R09

Code No: C3810, C7010

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.Tech I Semester Examinations March/April-2011
EMBEDDED REAL TIME OPERATING SYSTEMS
(COMMON TO DIGITAL ELECTRONICS & COMMUNICATION SYSTEMS, ELECTRONICS & COMMUNICATION)

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

Answer any five questions
All questions carry equal marks
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1. Write about fork, vfork, wait, waitpid. [12]

2. a) Write about precedence graph and task graph.
   b) Explain periodic task model. [12]

3. a) Explain priority – Driven scheduling approach for real –time systems with an example. [8]
   b) Write the distinctions function, ISR and task. [4]

4. a) Write about the Kernel services in an OS. [6]
   b) Explain I/o subsystem in atypical I/o system in an OS. [6]

5. a) Write about basic features of V_x works. [6]
   b) Write about system – level functions of MUCOS. [6]

6. Write the basic design principles when using an RTOS to design an embedded system. [12]

7. Write about the embedded system design process for a smart card in detail. [12]

8. a) What is Laxity type and Laxity Function? Explain. [6]
   b) What is preemptively of jobs and criticality of jobs? Explain [6]

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