#### **SEMESTER VI**

## EC1607 MICROPROCESSORS AND MICROCONTROLLERS LABORATORY

## **LIST OF EXPERIMENTS**

# 8086 Programs using kits

- 1. Basic arithmetic and Logical operations
- 2. Code conversion and Decimal arithmetic operations
- 3. Matrix operations
- 4. String manipulations
- 5. Sorting and Searching

# Peripherals and Interfacing

- 1. Traffic light controller Interface
- 2. Stepper motor control Interface
- 3. Key board and Display Interface
- 4. Parallel interface
- 5. A/D and D/A interface
- 6. Timer Interface

## 8051 Programs and Interfacing

- 1. Basic arithmetic and Logical operations
- 2. Square and Cube program, 2's complement of a number, Unpacked BCD to ASCII
- 3. 8051 Timer/Counter Programming
- 4. 8051 Parallel and Serial Port Programming
- 5. Stepper motor control Interface

## MSP430 Programs and Interfacing using CCS

- 1. Arithmetic Instructions Addition, subtraction, multiplication and division
- 2. Square, Cube
- 3. ADC & DAC Interface
- Stepper motor control interface to MSP

# LIST OF EQUIPMENT

SI.No.	Description of Equipment
1.	8086 Microprocessor trainer kit with powersupply
2.	8051 Microcontroller trainer kit
3.	Interfacing Components
4.	MSP 430 Microcontroller Kit
5.	Personal Computers (INTEL 7)
6.	Code Composer Studio