

Code: 9A04602

B.Tech III Year I Semester (R09) Supplementary Examinations June 2017

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) With examples, explain the programming model of 8086.
(b) What is the necessity of relocation? Explain the support provided by 8086 for relocation capability.
- 2 (a) Write an ALP in 8086 to arrange a set of 16 bit numbers into ascending order.
(b) Write a ALP in 8086 to subtract two 8 bit decimal numbers.
- 3 (a) Explain the static RAM and EPROM interfacing to 8086 Microprocessor.
(b) Explain the concept of Direct Memory Access (DMA).
- 4 Draw the cascading diagram of two 8259s and explain its functioning.
- 5 (a) Explain block diagram IC 8251? Explain the logic of 8251 program.
(b) What is RS232? Give the voltage levels of RS232. Give two features of RS232.
- 6 (a) With a neat diagram, explain the working principle of 8253.
(b) Bring out the features of 8259.
- 7 (a) How does 8051 differentiate between external and internal program memory?
(b) Explain how serial data communication is done with 8051 ports.
- 8 Discuss about pin diagram and architecture of MCS-96 microcontrollers.
