May 2015
Bachelor of Computer Application (BCA) Examination
VI Semester

Micro Processor and Assembly Language Programming

Time : 3 Hours]   [Max. Marks : 50

Note : *Attempt all Five questions. Write answer of any two parts from each question.*

1. (a) Draw internal block diagram of 8085 microprocessor to show its all internal block units.

    (b) Explain the usage of following functional pins of 8085 :

    (i) READY

    (ii) HOLD

    (iii) INTR

    (iv) S_0, S_1

    (v) ALE.

    (c) Explain different addressing modes of 8085 with an example for each.

2. (a) Write an assembly language program to subtract two BCD numbers. Each number is of two digits. Store the result after subtraction at memory location 2005 H.

    (b) Write an assembly language program to find smallest number among a series of five numbers available from 2000 H onwards. Store the result at 3000 H.

    (c) Explain following instructions :

    (i) LDAX   (ii) CC   (iii) JM   (iv) CPI   (v) DAD.

3. (a) Sketch as interfacing circuit to interface 1 k byte of RAM with 8085 and specify the address assigned to the chip.

    (b) Sketch an interfacing circuit to interface output device using a latch in 8085 system and assign address FF H to the device.

    (c) Explain various address assignment schemes to I/O devices in 8085 system.

4. (a) Draw internal block diagram of 8279 keyboard / display controller.

   (b) Assume address assignment to 1C 8255 starts from 80 H onwards. An input device is connected to Port A and an output device is connected to Port B of IC 8255. Write an application program for 8085 system to read Port A and display the same on Port B after regular time interval.

   (c) Explain timer mode of operation of IC 8155.

5. (a) List different criterias for choosing microcontroller instead of microprocessor.

   (b) Explain internal RAM organization of microcontroller 8051.

   (c) Compare between Microprocessors of diffrent series.

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