

July-22-00262

B. Tech. EXAMINATION, 2022

Semester IV (CBCS)

MICROPROCESSOR AND PERIPHERALS

EC-402

Time : 3 Hours

Maximum Marks : 60

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

Note : Attempt *Five* questions in all, selecting *one* question from each Sections A, B, C and D. Q. No. 9 is compulsory.

Section A

1. What are Addressing modes ? Discuss in 8085 Instruction word size and Opcode format. 10
2. Discuss the Branch and Machine control instruction of 8085 in detail. 10

Section B

3. Explain the concept of Stack and Subroutine with the help of suitable example. **10**
4. Discuss the absolute and parallel Memory interfacing decoding techniques. **10**

Section C

5. Discuss the basics of I/O interfacing using mapping techniques. **10**
6. Explain the concept of Serial I/O and Asynchronous serial data communication using SID. **10**

Section D

7. Discuss the Execution unit and bus interface unit of 8086 Microprocessor. **10**
8. Write notes on the following : **10**
 - (a) Memory Segmentation
 - (b) Memory Addressing
 - (c) 8086 Hardware pin signals.

(Compulsory Question)

9. Attempt all questions : **10×2=20**
 - (a) Write a short note on 8088 Microprocessor.
 - (b) What is Memory Mapped I/O ?
 - (c) Write the applications of Microprocessor.
 - (d) What are Direct and Immediate Addressing modes ?
 - (e) Differentiate between Memory and I/O Interfacing.
 - (f) Define the terms Synchronous and Asynchronous communication.
 - (g) Write the trends in Microprocessor technology.
 - (h) What do you mean by Interrupt ?
 - (i) Write a short note on 8085 machine cycles.
 - (j) What are Logic and bit manipulation instructions ?