R09

Code No: C5510
JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.Tech I Semester Examinations March/April-2011
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 about Computer Instruction Cycle with Interrupt.
   b)   Explain various I/O Communication Techniques with examples.   [12]

2.   Explain the following filters:
        a) wc
        b) egrep
        c) fgrep
        d) tr & dd.   [12]

3. a)   Write an algorithm for creating a file.
   b)   How to create a new process in UNIX? Write an algorithm for fork ( ) system call.
                                                                          [12]

4.   Explain the following:
        a) Message queues
        b) Semaphores
        c) Shared memory.   [12]

5. a)   Explain about Multiprocessor Time sharing systems.
   b)   Describe about Network Operating System.   [12]

6.   Explain the working of Remote Procedure Call using a stack.   [12]

7.   What is Mutual Exclusion? Explain Token ring algorithm to achieve Mutual Exclusion.   [12]

8.   What is an Atomic Transaction? Explain various Concurrency Control mechanisms.   [12]

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