**Experiments using Proteus**

1. Blinking of LEDed using 8051 microcontroller using proteus
2. LED toggle using 8051 using proteus
3. LED chaser using 8051 using proteus
4. Fade in fade out of LED using 8051 using proteus
5. Generation of square wave using proteus
6. Generation of triangular wave using proteus
7. Anticlockwise rotation of stepper motor using 8051 using proteus
8. Clockwise rotation of stepper motor using 8051 using proteus
9. Digital clock using proteus
10. Interfacing of relay and bulb with 8051 using proteus
11. Interfacing of relay and led with 8051 using proteus
12. 7 segment display using 8051 using proteus
13. Digital thermometer using proteus

**Experiment using LPC 2148 Development Kit**

1. Introduction to the LPC 2148 Development kit and Keil Software
2. LED flashing using LPC 2148 kit
3. Accessing an internal ADC and display the binary output in LEDs in LPC 2148 kit
4. Display a number in seven segment LED in LPC 2148 kit
   1. Decimal Numbers
   2. Hexa-Decimal Numbers
   3. Alphabets
5. Square waveform generation with 10-bit DAC using LPC2148 kit
6. Triangular waveform generation with 10-bit DAC using LPC kit
7. Arithmetic operations using LPC 2148 kit
8. Serial transmission and reception using on-chip UART in LPC 2148 kit

**Experiments using Arduino Uno Development Kit**

1. Blinking of an LED using Arduino Uno
2. Fading of an LED using Arduino Uno
3. Interfacing a water-level sensor with Arduino Uno
4. Interfacing an ultrasonic sensor with Arduino Uno
5. MQ-6 gas sensor interfacing with Arduino Uno
6. RFID module interfacing with Arduino Uno
7. Interfacing a buzzer with Arduino Uno
8. LED chaser with Arduino Uno
9. Study of PCB printing using Eagle CAD