), unlink()

Assignment 5

1) Explain zombies and orphans in UNIX.
2) Write series of commands for the following
   - Create a directory called stud
   - Change to the stud directory
   - Verify whether you have actually changed to stud directory
   - Return to your previous directory.