This question paper contains **2** printed pages]

AA—52—2019

FACULTY OF SCIENCE AND TECHNOLOGY

B.Sc. (CS) (Second Year) (Third Semester) EXAMINATION

OCTOBER/NOVEMBER, 2019

(CBCS Pattern)

COMPUTER SCIENCE

(DSE) (Elective–3) 8085 Programming (S3.5)

(Monday, 18-11-2019)	**Time : 2.00 p.m. to 5.00 p.m.**

Time—3 Hours   *Maximum Marks*—75

N.B. :—   (*i*)   *All* questions are compulsory.

(*ii*)   Figures to the right indicate full marks.

1.   Attempt any *five* of the following :   5×3=15

(*a*)   Explain the ALU and Register.

(*b*)   Explain the execute operation.

(*c*)   Explain I/O write.

(*d*)   Explain the implicit addressing.

(*e*)   Explain the arithmetic group.

(*f*)   Explain the assembly language program with syntax.

(*g*)   Explain the branch control group.

2.   Solve the following (any *two*) :   2×5=10

(*a*)   Explain pin configuration of 8085.

(*b*)   Explain the opcode and operand.

(*c*)   Explain the timing and control unit.

3.   Solve the following (any *two*) :   2×5=10

(*a*)   Explain the instruction and data flow.

(*b*)   Explain the fetch operation.

(*c*)   Explain the machine cycle and state.

P.T.O.

4. Solve the following (any *two*) : 2×5=10

    (*a*) Explain the direct addressing.

    (*b*) Explain the register indirect addressing.

    (*c*) Explain the immediate addressing.

5. Solve the following (any *two*) : 2×5=10

    (*a*) Explain the time diagram for opcode fetch cycle.

    (*b*) Explain the memory read and write.

    (*c*) Write an ALP to addition of two 8-bit numbers.

6. Solve the following (any *two*) : 2×5=10

    (*a*) Explain the logical group.

    (*b*) Explain the I/O machine control group.

    (*c*) Explain the data transfer group.

7. Solve the following (any *two*) : 2×5=10

    (*a*) Write an ALP to subtract the content of memory location covo and cool and place the result in cool.

    (*b*) Write an ALP to rotate data in 2000H by 2-bit positions to the left side.

    (*c*) Write an ALP to complement the contents of memory location C00H. Place the result in D00H.