III Year II Semester   **L   T   P   C**
17EC613   **0   0   3   2**

MICROPROCESSORS AND MICROCONTROLLERS (MPMC) LABORATORY
LIST OF EXPERIMENTS:

PART- A: (Minimum of 6 Experiments has to be performed)
8086 Assembly Language Programming using Assembler Directives
1. Addition of n-BCD numbers
2. Multiplication and Division operations
3. Multibyte addition/subtraction
4. Sum of squares/cubes of a given n-numbers
5. Factorial of given n-numbers
6. Sorting.
7. String operations
8. Stack operations
9. 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

Equipment Required:

1. Regulated Power supplies
2. Analog/Digital Storage Oscilloscopes
3. 8086 Microprocessor kits
4. 8051 microcontroller kits
5. ADC module
6. DAC module
7. Stepper motor module
8. Keyboard module
9. LED, 7-Segemt Units
10. Digital Multimeters
11. ROM/RAM Interface module
12. Bread Board etc.