

**FACULTY OF SCIENCE**

B.Sc. (CBCS) V – Semester Examination, November / December 2019

**SUBJECT : ELECTRONICS  
(DSE E-1) Paper – VI (A)  
(8085 Microprocessor and Applications)**

Time : 3 Hours

Max Marks : 60

**PART – A (5x3 = 15 Marks)  
(Short Answer Type)****Note : All the following FIVE question**

1. What are the internal data operations of 8085 microprocessor?
2. Differentiate between maskable and non-maskable interrupts.
3. Explain the ANA and XRA instructions with example
4. What are nested subroutines?
5. Write an 8085 assembly language program for subtraction.
6. What are the flags effected when the following program is executed

```
MVI A, FFH  
ADI 01 H  
STA 8085  
HLT
```

7. Explain the features of 8212 (I/O Port)
8. What are the advantages of closed loop method of control process?

**PART – B (45 Marks)  
(Essay Answer Type)****Note : All the following three question.**

9. a. Give the block diagram of 8085 microprocessor and explain its functions. 11  
OR  
b. What are the timing diagrams? Draw the timing diagram for memory read operation 3+8
10. a. Discuss the classification of an Intel 8085 instructions set. Illustrate your answer with suitable examples 3+8  
OR  
b. Explain in detail the different types of addressing modes in 8085 microprocessor 11
11. a. Write an algorithm to arrange any ten bytes in ascending order and implement the same using 8085 Assembly language Program 4+7  
OR  
b. Write an assembly language program to multiply two given Hex numbers. Explain the logic. 11
12. a. Explain the functioning and interfacing of 8255 Programmable Peripheral Interface with block diagram 12  
OR  
b. Explain the working of any one D/A converter 12