

MICROPROCESSOR & MICRO CONTROLLER LAB

Equipment Details:

S.No	Name of the item with specification	Quantity
1.	8051 – Micro Controller Trainer kit LCD version	14
2.	DAC/ADC & Temp sensor interface	8
3.	2 channel DAL interface	10
4.	8 channel ADC interface	10
5.	Interface (ARD 825)	10
6.	Interface card 8255	10
7.	Traffic light control system	10
8.	Interface CARD 8259	10
9.	Interface card 8279	10
10.	EPROM programmer interface board	02
11.	Real time clock / calendar board	10
12.	Stepper Motor interface card	10
13.	Elevator simulator interface	10
14.	8086 micro processor kit	18
15.	Computers (2.8 GHz, 1 GB RAM, P - IV)	18
16.	Computers (2.8 GHz, 2 GB RAM, AMD Dual core processor)	12

List of experiments:

Cycle - I

Introduction to MASM/TASM, KIEL IDE, Familiarization with 8086, 8051 Kits

8086 ALP using kit and MASM

1. Basic arithmetic and logical operations
2. Code conversion decimal arithmetic programs
3. String manipulation programs
4. Display a message on the screen of a computer using DOS / BIOS interrupts.

Cycle – II

Following peripherals and interfacing experiments to be implemented on 8086 and 8051 kits

1. A/D and D/A interfacing
2. Serial interfacing with PC
3. Keyboard and display interfacing
4. Stepper motor controller
5. Traffic light controller
6. Real Time clock interface with 8051 using 1²C