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National Institute of Technology Hamirpur (HP)

Name of the Examination: B.Tech. End Semester Examination

Branch : Electrical Engineering Semester : 4th
Course Name : Microprocessor Architecture Course Code : EE-222
and Interfacing

Note: Attempt all question parts in sequence

Time: 3 Hour

Maximum Marks: 50

Q.1a) Mention the names of various registers in 8085 along with its size.

b) Explain the function of IO/\overline{M} and I/O instructions in 8085.

(2.5x2=5)

Q.2 Explain timing diagram for memory write machine cycle of 8085 microprocessor.

(5)

Q.3 Explain the following 8085 instructions with example

(5)

CALL Addr 16, INX rp, CMP M, ADI d8, RAL

Q.4 Explain with example the addressing modes available in 8085 microprocessor.

(5)

Q.5 Interface two numbers of 4 kb EPROM and one number of 8 kb RAM with 8085 processor.

Explain the interface diagram and allocate binary addresses to memory ICs.

(5)

Q.6 Give comparison of memory mapping and I/O mapping of I/O device in 8085 system.

(5)

Q.7 Explain hardware and software interrupts of 8085 Microprocessor. Also give priorities of

Interrupts of 8085.

(5)

Q.8 Explain the various operating modes of programmable timer 8253.

(5)

Q.9 Explain interfacing of ADC0809 to microprocessor 8085. Also write program for it.

(5)

Q.10 Write an assembly language program to search smallest data in an array.

(5)