

**Code No: C4005**

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD  
M.TECH I SEMESTER EXAMINATIONS APRIL/MAY-2012  
EMBEDDED SYSTEMS DESIGN  
(INFORMATION TECHNOLOGY)**

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

**Answer any five questions  
All questions carry equal marks**

- - -

1. Discuss the Hardware units of embedded system? How selection of hardware units for a particular application is done?
2. Describe briefly the architecture of 8051.
3. Explain about wireless system protocols, Watch dog timer and Windows CE.
4. With the help of a C++ program show how stack, queue and list data structures are implemented?
- 5.a) How real time scheduling of multiple tasks are carried out by RTOS?  
b) What are the basic functions expected from the kernel of RTOS?
- 6.a) Explain the techniques used to put embedded software into the target system?  
b) Explain about Hardware software Co-Design.
7. Explain the goals of a testing Process. With suitable technique explain in detail how an embedded system is tested?
- 8.a) How Logic analyzer is used as a debugging tool in embedded design process? Explain.  
b) Write a note on real world interfacing?

---oo0oo---