

Code: R7320202**R07**

B.Tech III Year II Semester (R07) Supplementary Examinations December/January 2015/2016

MICROPROCESSORS & MICROCONTROLLERS

(Common to EEE and E.Con.E)

(For 2008 regular admitted batch only)

Time: 3 hours

Max Marks: 80

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Draw the pin diagram of 8086 in the maximum mode of operation and explain briefly about the function of each pin.
(b) Explain how control signals of 8086 are used for interfacing.
- 2 (a) Write an ALP in 8086 to add five 16-bit numbers and result is 24 bit.
(b) Explain why assembler directives are required? Give examples.
- 3 (a) Draw the internal architecture of 8255 and explain about each block.
(b) Discuss about mode 0 operation of 8255 with relevant configuration diagrams.
- 4 (a) Interface 2K x 8 EPROM and 2K x 8 RAM to 8086 microprocessor using 74138 decoder.
(b) Explain how I/O devices are interfaced with 8086 microprocessor.
- 5 (a) Explain the RS-232C to TTL Interfacing.
(b) Discuss in brief about Troubleshooting.
- 6 (a) Discuss briefly about program memory and data memory of 8051.
(b) Explain the differences between microprocessor and microcontroller.
- 7 (a) Discuss briefly about Timer modes of operation of 8051.
(b) Enlist the salient features of 8051.
- 8 (a) What is key bounce? Explain different key debounce techniques.
(b) Discuss on selecting an Analog-to-digital converter.
