

Roll No.

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 μ P. 14

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(1)

[Turn Over

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

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

2.5 x 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) ICW₀, and OCWs of 8259

(b) Pin diagram of 8086

(c) 8255 modes of operation