Code: 9F00303

Time: 3 hours   Max. Marks: 60
Answer any FIVE questions
All questions carry equal marks

*****

1   (a)   List and explain the various networking commands.
    (b)   What is a filter? Explain its role in Linux programming.

2   (a)   Write a shell script to find whether number is prime or not.
    (b)   Discuss in detail about input and output redirections.

3   Explain the following system calls:
    (a)   fcntl
    (b)   lseek
    (c)   unlink
    (d)   symlink

4   (a)   Draw and explain the structure of a typical process.
    (b)   Distinguish between fork and vfork.
    (c)   Write short notes on orphan process.

5   With the help of syntax and example, explain the following:
    (a)   kill
    (b)   raise
    (c)   alarm
    (d)   abort
    (e)   sleep

6   (a)   Explain the file locking with respect to semaphores.
    (b)   Write short notes on inter process communication by using message
          queues.

7   (a)   Draw and explain life cycle of thread.
    (b)   Explain the synchronization of threads by using mutexes.

8   (a)   Write and explain the steps to be followed for creating the server
          application.
    (b)   Write short notes on connectionless protocols for sockets.

*****