Code: R7320406

R07

B.Tech III Year II Semester (R07) Supplementary Examinations December/January 2015/2016
MICROPROCESSORS & INTERFACING
(Common to ECE and EIE)
(For 2008 regular admitted batch only)

Time: 3 hours   Max Marks: 80

Answer any FIVE questions
All questions carry equal marks
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1   With neat sketch explain the basic architecture of 8086 microprocessor.

2   (a) Explain the following instructions of 8086 with suitable examples:
          (i) Branch instructions.
          (ii) Call instructions.
    (b) Write an assembly language program to move a string of data words from offset 2000H to offset 3000H. The length of the string is 0FH.

3   With the necessary timing diagrams, explain the minimum mode operation of 8086.

4   Interface an 8255 with 8086 at 80H as an I/O address of port A. Interface five 7-segment displays with the 8255. Write a sequence of instructions to display 1, 2, 3, 4 and 5 over the five displays continuously as per their positions starting with '1' at the least significant position.

5   (a) Draw and discuss interrupt structure of 8086 in detail.
    (b) What is interrupt vector table of 8086? Explain its structure.

6   (a) With neat diagram, explain the internal architecture of 8251 USART.
    (b) What is meant by asynchronous data transfer? Explain about asynchronous data transfer schemes.

7   (a) What are the salient features of 80386? Discuss.
    (b) What is meant by protected mode of 80386? Explain.

8   Explain in detail about memory and I/O interfacing of 8051.

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