

1059
B.E. (Electrical and Electronics Engineering)
Fourth Semester
EE-405: Microprocessor and Interfacing

Max. Marks: 50

Allowed: 3 Hours

Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Part.
x-x-x

- (a) What is a Stack and How is it initialized in 8085?
- (b) What are the limits of Signed numbers in 8 bit microprocessors ?
- (c) What is the function of READY signal ?
- (d) How many output devices can 8085 support?
- (e) Differentiate the instructions PUSH and CALL (5X2)

PART A

- 3 (a) Discuss the Addressing Modes of 8085
- (b) Calculate the maximum delay offered by a register pair if the system Clock frequency is 2MHz (5,5)
- 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 40_{10} and lower Than 90_{10} in memory location starting from XX60H
- (b) Give the schematic for demultiplexing of address and data bus in 8085 (6,4)
- 4 (a) Discuss 8085 Interrupts , their vector locations and Priorities.
- (b) Design a schematic for interfacing a memory 2048 x 8 with 8085 Using a 74LS138 (3 to 8 decoder) ,thereby generating address range for the Memory IC as 8800H to 8FFFH (4,6)

P.T.O.

(2)

PART B

5. (a) Give schematic of interfacing 8085 with 8255
(b) Discuss the control word for BSR and I/O Modes

(5,5)

6. (a) Discuss the concept of segmented memory of 8086.
(b) Explain interfacing of a seven segment display with 8085

(5,5)

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

- (a) 1 byte CALL Instructions
(b) Interrupt Service Routine
(c) Successive Approximation Register
(d) Data Transfer(Timing Diagram .) during the execution of CALL instruction

(4,3,3)

X-X-X