

**B.Sc. DEGREE EXAMINATION, APRIL 2019**  
**III Year V Semester**  
**Microprocessor Architecture and Programming**

**Time : 3 Hours**

**Max.marks :60**

**Section A** ( $10 \times 1 = 10$ ) Marks

Answer any **TEN** questions

1. Convert the decimal number to binary number  $(19)_{10}$ .
2. What is an ideal microprocessor?
3. What is a register?
4. What is a stack pointer?
5. Define machine language.
6. What is the use of logic instructions in 8085?
7. Write a short note on direct addressing mode.
8. Define stack.
9. What is algorithm?
10. Give two examples for implied addressing mode.
11. What are the functions of ALU?
12. What do you mean by rotate instructions?

**Section B** ( $5 \times 4 = 20$ ) Marks

Answer any **FIVE** questions

13. Write a short note on BCD code.
14. Write a note on control and status signals.
15. Explain instruction format of 8085.
16. Discuss machine control instructions.
17. Write an assembly language program for adding two eight bit numbers.
18. Convert the following hexadecimal numbers to decimal.  
(a)  $(E9)_H$  (b)  $(FFFF)_H$
19. Explain instruction register.

**Section C** ( $3 \times 10 = 30$ ) Marks

Answer any **THREE** questions

20. Briefly explain the system bus and bus structure.
21. Draw and explain the internal architecture of 8085.
22. Explain the different rotate instructions in 8085.
23. Describe the addressing modes in 8085. Give two examples for each mode.
24. Write a program to pick up the largest among three numbers stored in three locations.  $2050_H$ ,  $2051_H$  &  $2052_H$ .

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