Code: R7310504

R07

B.Tech III Year I Semester (R07) Supplementary Examinations December 2015

MICROPROCESSORS & INTERFACING

(Common to CSE, IT and ECC)
(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 (a) Draw the architectural diagram of 8085 and explain the function of each block in detail.
   (b) Discuss about multiplexing in 8086 & 8085 microprocessors.

2 (a) Write an ALP to exchange two blocks of 8 bit numbers.
   (b) Write an ALP in 8086 to multiply two 8 bit numbers.

3 (a) Draw the timing diagram of READ cycle and explain about the waveforms.
   (b) Interface 128K x 8 EPROM and 128K x 8 RAM to 8086 microprocessor using 74138 Decoder.

4 (a) Discuss about the three modes of operation of 8255 with relevant configuration diagrams.
   (b) Briefly mention a few important features of 8255.

5 (a) Explain the Interrupt cycle of 8086.
   (b) What is the difference between hardware interrupt and software interrupt?

6 (a) Explain in brief about Asynchronous serial data communication.
   (b) Explain about TTL to RS 232C and RS 232C to TTL conversion.

7 (a) Discuss the different descriptor types supported by 80386.
   (b) Briefly explain the Superscalar Execution in Pentium.

8 (a) Discuss the following pin descriptions of 8051:

       (i) RXD.   (ii) $\overline{INT_0}$ and $\overline{INT_1}$ (iii) $\overline{WR}$.

   (b) Draw and discuss the format and bit definition of TCON register of 8051.

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