Code No: NR410310 **NR**

IV B.Tech I Semester Supplementary Examinations, April/May 2005
MICROPROCESSORS & APPLICATIONS
(Mechanical Engineering)

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

Answer any FIVE Questions
All Questions carry equal marks

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1. (a) With a neat block diagram explain the architecture of 8086 processor.
   (b) List 8085 registers and describe its functions.
2. Explain in detail about the assembler instruction formats.
3. (a) Explain about the linking and relocation of assembler.
   (b) Describe in detail about the macros.
4. (a) Differentiate between the programmed I/O and interrupt I/O.
   (b) Describe in detail about the repeated string instructions.
5. (a) Describe the transducers and actuators.
   (b) Explain the keyboard interfacing to 8086 microprocessor.
6. (a) Explain with examples of various addressing modes of 8086 instruction set with suitable instruction format.
   (b) Draw and explain the timing diagram of memory. Write operation of 8086 processor.
7. (a) Interface 8255 with 8086 so as to have port A address 00, port B address 02, port C address 01 and CWR address 03.
   (b) Develop an 8086 assembly language program to find the GCD of two 16 bit unsigned integers.
8. (a) Define an interrupt? How many interrupts does the microprocessor have? Explain them.
   (b) Write a program to find the sum of the numbers from 1 to 100.

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