VIT

Vellore Institute of Technology

(Deemed to be University under section 3 of UGC Act, 1956)

School of Computer Science and Engineering

Winter 2019 - 20

Continuous Assessment Test – I

B-Tech Computer Science and Engineering

Course Code : CSE 2006

Course Name : Microprocessor and Interfacing

Slot: C2

Duration: 90mns

Max. Marks: 50

Answer all questions (5X10=50 Marks)

1. A) Design a flow chart and pseudocode for the following Control structures
   If-Then-else
   Repeat-Until (5)

   B) Explain the function of the following pins: (5)
   NMI, ALE, QS_0 & QS_1, CLK

2. A) (i) Determine the value of BL and the value of the status flags after executing the following instruction sequence.

   MOV BL, 0AFh
   NEG BL (2)

   (ii) If AX=00FFh and BX=00AFH, what will be the content of AX, after the execution of instruction sequence
   MUL BX
   AAM (3)

   B) Discuss about any five assembler directives (5)

3. A) Identify the addressing mode for each of the following instructions. (5)
   a) MOV CL,00H

   b) MOV DI,04000H

   c) MOV AX,[BX+SI+02H]

   d) OUT[DL],AL

   e) MOV DX, 0AH[BX][SI]

   B) Discuss briefly about any five branch control instructions with example (5)

4. Draw and explain the architecture of 8086 with memory segmentation. (10)

5. Write an ALP to find the positive and negative number in the array using 8086 instruction set. (10)