ANNA UNIVERSITY, CHENNAI-25

B.E/B.TECH (PART-TIME) END SEMESTER ARREAR EXAMINATION

APR/MAY '14 INFORMATION TECHNOLOGY

FOURTH SEMESTER

PTIF233 – MICROPROCESSORS AND APPLICATIONS

DURATION: 3Hrs **MARKS: 100**

PART A (10 X 2 =20)

Answer the ALL Question

1. What is multiplexed bus in 8085?
2. Mention the signals that are related with serial communication in 8085.
3. What is a Machine Cycle and T-states? How they are related to Instruction cycle?
4. What is the purpose of PUSH and POP instructions in 8085?
5. Write a delay routine to generate a delay of 1second.
6. What is meant by I/O mapped I/O and Memory Mapped I/O?
7. Specify the status of 8259 PIC after enabling the reset pin.
8. What is the various method of reading an 8254-counter register?
9. Draw the flag register of 8086 microprocessor.
10. What do you meant by instruction prefetch queue?

PART B (5 X 16=80)

11. i) Explain the steps involved in execution of MVI A, 05_H instruction in 8085 processor. (10)

    ii) Draw the timing diagram for MVI A, 05_H instruction. (6)

12. a) Discuss various types of addressing modes in 8085. Explain each with an example.

    OR

    b) i) Write an 8085 Assembly Language Program to find the second largest element in the given array. (8)

ii) Write an 8085 Assembly Language Program to convert the given hexadecimal number into decimal number. (8)

13. a) Explain in detail about the internal block diagram of 8279 Keyboard/ Display Interface controller.

OR

b) i)Draw the control word format of 8255. (4)

ii) Discuss briefly about the various mode of operations in 8255 PPI. (12)

14. a) Describe the architectural block diagram of 8086 processor.

OR

b) Describe various types of instruction sets in 8086 processor.

15. a) Describe the different types of interrupts and its structure in 8086 Processor.

OR

b) Explain about various addressing modes in 8086. Give example for each addressing modes.

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