|  |  |  |
| --- | --- | --- |
| Exp.No | *Experiment Title* | Page No |
| 01 | Design and develop a reprogrammable embedded Computer using 8051 Microcontroller. | 1-4 |
| 2-a | Configure timer control registers of 8051 and develop a program to generate delay. | 2-8 |
| 2-b | Use of general Purpose I/O port of two controllers for data transfer. | 9-12 |
| 3-a | Simulate Binary Counter (8 bit) on LEDs. | 13-16 |
| 3-b | To interface 8 LEDs at I/O ports and create different patterns. | 17-20 |
| 3-c | To demonstrate timer working in and blink LED without using any loop. | 21-24 |
| 4-a | Serial I/O : Configure 8051 Serial port for Asynchronous Serial Communication. | 25-28 |
| 4-b | To demonstrate seven segments LED display and generate counting from 0 to 99. | 29-32 |
| 4-c | Interface 8051 with D/A converter and generate square wave on Oscilloscope | 33-34 |
| 5-a | Interface 8051 with D/A converter and generate triangular wave on Oscilloscope | 35-36 |
| 5-b | Interface 8051 with D/A converter and generate triangular wave on Oscilloscope with the help of lookup table. | 37-38 |
| 6 | Interface stepper motor with 8051. | 39-42 |
| 7 | Generate Traffic signals. | 43-46 |