JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.TECH I SEMESTER EXAMINATIONS, APRIL/MAY-2012
OPERATING SYSTEMS
(COMPUTER SCIENCE & ENGINEERING)

Time: 3hours   Max.Marks:60

Answer any FIVE questions
All questions carry equal marks
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1. Distinguish the following OS types:
    a. Batch
    b. Time-shared
    c. Distributed
    d. Real-time

2. a) Write about Process Control Block and Process state diagram.
   b) Distinguish the CPU scheduling in general-purpose computers from Real-time
      Scheduling through examples.

3. a) Explain the logical memory concept of paging scheme.
   b) Illustrate the Page Replacement algorithm – LRU.

4. a) Explain the different disk-file allocation methods.
   b) Distinguish the various free-space management techniques.

5. a) Write about characterization of Deadlocks
   b) Briefly discuss the Deadlocks-handling approaches.

6. a) Explain the Critical Section Problem (CSP) through an illustration.
   b) Write any one software solution to CSP.

7. Explain the various design issues of Distributed Systems.

8. Write short notes on:
    a. Bully algorithm
    b. ATM networks

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