Code: 9F00303

MCA III Semester Supplementary Examinations, July 2013

LINUX PROGRAMMING

Time: 3 hours Max Marks: 60

Answer any FIVE questions
All questions carry equal marks

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1 (a) Explain various process and disk utilities.
(b) Discuss the commands used to achieve the files and compress the contents of files in detail.

2 (a) Write a short note on the responsibilities of a shell.
(b) Write a shell script to compute first 'n' positive numbers sum and average values.

3 (a) Write the following in brief:
(i) Record locking.
(ii) File descriptors.
(iii) Symlink.
(b) Give a short account on I/O redirection operators with example.

4 (a) How processing of states can be performed in Linux?
(b) Explain how zombie process and orphan process created in Linux.

5 (a) In Linux how to generate and handle signals.
(b) Write a C program to illustrate kill () and raise () system calls.

6 Explain the following IPC briefly:
(a) FIFO.
(b) Shared memory.
(c) Message queues.

7 (a) Differentiate between thread and light weight process.
(b) Explain how semaphores are used to control thread operations on shared data.

8 Write and explain the program for client/server communication using sockets.

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