Code: 9A12601

R09

B.Tech IV Year I Semester (R09) Supplementary Examinations, May 2013

LINUX PROGRAMMING

(Electronics and Computer Engineering)

Time: 3 hours   Max Marks: 70

Answer any FIVE questions
All questions carry equal marks

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1. (a) Give brief description about the different text processing utility commands.
    (b) List and explain the internal commands used by sed.

2. (a) Discuss in detail about the different meta characters support by shell.
    (b) What is the role of here documents in shell programming?

3. (a) What is an error? Explain in different stream errors with suitable example.
    (b) Distinguish between file locking and record locking.

4. (a) Define a process. Draw and explain the Unix process data structure.
    (b) With the help of syntax and example explain the wait and waitpid system calls.

5. (a) Explain the inter process communication by using pipes.
    (b) What information will be stored in semaphore table? Draw and explain the Unix kernel
         data structure for semaphore.

6. (a) Write the procedure to interact a client process with server process by using semaphores.
    (b) With the help of syntax and example explain any three APIs for shared memory by using.

7. (a) In what way threads differ from processes created by fork.
    (b) Explain the synchronization of threads by using semaphores.

8.   List the various APIs present in socket. Explain them with suitable example.

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