Register Number ....

B.E. / B.TECH. DEGREE EXAMINATIONS: NOVEMBER 2009

Third Semester

U07CS303: MICROPROCESSORS

(Common to B.E. Computer Science Engineering & B.Tech. Information Technology)

Time: Three hours   Maximum Marks: 100

Answer ALL the Questions:-

PART A (10 x 1 = 10 Marks)

1. ACI is a _____ byte instruction

   a) 1   b) 2   c) 3   d) 4

2. The number of machine cycles used in CALL instruction is

   a) 1   b) 2   c) 3   d) 5

3. Number of address lines required to interface 1025 bytes

   a) 16   b) 10   c) 12   d) 11

4. Which register is used to convert Hexadecimal to decimal number

   a) DAA   b) DAD   c) DI   d) ORA

5. RST0 is a _____

   a) Software interrupts   b) Hardware Interrupt

   c) Software triggered Hardware Interrupt d) Hardware triggered software interrupt

6. Non Maskable Interrupt is

   a) Trap   b) RST 7.5   c) RST 5.5   d) RST 0

7. How many ports are there in 8255

   a) 2   b) 3   c) 4   d) 5

8. The Keyboard / Display Controller 8279 has

   a) 16 * 8 display RAM   b) 8 * 8 display RAM

   c) 16 * 16 display RAM   d) 4 * 16 display RAM

9. 8086 is a _____

   a) 8 bit Processor   b) 16 bit Processor c) 12 bit Processor d) 24 bit Processor

10. The number of address lines available in 8086 is

   a) 16   b) 24   c) 20   d) 28

PART B (10 x 2 = 20 Marks)

11. What are the different type of Flags used in the 8085 programming model and write its uses?

12. Explain the function of Program Counter

13. What are the addressing modes of 8085?

14. Define Subroutine and write its uses

15. What are 8085 Interrupt inputs?

16. What is initialization command word in 8259?

17. List the operating modes of PPI?

18. What do you mean by 'Cycle Stealing'?

19. Define Pipelining

20. What are the registers in 8086 processors?

PART C (5 x 14 = 70 Marks)

21. a) With neat diagram explain the architecture of 8085in detail

(OR)

b) Explain the Instruction set of 8085 with example.

22. a) i) Explain the various programming techniques used to implement delay

ii) Explain the Instructions to implement subroutine.

(OR)

b) Write a program to count a set of decimal numbers and display the results

23. a) With the help of functional block diagram explain the working of a Interrupt contro 8259 IC.

(OR)

b) With neat diagram explain the 8085 interrupts and vector location.

24. a) How to interface a keyboard with8279? Explain in detail

(OR)

b) How to establish a serial communication? Explain in detail

25. a) Explain the addressing modes of 8086 with the help of examples.

(OR)

b) Explain the block diagram showing 8086 with maximum mode configuration.

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