R09

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.TECH I SEMESTER EXAMINATIONS APRIL/MAY-2012
LINUX PROGRAMMING
(INFORMATION TECHNOLOGY)
Time: 3hours   Max.Marks:60
Answer any five questions
All questions carry equal marks
- - -

1.a)   Explain how Unix operating system provides more security than any other operating system.
  b)   Explain various meta characters in shell with an example script.

2.   Explain the following system calls with an example.
        a) creat( )
        b) write( )
        c) stat( )
        d) fcntl( )

3.a)   What is a zombie process? Write a sample program to explain about zombie process.
  b)   Differentiate between fork( ) and vfork( ).

4.a)   Explain about the effect of O-NDELAY flag on pipes and fifos.
  b)   Write a program to implement two-way communication using pipes.

5.   Compare the IPC functionality provided by message queues and fifos. What are the advantages and drawbacks of each? Explain briefly.

6.   What is socket? Explain various socket system calls used for UDP protocol.

7.   Explain the system calls related to shared memories.

8.   Explain briefly about the following:
  a)   I/O functions in Perl
  b)   Interrupt processing in Shell.

* * * * * *