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.
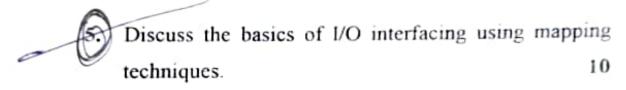
Section A

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)

Q. 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 ?