MALLA REDDY UNIVERSITY

School of Engineering-Dept. of IoT

Subject Name: MPMC

Subject Code: MR20-1CS0502

QUESTION BANK

UNIT-I

1. Explain with neat sketch architecture of 8086 microprocessor?
2. Explain the memory segmentation of 8086 with all segment registers?
3. Give the contents of the flag register after execution of following addition

   0110 0101 1101 0001

   0010 0011 0101 1001

   and also write conditions of different flags?
4. Sketch the pin diagram of 8086 microprocessor and Explain the functions of different pins?
5. Describe the minimum mode configuration of 8086 and its timing diagram?

UNIT-II

6. Discuss the addressing modes of 8086 microprocessor with examples?
7. Define the following in instruction set of 8086?

   a. Data transfer group b. Arithmetic group

   c. BCD&ASCII Arithmetic group d. Logic group
8. Discuss various assembler directives of 8086?
9. Explain various functions of assembly language programming tools?
10. Write an assembly language program to find sum of 'N' numbers given in an array?

    01h,02h,03h,04h,05h,06h,07h

UNIT-III

11. Explain in detail the concept of stack structure of 8086?

12. Explain in detail interrupt cycle of 8086?

13. What are the sources of interrupts in 8086 and draw its interrupt vector table?

14. a) Explain different types of interrupts in detail?

    b) Write an assembly language program to count number of ones and zeros in a number?

15. Explain the following

    1. Maskable interrupts

    2. Non Maskable interrupts

UNIT-IV

16. a) Differentiate between Microprocessor Vs. Microcontroller

    b) Discuss briefly different types of micro controllers in detail?

17. Explain in detail architecture of 8051 micro controller and mention its applications?

18. Discuss the addressing modes of 8086 microprocessor with examples?

19. Define the following in instruction set of 8051?

    1. Logical Instructions

    2. Boolean or Bit Manipulation Instructions

    3. Program Branching Instructions

20. Explain the following in 8051 micro controller?

    1. Program memory organization

    2. Data memory organization

UNIT-V

21. a) Classify different types of PIC micro controllers?

    b) Explain PIC microcontroller architectural block diagram in detail and list out parts of CPU?

22. Explain PIC microcontroller memory module in detail?

23. Explain ARM processor architecture and organization in detail?

24. Explain the following concepts in detail in ARM Processor ?

    a) Thumb programming model,

    b) Thumb instruction set.

25. Explain the following terms?

    a). Interrupts

    b). I/O Ports

    c).CCP Module