

Code No: **R32044**

**R10**

**Set No. 1**

**III B.Tech II Semester Supplementary Examinations, Dec - 2015**

**MICRO PROCESSORS AND MICRO CONTROLLERS**

**(Common to ECE, ECM, BMI, EIE)**

**Time: 3 hours**

**Max. Marks: 75**

**Answer any FIVE Questions  
All Questions carry equal marks**

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- 1 a) Explain the physical address formation in different addressing modes. [8]  
b) What is an instruction? Explain various instruction formats with examples. [7]
- 2 a) What do you mean by a Macro? What are the differences between a Macro and a subroutine? [5]  
b) Explain various logic instructions of 8086. [10]
- 3 a) Explain the different control word formats of 8255 PPI. [8]  
b) Explain the analog to digital converter. [7]
- 4 a) Explain the need of DMA data transfer. [5]  
b) Explain architecture of 8279 with neat block diagram. [10]
- 5 a) Discuss Salient features of 0386DX. [8]  
b) Explain real and protected mode 80386. [7]
- 6 a) Explain the stack operation in 8051 microcontroller. [7]  
b) Discuss addressing modes and instructions of MCS51. [8]
- 7 a) Write overview and features of PIC16CX/7X. [7]  
b) Discuss Data EEPROM and Flash EEPROM. [8]
- 8 a) Discuss ARM Thumb instruction set. [7]  
b) Explain ARM architecture and organization. [8]

