

2003000204020092
EXAMINATION OCTOBER 2024 (ATKT EXAM)
BACHELOR OF SCIENCE (FOURTH SEMESTER)
ELECTRONICS-IV (MICROPROCESSORS)

[Time: As Per Schedule]

[Max. Marks: 50]

Instructions:

1. Fill up strictly the following details on your answer book
 - a. Name of the Examination: **BACHELOR OF SCIENCE (FOURTH SEMESTER)**
 - b. Name of the Subject: **ELECTRONICS-IV (MICROPROCESSORS)**
 - c. Subject Code No: **2003000204020092**
2. Sketch neat and labelled diagram wherever necessary.
3. Figures to the right indicate full marks of the question.
4. All questions are compulsory.
- 5) Assume data, if required.
- 6) Symbols and abbreviations have their usual meanings.

Seat No:

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Student's Signature

Q.1 Answer in brief.

8

- A) What is a bus? What is the width of Address bus and Data bus in 8085A microprocessor?
- B) What is a stack top? State the difference between Stack and Stack pointer.
- C) What do you understand by maskable and non-maskable interrupt?
- D) State all interrupt available in 8085A microprocessor. List them in order of their priority.

Q.2 A) Explain various instructions of Logical group of instructions set of 8085 μ P. **7**

B) Explain, in detail, flag register of 8085A microprocessor. **7**

OR

A) Explain various programming modes of 8255. **7**

B) Write a program to add five numbers stored in consecutive memory location starting from memory location 2000H and assume that the result will be 8-bit. Store result at memory location 2100H. **7**

- Q.3** A) Explain the architecture of 8085A microprocessor. 7
B) Explain, with suitable example, the importance of stack in case of a interrupt. 7

OR

- A) Explain various programming modes of 8253. 7
B) Write a program to find largest number from three numbers stored in consecutive memory location starting from memory location 2000H and Store result at memory location 2100H. 7

- Q.4** A) Explain in detail, the function of HOLD and HLDC pin of 8085A with reference to other master like direct memory access controller. 7
B) Explain the register structure of 8085A microprocessor. 7

OR

- A) Explain, with suitable example, various instructions of Data transfer group of instruction set of 8085A microprocessor. 7
B) Write a program to [Assume Data format ($D_8D_7D_6D_5D_4D_3D_2D_1$)] 7
(1) mask-off 1st, 3rd, 5th, 7th bit of 8-bit data and
(2) mask-off 2nd, 4th, 6th, 8th bit of 8-bit data.
