Code No: **R31055**

R10

Set No. 1

III B.Tech I Semester Supplementary Examinations, October/November - 2018
MICROPROCESSORS 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) What is a microprocessor? What are different types of microprocessors? Also   [8M]
       explain the evolution of microprocessors.
   b) Briefly discuss about the execution of a three instruction program.   [7M]

2   With the help of suitable examples, explain the implementation of if-then, if-then- [15M]
       else and multiple if-then-else programs in assembly language.

3 a) Define macro? Explain how macro is different from procedure?   [7M]
   b) Explain the functions of the following instructions of 8086 with examples.   [8M]
       i) MOVSW   ii) CMPS   iii) LODS   iv) REP

4 a) Explain the functions of DB, DT, ENDP, EQU, LENGTH assembler directive.   [7M]
   b) What is MASM? Explain.   [8M]

5 a) List and explain the different interrupts of 8086 microprocessor.   [7M]
   b) Explain interrupt structure of 8086 microprocessor.   [8M]

6 a) Write an assembly language program in 8086 to convert a four digit octal number [8M]
       to decimal number.
   b) Write a program to move a string of data words from offset 2000H to offset   [7M]
       3000H. The length of the string is 10H.

7 a) Explain the internal architecture of 80286 with suitable diagram.   [8M]
   b) List out the salient features of the 80286 microprocessor?   [7M]

8 a) Explain the salient features of Pentium processor. Also explain the memory   [7M]
       system of the Pentium processor.
   b) Differentiate between Dual core and Core Duo processors.   [8M]

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