Class Test #01

Date: 31/5/2021 Time: 20mins

1. The following statements are part of a continuous program. Fill up the values of the appropriate flags after sequential execution of each instruction.
   AX = OFFFFH, BX = 8000H, CX = 0001H, DX = 8001H [6]
   (i) ADD AX, CX
   (ii) SUB BX, CX
   (iii) DEC, DX
   (iv) NEG DX
   (v) ROR DX, 3
   (vii) TEST DX, DX

2. Write an assembly language program to calculate Fibonacci series and store it in a byte type array. You must calculate the Nth Fibonacci number using a recursive procedure. [8]

3. For each of the following statements, state the addressing modes of the source and destination operands. [6]
   (i) MOV BX, 1000H
   (ii) MOV DI, 1008H
   (iii) LEA SI, B ;B is an array
   (iv) MOV BYTE PTR [SI], 3
   (v) MOV AX, B[BX+SI+2]
   (vi) MOV [BX] + B, CX