PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
B. TECHMIDSEM EXAMINATION WINTER 2022-23

SUBJECT NAME (CODE): Computer Organization and Microprocessor Architecture. (203124209)

BRANCH: AI/BDA/BC/CC/CS/IOT

DATE: 8.8.2022   **TIME:**2:30 PM to 4:00 PM   **TOTAL MARKS: 40**

Sr.No.		Marks
Q.1	(A) Compulsory Question (5 MCQ)	05

1. 8085 has _____ address bit.
   a. 4   b. 3   c. 8   d. 16

2. Total number of Pins in 8085 are _____.
   a. 40   b. 32   c. 20   d. 16

3. MOV A, B is a _____ byte instruction.
   a. 1 Byte   b. 3 Byte   c. 2 Byte   d. None

4. LXI H, 2048H is a _____ byte instruction.
   a. 1 Byte   b. 3 Byte   c. 2 Byte   d. None

5. Which among these is a non-vectored Interrupt.
   a. INTR   b. INTA   c. RST 4.5   d. RST 7.5

(B) Compulsory Question   05

1. Define: Opcode and Operand.
2. ALE is used to perform arithmetic and logical function. (TRUE/FALSE)
3. In LDA 5041H instruction, _____ is Opcode and _____ is Operand.
4. What is Microprocessor?
5. Define: T-state.

Q.2	Attempt any four(Short Questions)	12

(1) Describe: LDA, STA and MVI instruction with example.
(2) Explain classification of Addressing mode.
(3) What is Address Bus, Data Bus and Control Bus.
(4) What is a memory? Give difference of static and dynamic RAM
(5) Draw and explain Flag register?

Q.3   Attempt any two   08
       (1) Write a program to add two 8 bit of data F5H & 43H stored in memory location
       3041H & 3042H.
       (2) What is Interrupt? Describe function of each interrupt.
       (3) Draw and explain programmable model of 8085.

Q.4   (A) Draw Architecture of 8085 microprocessor.   05
       (B) Draw interfacing of EPROM of 4Kbyte and RAM of 6Kbyte with 8085 using the   05
       decoder. Also find its starting and ending address of EPROM & RAM.
                                    OR
       (B) Draw the timing diagram of MVI A, 06H Instruction.   05