Hall Ticket Number : | | | | | | | | | |

III B.Tech. I Semester Supplementary Examinations June 2022

Microprocessors and Interfacing

(Computer Science and Engineering)

Max. Marks: 70   Time: 3 Hours

Answer *any five full questions* by choosing one question from each unit (5x14 = 70 Marks)

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UNIT–I

1. a) Define addressing mode? Explain the addressing modes of 8086 with suitable examples.

   b) Explain at least 7 assembler directives of 8086 with suitable example.

OR

2. Illustrate the pin configuration of 8086.

UNIT–II

3. Explain the architecture of 8255 and also different modes of operation.

OR

4. a) Construct an interface of two 4K X 8 EPROMS and two 4K X 8 RAM chips with 8086. Select suitable memory map.

   b) Design an interface between 8086 CPU and two chips of 16K X 8 EPROM and two chips of 32K X 8 RAM. Select the starting of EPROM suitable. The RAM address must start at 00000H.

UNIT–III

5. Sketch and explain how to Interface 8257 with 8086

OR

6. a) List the differences between Programmed I/O and Interrupt driven I/O.

   b) Discuss the Interrupt structure of 8086 microprocessor.

UNIT–IV

7. Summarize each pin function of RS232

OR

8. Explain different modes of operation of 8253/54.

UNIT–V

9. What do you mean by paging? What are its advantage and disadvantage?

OR

10. Explain real and protected mode of 80386

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