Code No: D109115510

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.Tech I Semester Regular Examinations March/April 2010
ADVANCED OPERATING SYSTEMS
(EMBEDDED SYSTEMS)

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

Answer any five questions
All questions carry equal marks
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1.a) Explain how an instruction executed in a computer system.
  b) Explain the functionality of various user visible Registers

2. Explain the following filters:
     a)grep
     b)tail
     c)sort

3. a) Illustrate about file system calls in detail with syntax.
   b) Write an algorithm for reading a file and give syntax of read system call.

4.a) Differentiate File Locking versus Record Locking
   b) Compare Advisory Locking and Mandatory Locking.

5.a) What is a Distributed System? Explain its advantages and disadvantages.
   b) Illustrate the design issues in building a Distributed System.

6. Explain about Asynchronous Transfer Mode (ATM) Networks in detail.

7. How synchronization is achieved in a Distributed System? Explain different Clock Synchronization Mechanisms.

8.a) Explain how Dead Locks in distributed system differs from single processor
     system.
   b) Explain about Dead Lock Detection and Prevention in a Distributed System.

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