

QUESTION BANK-MICROPROCESSOR(REE-602,KCS-403)

UNIT-1

1. What are interrupts? List the interrupts of 8085.
2. Explain Program Counter and Stack Pointer?
3. Write the difference between subroutine and macro.
4. Draw and explain the Timing diagram of MVI A, A2H
5. Explain the operation of the following instructions: -
(i) LDAX (ii) LHLD (iii) ADI (iv) MVI (v) SUI
(vi) XCHG (vii) RAR (viii) HLT (ix) DI (x) DCX
6. What is addressing modes? List different addressing modes of 8085 and explain each
Of them with an example.
7. Draw and explain the architecture of 8085 microprocessor.
8. Why multiplexing is done in 8085 microprocessor?
9. List out the maskable and non-maskable interrupts
Available in 8085?

UNIT-2

1. Draw and explain the timing diagram of read cycle of 8085
2. List out the mask able and non-mask able interrupt
available in 8085?
3. With neat block diagram explain the architecture of 8085.
4. Write a program based on 8085 instruction set to
compute the addition of 16 bytes stored in memory.
5. Cite the concept of interrupt and polling.
6. Explain the following assembler directives

i) ASSUME

ii) DD

iii) EQU

7. Differentiate between half duplex and full duplex transmission.

8. What are Assembler directives?

9. What is memory segmentation?

10. Explain the addressing capability of 8085 microprocessor .How the 20 bit memory is addressed?

UNIT-3

1. Sketch the Architecture of 8086 microprocessor?

2. What is the difference between Subroutine and Macro?

3. Explain 8086 Flags?

4. List the function of LOCK and BHE pins used in 8086.

5. Draw and explain the maximum mode system of 8086 microprocessor.

6. Draw the interfacing diagram to interface 8086 with 16K*8 memory

7. Write a program based on 8086 instruction set to compute addition of 16 bytes stored in memory ?

8. Explain Minimum Mode operation of 8086 microprocessor with block diagram

9. Write a 8086 Assembly language program to convert an 8 bit binary number into equivalent ASCII code.

10. Write all types of addressing modes in 8086

UNIT-4

1. Write a program using 8086 to interfaces seven segment display with 8255.

2. Write a program to generate a square wave of 500 ps Using 8086. Assume 5 MHz Clock frequency.

3. What is USART?

4. Explain the role of REP prefix in 8086.

5. Give excitation table to rotate stepper motor in clockwise direction.

6. Describe the various addressing modes used in 8086 also describe with examples how the 20-bit physical address is calculated from the 16-bit logical address?

7. Draw and explain the maximum mode system of 8086 microprocessor.

8. Write assembly language program for the addition of two 16-bit numbers considering carry. The numbers are stored in the memory starting from 2500H. Store the result of addition and carry from the memory location starting from 2525H

UNIT-5

1. Explain the block diagram of 8255 DMA and interfacing.
2. Draw and explain the functional block diagram of 8255.
3. Explain the command words of 8255.
4. List the function of two DMA signals HOLD and HLDA
5. Explain 8253/54 programmable interval/ timer with schematic diagram.
6. Draw the interfacing diagram for interfacing 8255 with 8086.
7. Draw the schematic and internal block diagram of 8257 DMA controller. Explain the working of DMA controller with the help of block diagram.
8. Draw the interfacing diagram to interface 8086 with 16K*8 memory
9. Discuss the mode of operation of 8253 program, internal time with its control format.
10. Interface an 8255 with 8086 to work as an I/O port.