

**NR/R09**

**Code No: A4904, A5403, C4904, C5403, C6404, C0703, C4203, C5605**

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

**M.Tech I Semester Examinations, October/November-2011**

**MICROPROCESSORS AND MICROCONTROLLERS**

**(COMMON TO ELECTRICAL POWER ENGINEERING, POWER ELECTRONICS AND ELECTRIC DRIVES, POWER ENGINEERING AND ENERGY SYSTEMS, ELECTRICAL POWER SYSTEMS, POWER AND INDUSTRIAL DRIVES, POWER SYSTEMS(HIGH VOLTAGE))**

**Time: 3hours**

**Max. Marks: 60**

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

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1. Explain architecture of 8086 microprocessor. [12]
2. Explain in detail bus timing min and max modes of 8086 micro computing system. [12]
3. Explain 80386 programming model and memory paging. [12]
4. Explain interfacing of ADC with microprocessors. [12]
5. What is special purpose of programmable peripheral devices; explain their interfacing of programmable interval timer. [12]
6. a) Difference between microprocessor and microcontroller.  
b) Discuss in detail 8051 architecture. [12]
7. Explain port structure and operation of 8051 and interrupt priorities in 8051. [12]
8. Explain PPI modes of 8255. [12]

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