Question Bank (K scheme)

Name of subject: MICROPROCESSOR **Unit Test :II**

Subject code: 314321 **Course : CM**

CHAPTER 3: Instruction Set of 8086 Microprocessor (CO3) (18 Marks)

2 Marks

1. State any two differences between TEST and AND instructions.
2. State the function of STC and CMC Instruction of 8086.
3. Write any four-bit manipulation instructions of 8086
4. Explain the following instruction of 8086
    a. XLAT (b) XCHG
5. Explain the following instruction of 8086
    a. CALL (b) RET

4 Marks

1. List and explain any four string operation instruction
2. List and explain any four process control instruction
3. List and explain any four branching operation instruction
4. Describe how string instructions are used to compare two strings with suitable example.
5. Write assembly language instructions of 8086 microprocessor to
    a. Rotate the content of BX register by 4 bit toward left.
    b. Shift the content of BX register to right 3 times

CHAPTER 4: Assembly language Programming (CO4) (20 Marks)

2 Marks

1. Write an ALP to add / subtract two 8 bit numbers
2. Write an ALP to Add / subtract two 16 bit numbers

4 Marks

1. Write an ALP to multiply two 16 bit signed /unsigned numbers.
2. Write an ALP to count odd numbers in the array of 10 numbers
3. Write an ALP to find largest number in the array
4. Write an ALP to count number of '0' in 8 bit number.
5. Write an ALP to subtract two BCD number using procedure.
6. Write an ALP to concatenate two strings
7. Write an ALP to perform block transfer operation of 10 numbers
8. Write an ALP to transfer 10 bytes of data from one memory location toanother, also draw the flow chart of the same
9. Write an ALP to find length of string
10. Write an ALP to check a given number is positive or negative
11. Write an ALP to count ODD and/or EVEN numbers in array .

CHAPTER 5: Procedure and MACRO (CO5) (10 Marks)

2 Marks

1. Explain Re-Entrant and Recursive Procedure with diagram
2. Define MACRO with its syntax.
3. Write any two difference between NEAR and FAR procedure.
4. Explain CALL and RET instruction

4 Marks

1. Explain MACRO with suitable example. List four advantages of it.
2. Differentiate between Procedure and Macros
3. Write an ALP for Z = (A + B) * (C+ D) using PROCEDURE
4. Write an ALP for Z = (P + Q) * (R + S) using MACRO. Draw flow chart of the same.
5. Write a MACRO to perform 32 bit by 16 bit division of unsigned numbers