

Code: 9F00303

**MCA III Semester Supplementary June 2012 Examinations
LINUX PROGRAMMING**

(For 2009 & 2010 admitted batches only)

Time: 3 hours

Max Marks: 60

**Answer any FIVE questions
All questions carry equal marks**

1. (a) Explain various file permission in Linux with examples.
(b) Explain various characteristics of Linux.
2. (a) Define shell and explain how a shell variable can be defined and initialized.
(b) Write a shell script to delete duplicate files in the directory.
3. (a) Define Inode and discuss various file types used in Linux for accessing files.
(b) Write short notes with their syntax for the following:
(i) get cwd. (ii) readdir. (iii) fseek.
4. (a) Explain the steps of how kernel supports a process.
(b) What is a zombie process? Explain how zombie process can be removed from a system.
5. (a) What is a signal? Discuss the signals SIGKILL and SIGSTOP and explain.
(b) How Linux signals are processed inside the Kernel? Explain.
6. (a) Explain how pipes are used as a standard input and output.
(b) Explain shared memory and its usage by a number of processes.
7. (a) How mutexes are used to prevent data inconsistency? Explain.
(b) Explain various multithreading models with suitable example for each.
8. (a) What is a socket? Explain various data types used by the sockets interfaces.
(b) Differentiate between connection oriented and connectionless protocol.
