CSC. 153-2080 (Very Old) ✡

Tribhuvan University
Institute of Science and Technology
2080

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Bachelor Level / First Year /Second Semester/Science
Computer Science and Information Technology (CSC. 153)
(Microprocessor)
(VERY OLD COURSE)

Full Marks: 60
Pass Marks: 24
Time: 3 hours.

Candidates are required to give their answers in their own words as for as practicable.
The figures in the margin indicate full marks.

Section A

Attempt any TWO questions. **(2×10=20)**

1. Write a program for 8085 Microprocessor to add two 16 bits numbers 1234h and 5678h and store the sum in memory location 2050h and 2051h. (10)
2. Draw the block diagram of 8085 microprocessor and define its components. (10)
3. What is instruction cycle, machine cycle and T-state? Draw the timing diagram for the instruction MOV A, B. (6+4)

Section B

Attempt any EIGHT questions. **(8×5=40)**

4. What is microprocessor? Explain Von-Neumann Architecture with suitable diagram. (1+4)
5. Explain the architecture of SAP 1 Computer with suitable diagram. (5)
6. What is flag? Explain all the flags available in 8085 microprocessor. (1+4)
7. Explain the function of BIU and EU of 8086 microprocessor. (5)
8. Explain data transfer instructions of 8085 microprocessor in brief. (5)
9. What is addressing mode? Explain different addressing mode in 8085 microprocessor. (1+4)
10. Write a program for 8086 microprocessor to display a character entered from keyboard. (5)
11. What is interrupt? What happens when a microprocessor receives an interrupt? (1+4)
12. What is DMA? Explain the basic DMA operation. (1+4)
13. Write short notes on: (2×2.25=5)
    a) Serial Communication
    b) Multiplexed Address/Data Bus