Code :R5320202

R5

III B.Tech II Semester(R05) Supplementary Examinations, April/May 2011
MICROPROCESSORS & MICROCONTROLLERS
(Electrical & Electronics Engineering)

Time: 3 hours   Max Marks: 80

Answer any FIVE questions
All questions carry equal marks
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1. (a) Discuss about the interface signals of the 8086 processor in maximum mode.
   (b) Draw the block diagram of 8288 bus controller and explain it.

2. (a) Write short notes on Assembler.
   (b) Write an assembly language program to arrange a list of numbers in ascending order (with out using the assembler).

3. Explain different modes of operation of 8255 PPI in detail.

4. (a) Bring out the differences between static and dynamic RAM
   (b) Explain the principle and operation of EEPROM.

5. (a) Write an 8086 instruction sequence for transmitting 50 characters which are stored from the location 2010H using 8251.
   (b) Write an 8086 instruction sequence for receiving 50 characters using 8251 and store them in memory at location 2080H.

6. (a) Draw the pin diagram of 8051 and define the pins of port 3.
   (b) Draw and discuss the PSW of 8051.

7. (a) Write 8051 program as an example of interrupt call to a routine, timer 0 is used in mode 0 to overflow and set the timer 0 interrupt flag. When the interrupt is generated, the program vectors to the interrupt routine, resets the timer 0 interrupt flag, stops the timer, and returns.
   (b) Discuss the bit format of IP register of 8051.

8. (a) What is debouncing? Draw and explain the hardware circuit for key debouncing.
   (b) Interface Hex keyboard to 8051 and explain how a key closuse is detected and encoded.

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