Roll No. | | | | | | | | | | | | Total No. of Pages : 2

Total No. of Questions : 09

B.Tech. (CSE/IT) (Sem.–4)

MICROPROCESSORS AND ASSEMBLY LANGUAGE PROGRAMMING

Subject Code : CS-208

Paper ID : [A0461]

Time : 3 Hrs. Max. 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 has to attempt any TWO questions.**

SECTION-A

1. Write briefly :

a) How many address lines are necessary to address four megabytes of memory?

b) Why address bus is unidirectional?

c) What is the importance of RISC Processors?

d) Give the significance of SIM and RIM instructions available in 8085.

e) Differentiate microprocessor, microcomputer and a microcontroller.

f) What do you mean by PSW?

g) What are different modes of data transfer in DMA?

h) What is the purpose of status signals in 8085?

i) What is the purpose of signal ALE in 8085?

j) What is the significance of PUSH & POP instructions?

SECTION-B

2. Discuss various addressing modes for 8085 microprocessor with suitable examples.
3. Explain the concept of machine cycle, instruction cycle and T-state with the help of an example.
4. Explain the concept of Microprocessor Development Systems.
5. Draw the block diagram of internal architecture of 8086. Explain the function of each block.
6. Explain how 8251 can be interfaced with 8085 for serial communication?

SECTION-C

7. Explain how a stepper motor can be interfaced with 8085 Microprocessor.
8. Discuss the architecture for 8051 microcontroller.
9. Discuss the various registers available in 8085.