Code No: **R31055**

R10

Set No. 1

III B.Tech I Semester Supplementary Examinations, November - 2015
MICRO PROCESSORS AND MULTICORE SYSTEMS
(Computer Science and Engineering)

Time: 3 hours   **Max. Marks: 75**

Answer any FIVE Questions
All Questions carry equal marks
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1 a) Draw the schematic diagram of 8086 in maximum mode with all necessary support [10]
       components and explain the function of each support component.
   b) What is bus cycle? Draw memory write bus cycle in maximum mode operation.   [5]

2 a) List out and explain conditional jump instructions of 8086 with example.   [8]
   b) Write an ALP to multiply two 16bit number by using 8-bit registers.   [7]

3 a) What is macro? What are the differences between macro and subroutine?   [7]
   b) Write an ALP in 8086 to find the largest number from an array of 8 bit numbers? [8]

4 a) Write an ALP to convert a 3- digit BCD number to binary number.   [5]
   b) What are assembler directives? Explain the significance of the assembler directives with [10]
       suitable examples.

5 a) What is interrupt vector table? Draw and explain interrupt vector table for 8086. [8]
   b) Write the differences between hardware and software interrupts of 8086 processor. [7]

6 a) List and explain all ASCII related instructions in 8086 with examples.   [7]
   b) Write an ALP to transfer 10 words of data using REP MOV SW instruction from source [8]
       location to destination location. What is the role of SI, DI registers and DF bit?

7   With a neat diagram, explain the internal architecture of 80286 microprocessor. [15]

8 a) List the salient features of Pentium processor.   [7]
   b) Bring out the architectural differences between 80486 and Pentium processors.   [8]

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