



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc.DEGREE EXAMINATION – COMPUTER SCIENCE

FOURTHSEMESTER – APRIL 2017

CS 4500- MICROPROCESSORS & COMPUTER ARCHITECTURE

Date: 21-04-2017
Time: 09:00-12:00

Dept. No.

Max. : 100 Marks

SECTION – A

ANSWER ALL THE QUESTIONS

(10 X 2 = 20)

1. Define control bus
2. What is program counter?
3. Differentiate the instructions LDA and STA.
4. Write any two Zero address instructions.
5. What is the use of CALL and RETURN
6. What is dynamic debugging?
7. What is the use of status register?
8. What are the phases in instruction cycle?
9. What is hardware interrupt?
10. What are register pair?

SECTION – B

ANSWER ALL THE QUESTIONS

(5X 8 = 40)

11. a) Explain the Bus organization of 8085 with block diagram.
(OR)
b) Explain the memory organization of 8085.
12. a) Explain branching control statements
(OR)
b) List down the registers in the Microprocessor 8085.
13. a) Explain any four memory reference instructions and their usage.
(OR)
b) Explain the advanced subroutine features of Microprocessor 8085.
14. a) Explain Binary adder and Binary Subtractor with block diagram.
(OR)
b) Explain the operations of micro controller.
15. a) Explain DMA and its functionalities in data transfer.
(OR)
b) Explain timing and control in data transfer.

SECTION – C

ANSWER ANY TWO QUESTIONS

(2 X 20 = 40)

- 16.i) Explain Memory Mapped I/O and I/O mapped I/O in detail.
ii) Explain micro computer system with a block diagram
17. i) Explain instruction formats with example.
ii) Write an assemble language program to multiply two numbers in 8085.
18. i) Explain register reference instructions with example.
ii) Explain inter- processor arbitration in detail.
