SUB: MIC Course Code: 22415

## **QUESTION BANK UT-2**

## Chp 3:

- 1. List any four instructions from the Bit manipulation instructions of 8086. (S-19) (2M)
- 2. State the use of REP in string related instructions. (S-19) (2M)
- 3. Write classification of instruction set of 8086. Explain any one type out of them. (S-19) (4M)
- 4. Select an appropriate instruction for each of the following & write: (S-19) (6M)
  - (i) Rotate the contents of Dx to write 2 times without carry.
  - (ii) Multiply contents of Ax by 06H.
  - (iii) Load 4000 H in SP register.
  - (iv) Copy the contents of Bx register to CS.
  - (v) Signed division of BL and AL.
  - (vi) Rotate Ax register to right through carry 3 times.
- 5. Illustrate the use of any three Branching instructions. (S-19) (6M)
- 6. What is role of XCHG instruction in assembly language program? Give example. (W-19) (2M)
- 7. State the use of STC and CMC instructions of 8086. (W-19) (2M)
- 8. Explain logical instructions of 8086. (Any Four) (W-19) (4M)
- 9. Select assembly language for each of the following: (W-19) (6M)
  - (i) Rotate register BL right 4 times.
  - (ii) Multiply AL by 04 H
  - (iii) Signed division of AX by BL.
  - (iv) Move 2000 H in BX register.
  - (v) Increment the content of AX by 1.
  - (vi) Compare AX with BX.
- 10. State any two difference between TEST and AND instructions. (S-22) (2M)
- 11. State the use of DAA instruction in BCD addition. (S-22) (2M)
- 12. Describe DAS instruction with suitable example. (S-22) (4M)
- 13. Write an instruction to perform following operations: (S-22) (6M)
  - (i) Multiply BL by 88H
  - (ii) Signed division of AL by BL
  - (iii) Move 4000H to DS register
  - (iv) Rotate content of AX register to left 4 times.
  - (v) Shift the content of BX register to right 3 times.
  - (vi) Load SS with FF00H.

## Chp 4:

- 1. Write on ALP to count the number of positive and negative numbers in array. (S-19) (4M)
- 2. Write ALP to find the sum of series. Assume series of 10 numbers. (S-19) (4M)
- 3. Write an ALP to count ODD and EVEN numbers in array. (S-19) (4M)
- 4. Write an ALP to perform block transfer operation of 10 numbers. (S-19) (4M)
- 5. Write an ALP using procedure to solve equation such as Z = (A + B) \* (C + D) (S-19) (4M)
- 6. Write an ALP using macro to perform multiplication of two 8 bit unsigned numbers. (S-19) (4M)
- 7. Write an ALP to arrange numbers in array in descending order. (S-19) (6M)
- 8. Draw flowchart for multiplication of two 16 bit numbers. (W-19) (2M)

- 9. Write an ALP to find length of string (W-19) (4M)
- 10. Write an ALP to count no. of 0's in 16 bit number (W-19) (4M)
- 11. Write an ALP to find largest number in array of elements 10 H, 24 H, 02 H, 05 H, 17 H. (W-19) (4M)
- 12. Write an ALP for addition of series of 8-bit number using procedure. (W-19) (4M)
- 13. Write an ALP to reverse a string. Also draw flowchart for same. (W-19) (6M)
- 14. Write an ALP to count odd numbers in the array of 10 numbers. (S-22) (4M)
- 15. Write a MACRO to perform 32 bit by 16 bit division of unsigned numbers. (S-22) (4M)
- 16. Write an ALP to find largest number in the array. (S-22) (4M)
- 17. Write an ALP to count number of '0' in 8 bit number. (S-22) (4M)
- 18. Write an ALP to subtract two BCD number using procedure. (S-22) (4M)
- 19. Write an ALP to concatenate two strings. (S-22) (6M)

## Chp 5:

- 20. Define Macro & Procedure. (S-19) (2M)
- 21. Compare Procedure and Macros. (S-19) (4M)
- 22. With the neat sketches demonstrate the use of re-entrant and recursive procedure. (S-19) (W-19) (S-22) (4M)
- 23. Define Macro. Give syntax. (W-19) (2M)
- 24. Give the difference between intersegment and intrasegment CALL (W-19) (4M)
- 25. Write an assembly language program to solve  $p = x^2 + y^2$  using macro. (W-19) (4M)
- 26. Write 2 difference between near & far procedure (S-22) (2M)
- 27. Describe the directives used to define the procedure with suitable example. (S-22) (4M)