

Code: 9A12601

**R09** 

## B.Tech IV Year I Semester (R09) Supplementary Examinations June 2017

## **LINUX PROGRAMMING**

(Electronics & Computer Engineering)

Time: 3 hours Max. Marks: 70

> Answer any FIVE questions All questions carry equal marks

- (a) Explain file permission and the ways to ensure security using file permission.
  - (b) Write a script to find the number of files in a directory.
- (a) Describe input and output redirection operation in LINUX.
  - (b) Describe the different control structures in programming.
- (a) Describe hard link and soft links. 3
  - (b) With the help of neat diagram, explain inode structure of a file.
- (a) Draw the process state diagram and explain the function of scheduler queue.
  - (b) Briefly describe the syntax and working of the following functions.

kill

Pause

Abort

Sort

What are unreliable signals?

- Utelicoll Explain messaging queues and semaphores (a)
  - (b) Describe inter process communication.
- Write briefly about system calls used for message queue and semaphores.
  - Illustrate with example, concept of shared memory and the kernel support given to implement the concept of shared memory.
- (a) With the help of neat diagram, explain the concept of thread & processes. 7
  - (b) Describe light weight processes.
- 8 Write a program to implement echo server and echo client on port number 6789 using connection oriented system calls.