

CT Inst. of

Roll No. 

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (EE/EEE) (Sem.-5th)

**MICROPROCESSORS AND INTERFACING**

Subject Code : EE- 307

Paper ID : [A0416]

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTION 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 has to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students has to attempt any TWO questions.

**SECTION-A****1. Answer briefly :**

- a) What is the word length of a microprocessor?
- b) What is the function of PUSH instruction in 8085?
- c) What is the use of 8086 instruction XCHG?
- d) Write 8086 assembly instruction which will perform the operations copy BP register contents to SP register and divide the AL register contents by 2 by using a shift instruction.
- e) What is the function of BIU of 8086 microprocessor?
- f) State advantages of queue of 8086 microprocessor.
- g) List the index registers of 8086 microprocessor.
- h) State function of AAA instruction of the 8086 microprocessor.
- i) State function of linker.
- j) List two features of 8086 microprocessor.

**SECTION-B**

2. Explain the architecture of microprocessor 8085.
3. How is pipelining implemented in 8086?
4. What is an assembler directive? Explain the following with example :
  - a) PUBLIC
  - b) PROC
  - c) MACRO
  - d) DB
5. What are the various specifications of A/D converter?
6. What are the various modes of 8259A?

**SECTION-C**

7. Discuss the different types of 8086 instructions with examples.
8. Briefly explain the structure of 8086 interrupt request vector table with a neat diagram.
9. Explain with the internal block diagram of 8255, the modes and the control word formats.

