Roll No. ..... Total Pages : 2

BT-4/J-22 **44184**

MICROPROCESSOR INTERFACING & APPLICATION

Paper-PC-IT-208A

Opt. (II)

Time : Three Hours] [Maximum Marks : 75

Note : Attempt *five* questions in all by selecting at least *one* question from each unit.

UNIT–I

1. (a) With the help of neat diagram explain the architecture of 8085 microprocessor in detail. (8)

(b) Explain the flag register of 8085 microprocessor, in detail. (7)

2. (a) Explain the memory organization in 8085 microprocessor. (7)

(b) With timing diagram, explain the memory write operation in 8085 microprocessor. (8)

UNIT–II

3. (a) Write an 8085 assembly language program to generate a software time delay of 100 ms.

(b) Specify the contents of the registers and the flag status as the following instructions are executed :

(i) MVI A, 00H.

(ii) MVI B, F8H.
(iii) MOV C, A.
(iv) MOV D, B.
(v) HLT. (8)

4. (a) Explain the following instructions with suitable example of each :
(i) LXI (ii) MOV (iii) SHLD (iv) LDAX (v) CMP (vi) STA. (12)
(b) Explain the sequence of events during the execution of the RET instruction by 8085 processor with the help of neat timing diagram. (3)

UNIT–III

5. (a) Write short note on vectored interrupts of 8085 microprocessor. (8)
(b) With suitable examples explain how I/O devices are connected using memory mapped I/O and peripheral I/O. (7)

6. Interface multiplexed 4 digit seven segment display with 8085 microprocessor. (15)

UNIT–IV

7. Draw the block diagram of 8237 DMA controller and explain its working. (15)

8. Explain the interfacing of LCD displays with 8085 microprocessor. (15)
