

# ANURAG ENGINEERING COLLEGE

(An Autonomous Institution)

III Year B.Tech (ECE), I Semester

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## (EC509PC) **MICROPROCESSORS AND MICROCONTROLLERS LAB**

**Note:** Minimum 12 experiments should be conducted:

The Following programs are to be written for assembler and to be executed the same with 8086 and 8051 kits

### List of Experiments:

1. Programmes for 16 bit arithmetic operations for 8086 (Using Various Addressing Modes).
2. Program for sorting an array for 8086.
3. Program for searching for a number or character in string for 8086.
4. Program for string manipulations for 8086.
5. Program for digital clock design using 8086.
6. Interfacing ADC and DAC to 8086.
7. Interfacing 8255 to 8086.
8. Serial communication between two microprocessor kits using 8251.
9. Interfacing to 8086 an programming to control stepper motor.
10. Interfacing LCD to 8086
11. Interfacing 8259 PIC to 8086.
12. Interfacing 8279 keyboard controller to 8086.
13. SRAM/DRAM Interfacing to 8086.
14. Programming using arithmetic, logical and bit manipulation instructions of 8051.
15. Program and verify Timer/counter in 8051.
16. Program and verify Interrupt handling in 8051.
17. Communication between 8051 kit and PC.
18. Interfacing Matrix/Keyboard to 8051.
19. Data Transfer from Peripheral to Memory through DMA controller 8237/8257.