ANNA UNIVERSITY COIMBATORE

B.E. / B.TECH. DEGREE EXAMINATIONS : MAY / JUNE 2010

REGULATIONS : 2007

FIFTH SEMESTER : ECE

070290054 - MICROPROCESSOR AND APPLICATIONS

TIME : 3 Hours Max.Marks : 100

PART - A

(20 x 2 = 40 MARKS)

ANSWER ALL QUESTIONS

1. Define bit and byte?
2. What are PUSH and POP instructions?
3. List out the interrupts in 8085 processor. Which interrupt has the highest priority?
4. Mention the operation carried out by the following instructions.

   STA 2003 LXI H,3002
5. Define machine cycle and T state.
6. What are BIU and EU in 8086?
7. How many address lines and data lines in 8086?
8. What are the segment registers in 8086?
9. What is USART?
10. What is 8259A and mention the different priority modes?
11. Mention the Programmable Peripheral Interface IC. What is the function of it?
12. What are the operational modes of programmable timer IC?
13. Give examples for single operand instruction and double operand instruction in 8086.

14. List out the operating modes of 8086 which pin decides this operating mode?
15. What are the functions of the pointers SP and BP in 8086?
16. Give some examples of string instructions of 8086.
17. What is addressing mode? How many addressing modes are there in 8086?
18. What is an assembler?
19. What are the drawbacks in SRAM?
20. What is meant by Refreshing DRAM?

PART – B

(5 x 12 = 60 MARKS)

ANSWER ANY FIVE QUESTIONS

21. With a neat block diagram, explain the architecture of 8085.

22. a. Discuss in detail about timing diagram. 4

    b. Draw the timing diagram for the execution of the instruction MOV A, B in 8085 processor and explain. 8

23. Discuss in detail about different types of Interrupts in 8086 with necessary examples.

24. List out different types of addressing modes in 8086 and explain each mode with necessary examples.

25. With a neat block diagram explain about DMA controller and its operation in master and slave mode.

26. With neat logic schematic of Intel 8279, explain its interfacing with the microprocessor.

27. Write an assembly language program to find the largest number in a data array.

28. Explain the concept of SRAM interfacing and DRAM interfacing.

*****THE END*****