

**Code: 9F00303**

MCA III Semester Regular & Supplementary Examinations January 2015

**LINUX PROGRAMMING**

(For students admitted in 2009, 2010, 2011, 2012 & 2013 only)

Time: 3 hours

Max. Marks: 60

Answer any FIVE questions  
All questions carry equal marks

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- 1 (a) List and explain the various disk utility commands.  
(b) Explain with syntax of the various backup utilities with examples.
- 2 (a) Write a shell program to find the factorial of a given number.  
(b) Write short notes on *here* documents.
- 3 (a) Draw and explain the structure of a typical file system.  
(b) Give brief description on low level file access.
- 4 Explain the following system call interfaces:  
(a) `exec`.  
(b) `exit`.  
(c) `wait`.  
(d) `fork`.
- 5 (a) Discuss in detail about the reliable signals.  
(b) Write short notes on the kernel support for signals.
- 6 (a) What is inter process communication? Explain it by using FIFO's.  
(b) Explain inter process communication between two processes present in different systems.
- 7 (a) Distinguish between threads and processes.  
(b) Discuss in detail about the POSIX thread API.
- 8 (a) Explain the socket interfaced and features of TCP connection.  
(b) Draw and explain the typical client/server model.

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