

Subject Code: 3160712
Subject Name: MI (Microprocessor and Interfacing)

QUESTION BANK

1. Draw and explain hardware model and programming model of 8085 microprocessor. Explain working of 16 bit registers.
2. Draw the functional block diagram of internal architecture of IC 8085 and explain its working.
3. Using diagram illustrate logic pin out of the 8085 Microprocessor.
4. Explain (a) ALU (b) Program counter (c) Instruction decoder (d) machine cycle (e) T-State (f) Opcode
5. Explain addressing modes of 8085 microprocessor with example.
6. Explain how address/data lines AD0-AD7 are de-multiplexed. Draw logic diagram to generate control signals MEMW, MEMR, IOW and IOR from IO/M, WR and RD.
7. List different types of instruction set of 8085 and Explain categories of 8085 instructions that deal with data transfer.
8. Explain the working of rotate instructions of 8085 with proper example in each case.
9. State the function of following instructions. Also mention about the Addressing mode.

(1) LHLD 16-bit	(2) XCHG	(3) LDAX D
(4) DAD	(5) RRC	(6) CALL 16-bit
(7) XRA D	(8) CMA	(9) STA 16-bit
(10) DAA	(11) LXI	(12) CMP

Refer all the instructions.

10. Write a detailed note on Memory Classification.
11. Discuss memory mapped I/O and I/O mapped I/O and compare them.
12. Define T-state, machine cycle and instruction cycle. Explain the timing diagram of the memory write/read cycle.
13. Draw the timing diagram for the instruction IN AA H and OUT 01H instruction.
14. Draw the timing diagram for the instruction STA 3050 H and explain in detail.