

**Roll No.**

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**Total No. of Pages : 02**

**Total No. of Questions : 09**

**B.Voc. (E&IT) (Sem.-4)**

# INTRODUCTION TO MICROPROCESSOR

**Subject Code : BVET-402-20**

**M.Code : 91664**

**Date of Examination : 15-12-22**

**Time : 3 Hrs.**

**Max. Marks : 60**

### INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

## SECTION-A

**1. Write briefly :**

- Write advantage of the assembly language in comparison with high level language.
- List the various registers available in 8086.
- Specify the condition to start the counter.
- Give the four categories of 8085 instructions that manipulate the data.
- What do you mean by instruction format?
- What is memory mapping?
- Explain function of IO/M signal.
- What is the function of GATE input to 8253?
- List the interrupts of 8085.
- Write the principle used in interfacing a matrix keyboard seven segment LED display.

## SECTION-B

2. Discuss PSW in detail for 8085  $\mu$ p.
3. Write an assembly language program to arrange N numbers in ascending order.
4. Draw and explain the functional block diagram of 8086 microprocessor.
5. Draw the block diagram of DMA controller. Explain its control word.
6. Show and explain the interfacing of seven segment display with 8085 microprocessor.

## SECTION-C

7. Discuss the functioning of pins IO/M, SOD, INTA, TRAP and HOLD for 8085. How does bus contention avoided in 8085 based system?
8. Explain the memory organization in Intel-8086. What are the addressing modes available in this device?
9. (a) Differentiate between Software and Hardware interrupts.  
(b) What are various arithmetic and branch instructions? Discuss the working of each arithmetic instruction and branch instruction by taking suitable examples.

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**