

Code: 9A04602

B.Tech III Year II Semester (R09) Supplementary Examinations December/January 2014/2015

**MICROPROCESSORS & MICROCONTROLLERS**

(Common to EEE, ECE, CSE, EIE and E.Con.E)

Time: 3 hours

Max Marks: 70

Answer any FIVE questions

All questions carry equal marks

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- 1 (a) Explain memory addressing modes of 8086. Give an example for each addressing mode.  
(b) What is the purpose of Trap flag? Discuss how debugging feature is provided with the help of Trap flag in 8086.
- 2 Write an ALP in 8086 to find the largest and smallest of a set of 8-bit numbers.
- 3 (a) Explain need and importance of DMA.  
(b) Discuss about static RAM and EPROM with reference to 8086.
- 4 (a) What are the different modes of 8255?  
(b) Explain the 8255 interfacing to 8086 in mode 0.
- 5 (a) Explain about USB with necessary example and analysis.  
(b) Give the voltage levels of RS232. Give two features of RS232.
- 6 With a neat diagram explain the working principle of 8253.
- 7 (a) Write a program to load accumulator, DPH and DPL using 8051.  
(b) What is subroutine or procedure?
- 8 (a) Explain the addressing modes of MCS-96.  
(b) Clearly explain the Instruction set of MCS-96.

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