COURSE TITLE : MICROCONTROLLER AND INTERFACING LAB
COURSE CODE : 4048
COURSE CATEGORY : A
PERIODS/WEEK : 6
PERIODS/SEMESTER :84/4
CREDITS : 3

List of Experiments

On completion of the course, the student will be able:

1. To understand microcontroller programming

1.1 To familiarize with microcontroller kit.
1.2 To write an ALP to multiply two 8 bit numbers.
1.3 To write an ALP to divide two numbers.
1.4 To write an ALP to find sum of a block of N numbers.
1.5 To write an ALP to transfer a block of N data.
1.6 To write an ALP to find number of occurrence of a data in an array.
1.7 To write an ALP to find the largest / smallest data in an array.
1.8 To write an ALP to sort an array in ascending / descending order.
1.9 To write an ALP to convert BCD to Hex / Hex to BCD.
1.10 To write an ALP to convert Binary to ASCII / ASCII to Binary.
1.11 To write an ALP to generate a square wave.
1.12 To write an ALP to implement counter using timer.
1.13 To write an ALP to program using interrupt.

2. To understand interfacing of microcontroller

2.1 To write an ALP to interface digital I/O.
2.2 To write an ALP to interface matrix keyboard.
2.3 To write an ALP to interface seven segment displays.
2.4 To write an ALP to interface LCD Displays.
2.5 To write an ALP to interface traffic light.
2.6 To write an ALP to interface 8 bit ADC.
2.7 To write an ALP to interface 8 bit DAC.
2.8 To write an ALP to interface stepper motor control.
2.9 To write an ALP to interface DC motor control.
2.10 To write an ALP to interface sending data through serial port of controller.