

**Code No: A7504/C7503**

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

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

**ADVANCED MICROPROCESSORS**

**(CONTROL SYSTEMS)**

**Time: 3hours**

**Max. Marks: 60**

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

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- 1.a) Draw the architecture of 8086 microprocessor and explain briefly about each unit.
- b) List the assembler directives of 8086 and explain them [12]
- 2.a) Explain the instruction format of data transfer instruction of 8086 "MOV AX, [BX].
- b) Draw the timing diagram of write operation of 8086 in minimum mode. [12]
- 3.a) Write an assembly language Program for 8086 to word disassemble. e.g.: If AX has 4835H store 05H, 03H, 08H and 04H in 4 successive memory locations in Extra segment.
- b) Write an assembly language program for 8086 to insert a substring into a solid string at an appropriate position. [12]
- 4.a) Draw the block diagram of co- processor of 8086. [12]
- b) What is meant by paging technique? How does it improve the memory management in a system?
- 5.a) Explain the architectural features of 80386. [12]
- b) How is memory management carried in Pentium processor while two level Cache is used in the system?
- 6.a) Briefly compare RISC processor with CISC processor.
- b) Give a detail note on features of Power PC family [12]
7. Explain the Timer/ Counter operation in different modes of 8051. [12]
8. Write a brief note on
  - a) Advancements of 486 processor over 80386. [12]
  - b) I/O processor 8089 architecture.

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