B.TECH(CSE), 2014
MICROPROCESSORS AND ASSEMBLY LANGUAGE PROGRAMMING
PAPER CODE:CS 208
PAPER ID:[A0461]

Time allowed: 03 hours   **Maximum Marks : 60**

Instruction to candidates:

1) Section-A is compulsory consisting of Ten questions carrying two marks each.
2) Section-B contains Five questions carrying five marks each and students has to attempt any four questions.
3) Section-C contains three questions carrying ten marks each and students have to attempt any two questions.

Section-A

Q:1)

(a) Explain the function of the system controller in 8085?

(b) Write Instructions to load the hexadecimal number 65H in register C, and 92H in the Accumulator A. Display the number 65H at port 0 and 92H at port1?

(c) What are the conditions that will cause BIU to suspend fetching instruction?

(d) List the different categories of 8085 instructions that manipulate data?

(e) What are the various component of emulator?

(f) What is power saving option of 8051?

(g) Give the block diagram of 8086 memory banks?

(h) Assume that the accumulator contains data byte 82H, and the instruction MOV C, A (4FH) is fetched. List the steps in decoding and executing the instruction?

(i) Give the significance of SIM and RIM instruction available in 8085?

(j) Differentiate a microprocessor and a microcontroller?

Section-B

Q:2) Explain the interrupt driven data transfer techniques in 8085?

Q:3) Write an assembly language program in 8085 to find the largest number in a data array?

Q:4) Discuss the interfacing of matrix keyboard with 8085 microprocessor in detail?

Q:5) Discuss PSW in detail for 8085 microprocessor?

Q:6) Explain the different registers used in 8251 USART IC.

Section-C

Q:7) What is microcontroller? Discuss the architecture for 8051 microcontroller?

Q:8) Define the different modes of operation of DMA. What are various control signals generated by DMA controller in master mode?

Q:9) Diagrammatically explain how 8251 is interfaced with 8085 and used for serial communication.

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