



# V2V EDTECH LLP

Online Coaching at an Affordable Price.

## OUR SERVICES:

- Diploma in All Branches, All Subjects
- Degree in All Branches, All Subjects
- BSCIT / CS
- Professional Courses



+91 93260 50669



v2vedtech.com



V2V EdTech LLP



v2vedtech

**12+22+10=44**

**2 Marks Questions**

- (1) State the function of — BHE and Ao pins of 8086.
- (2) How single stepping or tracing is implemented in 8086 ?
- (3) State the role of Debugger in assembly language programming.
- (4) Write ALP for addition of two 8 bit numbers. Assume suitable data.
- (5) List any four instructions from the Bit manipulation instructions of 8086.
- (6) State the use of REP in string related instructions.
- (7) State the function of READY & INTR pin of 8086.
- (8) What is role of XCHG instruction in assembly language program ? Give example.
- (9) List assembly language programming tools.
- (10) Draw flowchart for multiplication of two 16 bit numbers.
- (11) Draw Machine language instruction format for Register-to-Register transfer.
- (12) State the use of STC and CMC instructions of 8086.

**4 Marks Questions**

- (1) Give the difference between intersegment and intrasegment CALL.
- (2) Draw flag register of 8086 and explain any four flags.
- (3) Explain logical instructions of 8086. (Any Four)
- (4) Compare Procedure and Macros. (4 points).
- (5) Explain any two assembler directives of 8086.
- (6) Write classification of instruction set of 8086. Explain any one type out of them.
- (7) Explain memory segmentation in 8086 and list its advantages. (any two)
- (8) Write on ALP to count the number of positive and negative numbers in array.
- (9) Write ALP to find the sum of series. Assume series of 10 numbers.

- (10) With the neat sketches demonstrate the use of re-entrant and recursive procedure.
- (11) Write an ALP to count ODD and EVEN numbers in array.
- (12) Write an ALP to perform block transfer operation of 10 numbers.
- (13) Write an ALP using procedure to solve equation such as  $Z = (A + B) * (C + D)$
- (14) Write an ALP using macro to perform multiplication of two 8 bit unsigned numbers.
- (15) Write an ALP to add two 16-bit numbers.
- (16) Write an ALP to find length of string.
- (17) Write an assembly language program to solve  $p = x^2 + y^2$  using macro. (x and y are 8-bit numbers)
- (18) What is pipelining ? How it improves the processing speed ?
- (19) Write an ALP to count no. of 0's in 16 bit number.
- (20) Write an ALP to find largest number in array of elements 10 H, 24 H, 02 H, 05 H, 17 H.
- (21) Write an ALP for addition of series of 8-bit number using procedure.
- (22) Describe reentrant and recursive procedure with schematic diagram.

### 6 Marks Questions

- (1) Define logical and effective address. Describe physical address generation process in 8086. If DS = 345A H and SI = 13DC H. Calculate physical address.
- (2) Explain the use of assembler directives :
- (i) DW (ii) EQU (iii) ASSUME (iv) OFFSET (v) SEGMENT (vi) EVEN
- (3) Describe any four string instructions of 8086 assembly language.
- (4) Select assembly language for each of the following :
- (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. (vii) Rotate the contents of Dx to write 2 times without carry. (viii) Multiply contents of Ax by 06H. (ix) Load 4000 H in SP register. (x) Copy the contents of Bx register to CS. (xi) Signed division of BL and AL. (xii) Rotate Ax register to right through carry 3 times.
- (5) Write an ALP to reverse a string. Also draw flowchart for same.

- (6) Draw architectural block diagram of 8086 and describe its register organization.
- (7) Demonstrate in detail the program development steps in assembly language programming.
- (8) Illustrate the use of any three Branching instructions.
- (9) Describe any six addressing modes of 8086 with suitable diagram.
- (10) Write an ALP to arrange numbers in array in descending order.

