

Exam.Code:0934  
Sub. Code: 6980

1019  
B.E. (Electrical and Electronics Engineering)  
Fourth Semester  
EE-405: Microprocessor and Interfacing

Time allowed: 3 Hours

Max. Marks: 50

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

x-x-x

- 1 (a) What is the word length of a general purpose register in 8085?  
(b) Explain Program Status Word in 8085  
(c) What is the function of a buffer ?  
(d) How many I/O devices can 8085 support?  
(e) Differentiate the instructions POP and PUSH. (5X2)

PART A

- 2 (a) Give the schematic for demultiplexing of address and data bus in 8085  
(b) On loading Register pair BC with 6500 H ,calculate the loop delay  $T_L$  if the system  
Clock frequency is 2MHz (4,6)
- 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) Discuss the Addressing Modes of 8085 (6,4)
- 4 (a) Discuss 8085 Interrupts , their vector locations and Priorities.  
(b) Design a schematic for interfacing a memory  $4096 \times 8$  with 8085  
Using a 74LS138 (3 to 8 decoder) ,thereby generating address range for the  
Memory IC 6000H to 6FFFH (4,6)

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 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) RS232C

(b) Status Signals

(c) Peripheral Mapping vs Memory Mapping

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

(5,5)

x-x-x