1048
B.E. (Electrical and Electronics Engineering)
Fourth Semester
EE-405: Microprocessor and Interfacing
(May – 2017)

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt _five_ questions in all, including Question No. I which is compulsory and selecting two questions from each Part.

x-x-x

1   (a) What is a tri state device?

(b) Explain Program Status Word in 8085

(c) How many address lines are necessary to address two megabytes(2048K) of memory ?

(d) How many I/O devices can 8085 support?

(5X2)

(e) Differentiate the instructions DAA & ADC

PART A

2   (a) Give the Programming Model of 8085.

(b) Discuss the function of the following :

(6,4)

RESET OUT , READY , HLDA , SID

3   (a) A set of ten bytes is stored starting from memory location XX50H.

WAP to check each byte and save the bytes that are higher than 60_{10} and lower

Than 100_{10} in memory location starting from XX60H.

(b) On loading Register pair BC with 8000 H ,calculate the loop delay T_L if the system

Clock frequency is 2MHz.

(6,4)

4   (a) Discuss SIM and RIM in 8085

(b) Design a schematic for interfacing a memory 4096 x 8 with 8085
Using a 74LS138 (3 to 8 decoder) ,thereby generating address range for the
Memory IC 7000H to 7FFFH

(4,6)

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PART B

5. (a) Give block diagram of Programmable Peripheral interface 8255

   (b) Discuss the control word for BSR and I/O Modes

   (5,5)

6. (a) Discuss Architecture of 8086

   (b) Explain interfacing of 8085 with Digital to Analog Converter

   (5,5)

7. Write short notes on any three of the following :

   (a) Stepper Motor

   (b) Multiple Interrupts and Priorities

   (c) CALL & RET vs PUSH & POP

   (d) Data Transfer(Timing Diagram) during the execution of CALL instruction

   (5,5)

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