

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

**B.Tech. (Civil Engineering) / (Computer Science & Engineering) /  
(Mechanical Engineering) (Sem.-6)**

**MICROPROCESSOR IN AUTOMATION**

**Subject Code : BTME611-18**

**M.Code : 79656**

**Date of Examination : 12-07-22**

**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 :**

- a) Draw symbol for OR Gate.
- b) What do you mean by Demux Circuit?
- c) What we shift registers?
- d) What is the use of BUS systems?
- e) Describe instruction timing diagrams.
- f) Define ALP.
- g) What do you mean by programmable interrupt controller?
- h) Write advantages of digital interface.
- i) What is the need for number system is microprocessor?
- j) Define memory interfacing.

## SECTION-B

2. Describe the interrupts of 8085 and its types.
3. Explain the addressing modes of 8085 microprocessor with examples.
4. What are the commonly used alpha-numeric codes in a computer? Why are such codes needed?
5. Draw a schematic internal block diagram of 8085 and label its parts clearly.
6. Write an ALP for 8085 to find out the largest among 25 members (16 bit integers) stored in memory.

## SECTION-C

7. Explain how virtual address is translated into physical address with a neat diagram.
8. Discuss the functions of segment register of 8085 with examples. Given some advantages of memory segmentation.
9. With the help of neat block diagram, explain the 8255 programmable peripheral interface and its operating modes.

**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.**