

H

Roll No.

TBC-402

B. C. A. (FOURTH SEMESTER)

MID SEMESTER

EXAMINATION, April, 2023

MICROPROCESSORS

Time : 1½ Hours

Maximum Marks : 50

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

(ii) Each sub-question carries 10 marks.

1. (a) Discuss the classification and evolution of Intel microprocessors. (CO1)

OR

- (b) Explain the functions of the following pins of 8085 : (CO1)

(i) READY

(ii) HLDA

P. T. O.

(iii) INTR

(iv) TRAP

(v) ALE

2. (a) Explain the following registers of microprocessor 8085 : (CO2)

(i) General purpose registers

(ii) Stack pointer and program counter.

OR

- (b) Explain briefly about bus structure of 8085 with diagram of external system bus architecture. (CO1)

3. (a) Calculate the execution time required for instruction MVI A, 32H in microprocessor 8085. (CO2)

OR

- (b) State and explain the timing diagram of instruction STA 3200H. (CO2)

(3)

4. (a) Draw and explain the Internal Architecture of 8085 microprocessor with neat diagram.

(CO1)

OR

- (b) Explain the flag register of microprocessor 8085.

(CO1)

5. (a) Calculate the address range of RAM size 16 kbyte interfaced with microprocessor 8085.

(CO2)

- (b) Draw and explain how addresses are calculated in I/O interfacing.

(CO2)