

OR

Code No. OR-NRB5501

JAWAHARLAL NEHRU TECHNOLOGY UNIVERSITY, HYDERABAD
M .Tech. II Semester Supplementary Examinations, March – 2009
REAL TIME OPERATING SYSTEMS FOR EXBEDDED SYSTEMS
(Embedded Systems)

Time: 3 hours

Max. Marks.60

Answer any Five questions
All questions carry equal marks

1. Describe what are pipes and semaphores? Explain the mechanism of pipes with two-way communication and semaphores of unix with your own program?
2. Describe any four commonly used approaches to Real Time Scheduling.
- 3.a) What are resource parameters of jobs and parameters-explain?
b) Describe hard vs soft real time systems.
- 4.a) What are processor reserves and resource kernels?
b) What are all the capabilities of commercial real time operating systems?
5. Describe pre-emptive priority, and scheduling of Vx works?
- 6.a) Explain with your programs semaphore, Binary mutex of Vx works?
b) Describe watch dogs and I/O system of VX works?
7. Describe process management and synchronization of RT Linux.
8. Write short notes on the following:
 - a) Typical real time applications
 - b) Integrated Failure Handling
 - c) Fault Tolerance Techniques.
