R09

Code: 9A04602

B.Tech III Year I Semester (R09) Supplementary Examinations December 2015

MICROPROCESSORS & MICROCONTROLLERS
(Common to CSS, ECC and IT)

Time: 3 hours   Max Marks: 70

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

1 (a) Elucidate Instruction set of 8086.
   (b) Write short notes on general purpose registers of 8086.

2   Write an ALP in 8086 to arrange a set of 16 bit numbers into ascending order.

3   Draw the block diagram of 8257 DMA controller and explain its operations.

4 (a) Explain keyboard and display interface method.
   (b) Explain A/D converter interface to 8086 microprocessor.

5 (a) Explain RS-232C to TTL interfacing.
   (b) Give a sample program for serial data transfer.

6 (a) Explain briefly the interfacing of 8253 with 8086 with an example.
   (b) Discuss about priorities of interrupt lines of 8259.

7   Draw the schematic for interfacing a stepper motor with 8051 microcontroller and write 8051 ALP for changing speed and direction of motor.

8 (a) Discuss about interfacing concept in ARM.
   (b) Explain the instructions of ARM microcontroller with simple examples.

*****