R09

Code No: F3303

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MCA III Semester Examinations, January - 2018
LINUX PROGRAMMING

Time: 3hrs   **Max.Marks:60**

Answer any five questions
All questions carry equal marks
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1.a) Explain various process utilities available in linux.
 b) Write a shell script that deletes all lines containing a specified word in one or more files supplied as arguments to it.   [6+6]

2.a) Explain the kernel support for file system.
 b) Explain about symlink ( ) function with example program.   [6+6]

3.a) Explain various patterns and actions in awk.
 b) Write an awk script to perform simple arithmetic operation.   [6+6]

4.a) Differentiate soft link and hard link with examples.
 b) Describe usage of dup(), dup2() system calls with example.   [6+6]

5.a) What is an orphan process? Write a program to illustrate orphan process.
 b) Define Signals. What do you mean by Unreliable Signals? Explain.   [6+6]

6.a) What is a pipe? Using pipe, how IPC can be implemented.
 b) Compare the IPC functionality provided by message queues and FIFO's. What are the advantages and drawbacks of each? Explain briefly.   [6+6]

7.a) Differentiate all IPC mechanisms with examples.
 b) Write a C Socket Program for Linux with a Server and Client Example Code.   [6+6]

8.a) Write briefly on POSIX threads.
 b) Write briefly on Thread synchronization with semaphores.   [6+6]

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