

7. What is the execution time of an instruction if the clock frequency of the 8085 is 3 MHz and the instruction requires 18 T-states?
 - a) 6 μ s
 - b) 9 μ s
 - c) 12 μ s
 - d) 15 μ s
8. Which of the following is a vectored interrupt in the 8085 microprocessor?
 - a) RST 7.5
 - b) TRAP
 - c) INTR
 - d) Both a and b
9. How does the RIM instruction affect the interrupt system of the 8085?
 - a) It enables all interrupts
 - b) It provides the status of the interrupt system
 - c) It resets the interrupt flags
 - d) It masks the interrupts
10. Conditional instructions are independent of which of the following flag?
 - a) Z
 - b) AC
 - c) CY
 - d) P

SECTION- B

Each question carries 4marks

11. Write a program to count from 0 to 9 with a one-second delay between each count. At the count of 9, the counter should reset itself to 0 and repeat the sequence continuously. Display each count at one of the output ports. Assume clock frequency is 1MHz.
12. Write 8085 program to divide two 8 bit numbers.
13. Differentiate between hardware and software interrupt.(discuss about any five points)
14. Write a program to exchange the 10 byte of data which are stored in location 2000H to 2009H from the location 3000H to 3009H.
15. Draw the neat and clean timing diagram of MVI M,25H.

SECTION- C

Each question carries 10 marks

16. How we pass the parameters in 8085 programming? Explain all with suitable examples.
17. Write a program to:
 - a) Store the contents of stack pointer
 - b) Point the SP to location 9050H
 - c) Add 16 bit data stored at memory locations 9050 & 9051 with immediate data 3210H & store the result at the same address.
 - d) Take back the contents of SP & transfer these contents to the SP.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

University Institute of Engineering and Technology, C.S.J.M. University Kanpur

Microprocessor (CSE-S303)

Odd Semester - 2024

Year: 3rd year

(2K22)

End semester Examination

Time: 3hr

Maximum Marks: 50

Note: All questions are compulsory.

SECTION A

Each question carries 1 mark

1. The microprocessor of a computer can operate on any information if it is present in _____ only.
 - a) Program Counter
 - b) Flag
 - c) Main Memory
 - d) Secondary Memory
2. Which of the following instructions is used to enable interrupts in the 8085 microprocessor?
 - a) SIM
 - b) RIM
 - c) EI
 - d) DI
3. Which of the following is a special-purpose register of microprocessor?
 - a) Program counter
 - b) Instruction register
 - c) Accumulator
 - d) Temporary register
4. Which of the following flag condition is used for BCD arithmetic operations in microprocessor?
 - a) Sign flag
 - b) Auxiliary carry flag
 - c) Parity flag
 - d) Zero flag
5. What is the primary role of the ALE (Address Latch Enable) signal in the 8085 microprocessor?
 - a) To enable address decoding
 - b) To demultiplex the address and data bus
 - c) To enable memory read/write operations
 - d) To indicate an interrupt
6. Which of the following is a register-indirect addressing mode instruction set?
 - a) LDA 2700H
 - b) ADI 36H
 - c) DAA
 - d) LDAX B

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

University Institute of Engineering and Technology, C.S.J.M. University Kanpur

Microprocessor (CSE-S303)

Even Semester - 2024

Year: 3rd year

(2K22-CSE)

Mid Semester Examination

Time: 1.5H

Maximum Marks: 30

Note: All questions are compulsory.

SECTION A

Each question carries 1 mark

1. The clock frequency of the 8085 microprocessor is _____ MHz.
2. In the 8085 microprocessor, the instruction cycle consists of _____, _____, and _____ cycles.
3. The 8085 microprocessor has _____ interrupt lines.
4. The _____ instruction is used to transfer control to a specific memory location based on a condition.
5. The instruction _____ is used to load an 8-bit immediate value into a register.
6. In 8085, the _____ instruction is used to set the carry flag to 1.
7. The _____ signal in the 8085 microprocessor is used to acknowledge an interrupt request.
8. _____ signal is used to latch address from multiplexed address data bus.
9. CMC is a type of _____ addressing mode.

SECTION B

Each question carries 3 marks

10. Explain how 'JMP' instruction is executed in 8085 microprocessor?
11. In 8085 micropocessor how and what internal operations are performed with data?
12. Explain about hardware interrupts in 8085 microprocessor.

SECTION C

Each question carries 6 marks

13. Describe the architecture of the 8085 microprocessor in detail, including its major components and their functions.
14. Explain about the instructions following given below
 - a) STAX
 - b) DAA
 - c) DAD