

Roll No.

24230

**B. Tech. 5th Semester (CS & IT)
Examination – December, 2022
MICROPROCESSING AND INTERFACING**

Paper : EE-309-F

Time : Three Hours]

[Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt *five* questions in all, selecting *one* question from each Section. Question No. 1 is *compulsory*. All questions carry equal marks.

1. (a) What is the purpose of Push and POP instructions in 8085 microprocessor ?
 - (b) Explain PSW of 8085.
 - (c) Write difference between CISC and RISC.
 - (d) Explain NOP and HLT instructions in 8086.
 - (e) Differentiate between MOV and MVI with suitable example.

24230-6-5a -(P-3)(Q-9)(22)

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SECTION – A

2. (a) Draw and explain architecture of 8085 microprocessor.
- (b) Explain different addressing modes of 8085 in detail with example.
3. (a) Write about the different data transfer techniques used in Microprocessor.
- (b) Explain 1 byte, 2 byte and 3 byte instruction with suitable example.

SECTION – B

4. (a) Discuss architecture of 8086 microprocessor.
- (b) Explain instruction formats of 8086 microprocessor.
5. (a) Discuss Memory segmentation of 8086 microprocessor.
- (b) Explain block diagram of 8086.

SECTION – C

6. (a) Explain Flag manipulation instructions in 8086.
- (b) Explain derivatives and operators.

24230- (P-3)(Q-9)(22) (2)

7. Explain the following :

- (a) Data transfer instructions
- (b) Arithmetic instructions

SECTION – D

8. Explain DMA controller with neat block diagram.
9. Write technical notes on :
 - (a) 8259A programmable interrupt controller
 - (b) 8255 Programmable peripheral interface

24230- (P-3)(Q-9)(22) (3)