

Code No: NR-32-MCA

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MCA-III Semester Regular Examinations, February 2010
UNIX INTERNALS**

Time: 3hours

Max.Marks:60

**Answer any Five questions
All questions carry equal marks**

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- 1.a) Draw the flow chart for Interrupt handling.
- b) Explain about the lightweight processes.

- 2.a) Explain the important features of SVR3 model
- b) Explain the limitations of priority inheritance

- 3.a) What are the important goals in the design of mach IPC.
- b) Describe a situation in which a deadlock may be avoided by making the locking granularity finer.
- c) Compare the IPC functionality provided by pipes and message queues.

- 4.a) Explain about temporary file systems
- b) Explain the drawbacks of SVR4 implementation

- 5.a) Explain the components of network file system
- b) Draw and explain the memory allocators in the kernel

6. Describe in detail about virtual memory operations.

- 7.a) Explain about the classification of devices and drivers
- b) Describe the flow control between two queues

- 8.a) Explain the TLI functions for a connectionless protocol
- b) Differentiate between TPI and TLI.