## Code No: C5510 R09 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 Max.Marks:60

## Answer any five questions All questions carry equal marks

1. a) b)	Explain about Computer Instruction Cycle with Interrupt. 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) b)	Write an algorithm for creating a file. How to create a new process in UNIX? Write an algorithm for fork ( ) call.	
4.	<ul><li>Explain the following:</li><li>a) Message queues</li><li>b) Semaphores</li><li>c) Shared memory.</li></ul>	[12] [12]
5. a) b)	Explain about Multiprocessor Time sharing systems. 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 Exclusion.	Mutual [12]
8.	What is an Atomic Transaction? Explain various Concurrency mechanisms.	Control [12]

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