

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****- - -**

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]

*** * * * ***