

Enrolment Number: _____

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
B.TECH MIDSEM EXAMINATION
4th SEMESTER
ACY-2023-24 (EVEN SEM)

Subject Name (Code): COM (303105210)

Branch: CSE(Except AI,BDA)

Date: 29/1/24

Time: 10.30 -12. 00pm

Total Marks: 40

Sr.	Marks
No.	05
Q.1 Attempt any 5	

A

- RAM is ___ memory.
 - Read only
 - Write only
 - Read/write
 - None of above
- Which of the following is true about 8085 microprocessor?
 - It is an 16-bit microprocessor
 - It is a 40 pin DIP chip.
 - It has inbuilt ADC.
 - It has 8 address lines
- 8085 has _____.
 - One 16-bit register
 - Two 16-bit register
 - Three 16-bit register
 - Four 16-bit register
- How many address lines are required to connect a 16 KB RAM to a microprocessor?
 - 10
 - 14
 - 12
 - 11
- Which of the following is high level language?
 - C++
 - Assembly language
 - Machine level language
 - None of the above.
- Hold signal is related to _____.
 - Write data
 - Data
 - Address
 - DMA controller

7. Which is of the following is true about STA instruction?
- a) It uses immediate addressing mode
 - b) It is a 3-byte instruction
 - c) It required three machine cycles
 - d) Accumulator is loaded with the content of memory

B

Attempt any 5.

05

1. Explain ALE pin usage in 8085.
2. Define the term machine cycle.
3. What is difference between assembly language and machine language?
4. How many maximum memory locations and I/O devices can be addressed by an 8085?
5. Explain the use of program counter in 8085.
6. What is Op-code?

Q.2 Attempt any 4 (Short Questions)

12

- (1) Write a program to transfer a block of data from memory location 2050H to 2080H.
- (2) Write a program to add two 8-bit numbers located at 2010 and 2011H and store result at 2012H.
- (3) Explain the flag register.
- (4) Give difference between Memory mapped I/O and Peripheral mapped I/O.
- (5) Name and explain any three 8085 interrupt pins in brief with functions.
- (6) Explain bus architecture of 8085.

Q.3 Attempt any two

08

- (1) Explain categories of 8085 instructions that manipulate data with examples.
- (2) Explain the demultiplexing of data and address bus in 8085.
- (3) Draw the timing diagram of MOV C, A (4FH) and explain in short.

Q.4 (A) Explain generation of the control signals in 8085 microprocessors.

05

(B) Explain the pin diagram of 8085 with neat diagram. (explain any 3 pins).

05

OR

B. Draw the block diagram of 8085 and explain about working registers of 8085.

05