



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – COMPUTER SCIENCE

SECOND SEMESTER – APRIL 2017

16UCA2AL01- MICROPROCESSOR - 8085

Date: 27-04-2017
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

PART A

(10*2=20 Marks)

Answer all questions

1. Define Microprocessor.
2. Expand: SLSI, SID.
3. Why the lower byte address bus (A_0-A_7) and data bus (D_0-D_7) are multiplexed?
4. In how many groups the signals of 8085 are classified?
5. Define machine cycle.
6. Define stack.
7. List two instructions associated with subroutines.
8. What is an instruction set?
9. Mention any two conditional branching instructions.
10. What is the use of temporary register?

PART B

Answer all questions

(5*8=40 Marks)

11 a. Explain the advances in semiconductor technology.

(OR)

b. Discuss the block diagram and operation technique of a microprocessor.

12 a. How will you demultiplex the bus AD_7-AD_0 ?

(OR)

b. What are the flags in 8085? Discuss the flag register with an example.

13 a. Draw the opcode fetch machine cycle of 8085 and discuss.

(OR)

b. Draw and explain the timing diagram of I/O write operation.

14 a. Write an assembly language program to add two 8 bit numbers.

(OR)

b. What are the types of addressing modes of 8085 microprocessor? Explain.

15a. Define time delay. Explain time delay using one register.

(OR)

b. Define subroutine. Explain its instructions with example.

PART C

Answer any two questions

(2*20=40 Marks)

- 16 a. Describe in detail about the organization of a microprocessor based system.
b. Draw the pin diagram of 8085 microprocessor and explain in detail
- 17 a. Discuss in detail about Memory read/write operation.
b. Write an assembly language program to find the largest number in an array.
- 18 a. Explain in detail about the instruction set of 8085 microprocessor.
b. Write an assembly language program to find the sum of even numbers.

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