Question Bank (K scheme)

Name of subject: MICROPROCESSOR Unit Test :I Subject code: 314321 Course : CM

Semester: IV

CHAPTER1: 8086-16 Bit Microprocessor (CO1) (14 Marks)

2 Marks

- 1 List any four Salient features of 8086.
- 2 Define Pipelining and give its two advantages.
- 3 List 16-bit registers of 8086.
- 4 Draw the flag register format of 8086 microprocessor
- 5 Calculate the physical address if:
 - (i) CS = 1200H and IP = DE00H
- 6 State the function of following pins of 8086.
 - (a) TEST (b) BHE'
- 7 State the function of following pins of 8086.
 - (a) ALE (b) DT/R'
- 8 State the function of following pins of 8086.
 - (a) M/IO' (b) READY

4 Marks

- 1 Draw the pin diagram of 8086.
- 2 Draw architecture of 8086 and Label it.
- 3 Explain pipelining in detail with diagram.
- 4 Write any four important functions of BIU.
- 5 Write any four important functions of EU.
- 6 Describe memory segmentation in 8086 with suitable diagram.
- 7 Describe the physical address generation processor in 8086 microprocessors with any suitable example
- 8 Define logical and effective address. If CS = 2135 H and IP = 3478H, calculate Physical Address

CHAPTER 2: The Art of Assembly Language Programming (CO2) (8 Marks)

2 Marks

- 1 State the function of Editor.
- 2 Describe Linker and Debugger.
- 3 Describe following assembler directives.
 - (a) DD (b) STRUCT
- 4 Describe following assembler directives.
 - (a) EQU (b) EVEN
- 5 Difference between Assembler Directive and Instructions.
- 6 Define Assembler Directive
- 7 Draw the different set of symbols used in the flowchart.

4 Marks

- 1 State and explain the steps involved in program development.
- 2 Explain Assembly language program development tools.
- 3 Describe the directives used to define the procedure with suitable example
- 4 Describe any four assembler directives with suitable example
- 5 Give the description of following assembler directives
 - i. OFFSET operator
 - ii. PTR operator
 - iii. TYPE operator
 - iv. GLOBAL operator

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

2 Marks

- 1 Define immediate addressing mode with suitable example.
- 2 State two examples of each, Immediate and based indexed Addressing modes.
- 3 Identify the addressing mode of the following instructions.
 - (a) MUL AL,BL
- (b) MOV DX,0040H

4 Marks

- 1 Sate and explain any four-addressing mode of 8086 with example.
- 2 Explain any four logical instructions of 8086 microprocessor with example
- 3 With suitable example explain following instruction.
 - (a) DAA
- (b) ADC
- (c) MUL
- (d) AAM
- 4 Write assembly language instructions of 8086 microprocessor to
 - (a) Divide the content of AX register by 50H
 - (b) Multiply AL by 08 H.