Code No: C4007

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.Tech I Semester Examinations March/April-2011
LINUX PROGRAMMING
(INFORMATION TECHNOLOGY)

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

Answer any five questions
All questions carry equal marks
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1. a)   Define Shell and its Responsibilities.
   b)   Explain with example the Process of Creation and Execution of a Shell Script.
   c)   Describe the file access permissions in Unix.   [12]

2. a)   Describe the characteristics of Unix File System.
   b)   Discuss clearly the Low Level File I/O System Calls.
   c)   Explain dup() and its importance.   [12]

3. a)   Explain with suitable examples the use of Perl in Pattern Matching.
   b)   Explain File I/O in Perl using suitable example.   [12]

4. a)   Explain the Data Structures that are affected when a process gets created or deleted.
   b)   What is a Zombie Process? What is its significance? Describe with an example.
                                                                                        [12]

5. a)   Define Signals. What do you mean by Unreliable Signals? Explain.
   b)   Explain clearly the Signal concept with a suitable example.   [12]

6. a)   Why do Process Communicate?
   b)   Elaborately discuss various forms of IPC supported by Unix.   [12]

7.   Explain with example the Kernel Support and working of Shared Memory.
                                                                                        [12]

8.   Discuss the following:
     a) Socket System Calls for Connection Oriented Protocol.
     b) Semaphores.   [12]

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