**Microprocessors and Microcontroller Lab**

**Paper code: ETEE 358**

**LIST OF EXPERIMENTS**

1. Write a program in 8085 to add two 8 bit numbers using:

i. Immediate addressing

ii. Direct addressing

iii. Indirect addressing

2. Write a program in multiply and divide two 8-bit numbers stored in consecutive memory locations.

3. Write a program in 8085 to sort a series of five data bytes in ascending/descending order.

4. Write a program in 8086 to perform following arithmetic operations on two 16 bit numbers:

i. Addition

ii. Subtraction

iii. Multiplication by repetitive addition

5. Write a program in 8086 to generate Fibonacci Series for ten terms.

6. Write a program in 8086 to generate factorial of a number.

7. Write a program in 8086 to transfer a block of ten data bytes from source to destination with and without using string instructions.

8. Write a program in 8051 to add and subtract two 8 bit numbers.

9. Write a program in 8051 to multiply and divide two 8 bit numbers.

10. Write a Program to generate a square wave using 8254.

**LIST OF EXPERIMENTS BEYOND CURRICULUM**

1. Write a program to interface stepper motor with 8086.

2. Write a program to Interface Analog-to-Digital converter to 8086 using 8255 and to read Digital value from ADC.