



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc.DEGREE EXAMINATION – COMPUTER SCIENCE

SECOND SEMESTER – APRIL 2018

17/16UCA2AL01- MICROPROCESSOR - 8085

Date: 28-04-2018
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

SECTION – A

Answer ALL the Questions

(10 x 2 = 20 Marks)

1. What is the function of the accumulator?
2. Why data bus is bi-directional?
3. Define T-state.
4. Give the bit positions reserved for the flags.
5. If the 8085 adds 87H and 79H, specify the contents of the accumulator and the status of the S, Z, and CY flag?
6. How many interrupts does 8085 have?
7. What is an addressing mode?
8. Compare CALL and PUSH instructions.
9. How to access subroutine within the main program procedure?
10. How to create counters?

SECTION - B

Answer ALL the Questions

(5 x 8 = 40 Marks)

11. a) Explain organization of a microprocessor based system with bus architecture.
(Or)
b) Explain Interrupt and externally initiated signals in microprocessor 8085.
12. a) Explain instruction decoding and encoding in microprocessor 8085.
(Or)
b) Explain the Internal data operation in 8085 microprocessor.
- 13 a) Explain the Opcode machine fetch cycle.
(Or)
b) Sketch the Memory Read machine cycle of 8085.
- 14a) Write an assembly language program to find largest of N numbers.
(Or)
b) Explain the types of instruction formats with example.
15. a) Explain stack operation with its necessary instruction.
(Or)
b) Explain the Subroutine and its benefits.

SECTION - C

Answer any TWO Questions

(2 x 20 = 40 Marks)

16.a) Explain the pin configuration of Microprocessor 8085.

b) Explain in detail demultiplexing Address/Data bus.

17.a) Explain the timing diagram of I/O read and I/O write cycle.

b) Explain Data Transfer and Machine Control Instructions.

18.a) Explain Counters and Time delay using single register and register pair.

b) Write an assembly language program for Hexadecimal to BCD conversion.

\$\$\$\$\$\$\$\$