

Roll No. ....

**23257**

**M.Tech. 1st Semester (Electrical  
Power Systems) Examination-  
December, 2016**

**MICRO PROCESSOR & MICRO CONTROLLER**

**Paper : MTEPS-101**

**Time : 3 hours**

**Max. Marks : 100**

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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.

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**Note:** Students have to attempt **five** questions out of **eight** questions. All questions carry equal marks.

1. Discuss the architecture of 8086  $\mu$ P and discuss the PIN configuration. (20)

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(1)

[ Turn Over

2. Explain the stack operation and string instruction of 8086 by taking a suitable examples of each. (20)

3. Explain the minimum mode and maximum mode of 8086. (20)

4. Write short notes on : (20)

(i) I/O address space and data transfer

(ii) I110 Bus Cycles

5. Explain the DOS and BIOS Interrupts in detail by taking examples of each. (20)

6. Explain the following : (20)

(i) Interfacing of Stepper Motor

(ii) 8255 Modes of Operation

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7. Design a five minute clock timer using 8254 and interrupt technique. Display minutes and seconds. (20)

8. What do you mean by Micro Controller. Discuss its architecture and PIN diagram in detail. (20)

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