H   Roll No. ....

TCS–403

B. TECH. (FOURTH SEMESTER)
MID SEMESTER
EXAMINATION, April/May, 2022
MICROPROCESSOR

Time : 1½ Hours

Maximum Marks : 50

Note : (i) Answer all the questions by choosing any *one* of the sub-questions.

(ii) Each question carries 10 marks.

1. (a) What do you mean by the microprocessor ? Discuss the classification and evolution of microprocessor.

10 Marks (CO1)

OR

(b) Draw and discuss the internal architecture of 8085.   *10 Marks (CO1)*

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2. (a) Draw the flag register of 8085 and discuss all flags with suitable examples.

   10 Marks (CO1)

   OR

   (b) What do you mean by the multiplexed address/data bus of 8085 ? Explain its demultiplexing with the help of a neat block diagram.   10 Marks (CO1)

3. (a) Draw a neat pin diagram of 8085. Explain the function of HOLD and HLDA pins.

   10 Marks (CO1)

   OR

   (b) Design an interfacing circuit to connect a 2 KB RAM with 8085 such that the starting address is 4000H. What will be the last address of this RAM ?

   10 Marks (CO1)

4. (a) What do you mean by an addressing mode ? Discuss all addressing modes of 8085.   10 Marks (CO2)

OR

(b) Write a 8085 assembly language programme to transfer a block of 16 bytes stored in contiguous memory locations at a starting address 2050H to a new memory locations starting at address 2060H.

10 Marks (CO2)

5. (a) Discuss 8085 interrupts in detail.

10 Marks (CO2)

OR

(b) Explain the following 8085 instructions with suitable examples : 10 Marks (CO2)

(i) STA

(ii) LXI

(iii) DAD

(iv) RAL

1470