Code :R7310504 **R7**

**III B.Tech I Semester(R07) Supplementary Examinations, May 2011**
**MICROPROCESSORS & INTERFACING**
**(Common to Computer Science & Engineering, Information Technology, Electronics & Computer Engineering)**

**Time: 3 hours** **Max Marks: 80**

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

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1. (a) Describe in detail about the register organization of 8086 microprocessor.
   (b) What is multiplexing? Explain briefly about multiplexing and demultiplexing in 8085.
2. (a) Write an ALP in 8086 to find the largest of a set of 8 bit numbers.
   (b) Write an ALP in 8086 to subtract two 8 bit hexadecimal numbers.
3. (a) With a neat block diagram, explain the working of 8257 DMA controller.
   (b) Explain briefly about memory interfacing with 8086 microprocessor.
4. (a) Explain about the three I/O ports of 8255 and also describe briefly the three modes of operation of 8255.
   (b) With a neat diagram explain how a key board is interfaced using 8255.
5. (a) Explain the priority of 8086 interrupts.
   (b) With a neat sketch explain the pin diagram of 8259A.
6. (a) Explain in brief about Asynchronous serial data communication.
   (b) Draw and explain the mode word format of 8251A.
7. (a) Explain the real address mode of 80386.
   (b) Define the terms interrupt, exception, fault and trap.
8. (a) Discuss briefly about serial data transmission modes of 8051.
   (b) Write short notes on General-purpose registers of 8051.

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