L T P C 0 0 3 2

MICROPROCESSORS AND MICROCONTROLLERS LAB

LIST OF EXPERIMENTS

PART- A: (Minimum of 5 Experiments has to be performed)

8086 Assembly Language Programming using Assembler Directives

- 15. Sorting.
- 16. Multibyte addition/subtraction
- 17. Sum of squares/cubes of a given n-numbers
- 18. Addition of n-BCD numbers
- 19. Factorial of given n-numbers
- 20. Multiplication and Division operations
- 21. Stack operations
- 22. BCD to Seven segment display codes

PART-B: (Minimum of 3 Experiments has to be performed)

8086 Interfacing

- 1. Hardware/Software Interrupt Application
- 2. A/D Interface through Intel 8255
- 3. D/A Interface through Intel 8255
- 4. Keyboard and Display Interface through Intel 8279
- 5. Generation of waveforms using Intel 8253/8254

PART- C: (Minimum of 3 Experiments has to be performed)

8051 Assembly Language Programs

- 1. Finding number of 1's and number of 0's in a given 8-bit number
- 2. Addition of even numbers from a given array
- 3. Ascending / Descending order
- 4. Average of n-numbers

PART-D: (Minimum of 3 Experiments has to be performed)

8051 Interfacing

- 1. Switches and LEDs
- 2. 7-Segment display (multiplexed)
- 3. Stepper Motor Interface
- 4. Traffic Light Controller