

Question Bank (I scheme)

Name of subject: MICROPROCESSOR

Unit Test :II

Subject code: 22415

Course : CM

Semester: IV

CHAPTER 3: Instruction Set of 8086 Microprocessor (CO3) (16 Marks)

2 Marks

- 1 What is the use of REP in string related instruction?
- 2 With examples, describe any two String instructions in 8086 assembly language.
- 3 Describe any two Rotate instructions with example.
- 4 List any four Bit manipulation instructions of 8086.

4 Marks

- 1 Select the instruction for each of the following
 - i) Rotate register BH left 4 times.
 - ii) Multiply AL by 08H.
 - iii) Signed division of BL and AL
 - iv) Rotate BX to left 4 times through carry.
- 2 Describe the function of following instructions: AAA, CMP, ADC and JC.
- 3 Explain DAA and DAS instruction.
- 4 List and explain any four process control instruction with their functions.

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

2 Marks

- 1 Draw the flowchart for Multiplication of two 16 bit numbers.
- 2 Write an ALP to count number of '1' in 16-bit number.
- 3 Write an ALP for finding length of two strings.
- 4 Write an ALP for 16-bit subtraction.

4 Marks

- 1 Write an ALP to perform 32 bit by 16-bit division of unsigned numbers.
- 2 Write an ALP to find the smallest number in the Array.
- 3 Write an ALP to count the number of positive and negative numbers in array.
- 4 Write an ALP to perform block transfer without using string instruction.

CHAPTER 5 : Procedure and Macro (CO5) (12 Marks)

2 Marks

- 1 Define Procedure and write its syntax.
- 2 Compare Procedure and macro based on
 - i) length of code
 - ii) generation of object code
- 3 Define Macro.
- 4 State the advantages and disadvantages of using Procedure.
- 5 What is the difference between Near and Far Procedure?
- 6 What do you mean by Recursive procedure?

4 Marks

- 1 Give the difference between Inter segment and Intra segment CALL.
- 2 Compare PROCEDURE and MACRO.
- 3 Write an ALP for sum of series of 10 no. using PROCEDURE.
- 4 Write an ALP using MACRO to perform following operations
$$X=(A+B)*(C+D)$$