SUBJECT:MAP(17431)

CLASS:SYCM/SYIF(FIRST /SECOND SHIFT)

[3 marks]

Chapter 1:

1) State the vector addresses of all hardware interrupt of 8085 microprocessor.

2) List maskable and non-maskable interrupts of 8085 microprocessor.

3) Describe the function of ALU group.

4) Explain features of 8085.

5) Explain limitations of 8085.

Chapter 2:

1)Define logical and physical address. Explain the address generation process in 8086 of DS=3458H and SI=13DC H. Calculate physical address.

2) What is pipelining concept and explain the function of stack and queue.

3) Explain the flag register in 8086 and list the different categories of flags.

4) Explain address generation diagram and advantages of segmentation.

5) Explain features of 8086.

Chapter 3:

1)Describe the use of DAA instruction of8086 with example.

2)With example, describe the register indirect addressing mode of 8086.

3)Explain MUL and DIV instruction with 8 bit and 16 bit data with example.

[4 marks]

Chapter 1:

1)Describe i) Timimng and control unit of 8085

ii)General purpose register of 8085

2) Draw the neat labeled architecture of 8085 indicating different signals of all the blocks.

3) Explain the function of instruction register, program counter, stack pointer and instruction decoder.

Chapter 2:

1)List the features of clock generator 8284.

2) Show interfacing of 8086 in maximum mode and explain in detail.

3) Describe the function of bus controller 8288 with its function diagram.

4) Differentiate between maximum and minimum mode of 8086.

5) Draw the timing diagram of 8086. Write machine cycle in maximum mode.

6) Draw 8086 architecture block diagram and explain BIU.

Chapter 3:

1)List addressing modes of 8086 with examples.

2)Explain the instructions : i)XLAT ii)XCHG iii)LEA iv)INC

3)Describe the instructions: i)CMP ii)DAA iii)AAM iv)AAD

2nd Unit Test Question bank

Subject : MAP (1st& 2nd shift)

3 marks Question

Chapter 3

1. Describe the string instruction - CMPS.
2. Select instructions for each of the following:
   I) Rotate register BL, right 4 times
   II) Multiply AL by 08H
   III) Signed division of BL and AL
   IV) Move 5000H to register DS
3. Explain the following instructions

I) CALL
II) RET
III) Loop

4. List different types of JMP instruction. Distinguish the following : Inter-Segment Jump and Intra-Segment Jump

Chapter 4

1. Describe the function of following tools
   I) Editor
   II) Assembler
   III) Linker

2. State the steps involved in program development.
3. What are the assembler directives? Explain the following directives.
   I) ASSUME
   II) EVEN
   III) PTR
   IV) SEGMENT
4. Describe following directives: i)DD ii)DW iii)ENDS

Chapter 5

1. Write an ALP to multiply two 16 bit binary numbers.
2. Write an ALP to divide two 16 bit unsigned numbers.
3. Write algorithm, flowchart for 8086 to transfer a block of data from one location to other.
4. Write ALP to perform addition of two BCD numbers.
5. Write an ALP to count numbers of 1's in DL register.
6. Write an ALP to find length of string.

Chapter 6

1. What is procedure? What are the advantages of using procedure in our program?
2. Define macro with example.

4 marks Question

Chapter 3

1. List any four stack related instructions of 8086 microprocessor and explain any two instruction.
2. State any 4 string instruction and write one example for each instruction. Write operation of these instructions.
3. Distinguish the following instruction (any two points)
    I) AAA and DAA
    II) AND and DAA
4. Explain the following instructions
    I) AAM
    II) AAA
    III) TEST
    IV) XCHG

Chapter 4

1. What are the assembler directives? Explain the following directives.
    I) ASSUME
    II) EVEN
    III) PTR
    IV) SEGMENT

Chapter 5

1. Draw the flowchart and write an ALP to find smallest number of given block of data.
2. Write an ALP to find largest number to ten numbers.

Chapter 6

1. Write a ALP to find factorial of a number using procedure.
2. Using MACRO, write ALP to solve $P = X^2+Y^2$ where X and Y are 8 bit numbers.