LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc., B.C.A. DEGREE EXAMINATION – **COMPUTER SCI. & APPLI.**

THIRD SEMESTER – **NOVEMBER 2013**

PH 3208 - MICROPROCESSOR 8085

Date : 13/11/2013   Dept. No.   Max. : 100 Marks
Time : 9:00 - 12:00

PART - A

Answer **ALL** questions   (10 x 2 = 20)

1. What is the significance of ALE in μP8085?
2. What is the difference between hardware interrupts and software interrupts?
3. What are the operations performed by ALU in μP8085?
4. What is the difference between SUB B and CMP B instructions in μP8085?
5. Assume register A holds 75H and register B holds 65H, predict the status of all the flags after ADD B instruction is executed.
6. Explain a three byte instruction with an example
7. What is an interrupt?
8. Explain how 8259 is initialised?
9. What is interrupt I/O?
10. What are the different types of DMA?

PART - B

Answer any **FOUR** questions   (4 x 7.5 = 30)

11. How are the address and the data lines demultiplexed in μP8085?
12. Write an assembly language program to add two numbers of 8 bit data stored in memory locations 4200H and 4201H and store the result in 4202H and 4203H
13. What are the various flags available in 8085? Explain them in detail
14. a)What is 8259 ?   (2)
    b) List the features of 8259   (5.5)
15. Explain the methodology of interfacing I/O devices and peripheral IC's

PART - C

Answer any **FOUR** questions   (4 x 12.5 = 50)

16. With a neat block diagram explain the internal architecture of μP8085
17. Write an assembly language program to search the largest data in an array of data stored in memory starting from 4200H.
18. a) What are the control and status signals of μP8085? Explain them   (9.5)
    b) What is the difference between CALL and JMP instructions?   (3)
19. Explain the working of the programmable interrupt controller 8259 with a neat block diagram.
20. a)What are the operating modes of port 'A' of 8255   (3)
    b) Explain the block diagram of the programmable peripheral interface 8255 (9.5)

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