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MAY-24-0504
EE-602 (Microprocessors & Applications)
B.Tech-6th (CBCS)

Time : 3 Hours

Max. 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 each from Section A, B, C and D. Section E is compulsory.

SECTION-A

1. Draw and explain the pin configuration of 8085 microprocessor. (10)

OR

2. Explain the different addressing modes of 8085. (10)

SECTION-B

3. Write an assembly language program to add two 8 bit BCD numbers to get 16 bit BCD sum. (10)

OR

4. What are vectored interrupts? Explain enabling, disabling and masking of interrupts. How can data be transferred by using interrupts? (10)

SECTION-C

5. Differentiate between IO mapped IO and memory mapped IO. (10)

OR

6. Explain 8255 programmable peripheral interfacing. Also explain the techniques involve in interfacing 8255 with 8085 processor. (10)

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SECTION-D

7. Explain 8259 and 8255 with the help of functional block diagrams. (10)

OR

8. Draw and explain the internal architecture of 8086 microprocessor. (10)

SECTION-E (Compulsory)

9. Answer the following:

- (a) What is the use of SID and SOD lines of 8085?
(b) Define pipelining.
(c) Define the terms "Synchronous and Asynchronous data transfer".
(d) Find the number of address, data lines and capacity of the chip (2048 x 256) RAM.
(e) What is difference between 8085 & 8086 microprocessor?
(f) What is the function of hand shaking signals?
(g) Explain TRAP and NMI.
(h) What are the basic operation cycle and instruction cycle of 8085 processor?
(i) If the memory size is 2048 B, how many chips are required to make up 32 KB memory?
(j) List out some modern microprocessors.

(10×2=20)