23257

M.Tech (Electrical Engg) Specialization: Electrical Power System Ist Semester Examination– January, 2013

Micro Processor and Micro Controller

Paper MTEPS-101

Time : 3 hours   *Max. Marks : 100*

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard will be entertained after the examination.

Note : Attempt any **five** questions. All questions carry equal marks.

1. (a) Draw and explain architectural block diagram of 8086 µP.   14

(b) Discuss in brief the physical memory
organization of 8086 µP.   6

2. Explain the following instructions of 8086
micro processor with suitable examples.

                                        2.5 × 8

(i) STOSB

(ii) XALT

(iii) NEG

(iv) IDIV

(v) AAA

(vi) JGE

(vii) PUSH

(viii) LOOP

3. (a) Write an Assembly language programme

using 8086 to display a string : 14

    (i) Using Macro

    (ii) Without Macro

(b) Explain the following directives with

suitable examples : 3 × 2

    (i) LENGTH

    (ii) SIZE

    (iii) DB

4. (a) Draw and discuss interrupt cycle of

8086. 10

(b) Write an Assembly Language programme

using 8086 to transfer a block of data

from one portion of memory to another
portion of memory.   10

5. Write in detail about 8254.   20

6. Write in detail about 8279.   20

7. (a) Draw and explain pin diagram of 8051.

                                                       14

   (b) Discuss in brief the addressing modes of
       8051.   6

8. Write short notes on any **two** :   10,10

   (a) ICW_0, and OCWs of 8259

   (b) Pin diagram of 8086

   (c) 8255 modes of operation

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