

2018

M.Sc. 4th Semester Examination

ELECTRONICS

PAPER—ELC-405

Subject Code—27

(Practical)

Full Marks : 50

Time : 3 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

(Microprocessor Programming)

Answer any *one* question selecting it by a lucky draw.

1. Write an assembly language program using 8085 microprocessor to add one 8 bit number with another 8 bit number stored at two consecutive memory locations and store the result which may contains carry.
2. Write an assembly language program using 8085 microprocessor to find the largest number in a series of

(Turn Over)

data. The length is given in memory location X and the series starts from X + 1. Store the result in Y.

3. Write an assembly language program using 8085 microprocessor to multiply one 8 bit member with another 8 bit member stored at two consecutive memory locations using repeated addition method.
4. Write an assembly language program using 8085 microprocessor to find the square of a number using 'Look up Table'.
5. Write an assembly language program using 8085 microprocessor to subtract one 8 bit decimal number with another 8 bit decimal number stored at two consecutive memory locations and store the result in the next memory locations.
6. Write an assembly language program using 8085 microprocessor to calculate the sum of series of number. The length of the series is in memory location X_2X_1OOH and the series begins from memory location X_2X_1O1H . Consider the sum to be 16 bit number. Store the sum at memory location Y_2Y_1OOH and Y_2Y_1O1H .

7. Write an assembly language program to calculate the square root of a given number. Store the result in the consecutive memory locations if the number is a perfect square; otherwise an error message FEH in the result memory location.
8. Write an assembly language program in 8085 microprocessor to transfer 10 bytes to data from one memory to another memory block. Source memory block starts from memory location X_2X_100H where as destination memory block starts from memory location Y_2Y_100H .
9. Write an assembly language program in 8085 microprocessor to generate Fibonacci series upto 10th terms.
10. Write an assembly language program to arrange 10 bytes of data in a descending order. The data are stored in memory locations starting from $X050H$ Store the result from the memory locations $X500H$ onwards.
11. Write an assembly language program to compute the sum of 10 natural numbers.

12. Write an assembly language program to perform multibyte addition.

Distribution of Marks

Flow Chart	: 05 Marks
Assembly Language Program	: 10 Marks
Execution of the program	: 10 Marks
Result	: 05 Marks
Discussion	: 05 Marks
Viva-Voce	: 10 Marks
Laboratory Note Book	: 05 Marks
Total	: 50 Marks