Code : R7410505

R07

IV B.Tech I Semester (R07) Supplementary Examinations, May 2012
EMBEDDED SYSTEMS
(Common to Computer Science & Engineering, Information Technology and Computer Science & Systems Engineering)

Time: 3 hours   Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks
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1. Explain the embedded system design process with an example.

2. (a) Explain how external memory is interfaced to the 8051 microcontroller.
    (b) What is an interrupt? Explain.

3. (a) Discuss various programming tools and techniques.
    (b) Write an ALP to transfer the contents of memory location 2000H to 4000H.

4. (a) Write an ALP and explain the program to illustrate decimal arithmetic.
    (b) Explain in detail various conditional jumps with illustrative examples.

5. Give a note on the following:
    i. Displays.
    ii. Multiple interrupts.

6. (a) What is a task? Give the task state diagram and explain the transitions?
    (b) Discuss the role of message queues in solving the shared data problem.

7. (a) Explain various techniques for getting embedded software into the target system.
    (b) Discuss the techniques for performing testing on host machine.

8. Write short notes on:
    i. Instruction level parallelism.
    ii.Internet enabled systems.

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