# [Total No. of Questions - 9] [Total No. of Printed Pages - 2] Dec-22-0160

## EC-402 (Microprocessors & Peripherals)

(ECE, CSE, IT)

#### B.Tech-4th (CBCS)

Time: 3 Hours

Max. Marks: 60

The candidates shall limit their answers precisely within the answerbook (40 pages) issued to them and no supplementary/continuation sheet will be issued.

**Note:** Attempt Five questions in all, selecting one question from each Section A, B, C and D. Section E is compulsory.

#### **SECTION-A (Attempt any One)**

- 1. Discuss the 8085 Microprocessor Architecture and its pin configuration. (10)
- 2. Discuss the Data transfer and arithmetic instructions of 8085 Microprocessor. (10)

#### SECTION-B (Attempt any One)

- 3. Write note on: (10)
  - a) Interrupt system of 8085
  - b) Stack and Subroutine
  - c) Memory map and Address range
- 4. Discuss the Memory Interfacing decoding techniques in detail. (10)

#### SECTION-C (Attempt any One)

- 5. Differentiate between I/O Mapped and Memory Mapped I/O. Give Example. (10)
- 6. Discuss the 8257 DMA Controller in detail. (10)

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#### SECTION-D (Attempt any One)

- 7. Discuss the main features and architecture of 8086 Microprocessor. (10)
- 8. Discuss the Memory Segmentation and Memory Addressing of 8086 Microprocessor. (10)

### **SECTION-** E (Compulsory Section)

9. Attempt all Questions.

 $(10 \times 2 = 20)$ 

- a) What are Addressing Modes?
- b) What is the Instruction word size of 8085 Microprocessor?
- c) What do you mean by timing diagram?
- d) What are the Branch instructions of 8085?
- e) Write an Assembly language program for addition of 2 numbers.
- f) Write short note on Asynchronous serial data communication using SOD and SID.
- g) Write short note on 8086 bus interface unit.
- h) What are the types of memory in 8085 Microprocessor?
- Define the term I/O Interfacing.
- j) Write short note on 8087 floating point coprocessor.