Aditya Group of Degree Colleges

ADITYA DEGREE COLLEGES
* ANDHRA PRADESH *
PRE-FINAL - EXAMINATIONS
III B.SC :: *ELECTRONICS*
MICROCONTROLLER AND INTERFACING

Max. Marks : 75 M

Date:

Time: 3hrs

SECTION-A

I. Answer any FIVE of the following questions:　　　　　**5 x 5 = 25 M**

1. Write about evolution of microcontrollers

2. Explain the PSW register of 8051

3. Write about interrupts of 8051 & their priority order.

4. Explain the logical instructions of 8051

5. Explain about TMOD register of 8051

6. Write an ALP for addition of two 16-bit numbers

7. Explain about interfacing of Keyboard with 8051

8. Explain about DAC interfacing with 8051

SECTION-B

II. Answer the following questions:　　　　　**5 x 10 = 50 M**

9. a) Explain the differences between microprocessor and microcontroller

(Or)

   b) Draw the pin diagram of 8051 & Explain each pin in detail.

10. a) Draw the block diagram of 8051 & Expalin the function of each block.

(Or)

   b) Explain about internal & external memory of 8051

11. a) Explain the arithmetic instructions of 8051

(Or)

   b) Explain the Jump & call instructons of 8051

12. a) Write on ALP for multiplication & division of two 8-bit numbers

(Or)

   b) Write an ALP to pick the smallest number in array of data.

13. a) Explain how to interface 8255 with 8051 with a neat diagram.

(Or)

   b) Explain about interfacing of stepper motor with 8051