### **ELECTRON DEVICES AND CIRCUITS LABORATORY**

## LIST OF MAJOR EQUIPMENTS

SL. NO	NAME OF THE EQUIPMENTS / SOFTWARE	QUANTITY
1	CRO (30MHz)	15
2	Signal Generator /Function Generators (3 MHz)	15
3	Dual Regulated Power Supplies (0-30V)	15
4	Standalone Desktop PCs with SPICE Software	7
5	Dual Power Supply/ Single Mode Power Supply	15
6	Computer with HDL Software	15

### **PHOTO**



### INTEGRATED CIRCUITS AND DIGITAL LABORATORY

### LIST OF MAJOR EQUIPMENTS

SL. NO	NAME OF THE EQUIPMENTS / SOFTWARE	QUANTITY
1	CRO (Min 30MHz)	15
2	Signal Generator /Function Generators (2 MHz)	15
3	Dual Regulated Power Supplies (0-30V)	15
4	IC Tester	3
5	Standalone Desktops PC	15
6	SPICE Circuit Simulation Software Transistors, Resistors, Capacitors, Diodes, Zener Diodes, Bread Boards	7
7	IC Trainer Kit	15



# NETWORKS, SIGNAL PROCESSING AND EMBEDDED LABORATORY LIST OF MAJOR EQUIPMENTS

SL. NO	NAME OF THE EQUIPMENTS / SOFTWARE	QUANTITY
1	PCs with Fixed / Floating Point DSP Processors (Kit / Add-on Cards)	15
2	MATLAB with Simulink and Signal Processing Tool Box or Equivalent Software in Desktop Systems	
3	Signal Generators (1MHz)	15
4	CRO (30MHz)	15
5	C / C++ / Java / Equivalent Compiler	30
6	Network Simulator like NS2/ NS3/ Glomosim/OPNET/ Equivalent	30
7	Standalone Desktops	30
8	Embedded Trainer Kits with ARM Board	10
9	Embedded Trainer Kits Suitable for Wireless Communication	10



## **COMMUNICATION LABORATORY**

## LIST OF MAJOR EQUIPMENTS

SL.NO	NAME OF THE EQUIPMENTS / SOFTWARE	QUANTITY
1	Kits for Signal Sampling, TDM, AM, FM,PCM, DM and Line Coding Schemes	10
2	CROs	15
3	MATLAB Software Package For Simulation Experiments	10
4	PCs	5



# MICROPROCESSOR AND MICROCONTROLLER LABORATORY LIST OF MAJOR EQUIPMENTS

SL. NO	NAME OF THE EQUIPMENTS / SOFTWARE	QUANTITY
1	8086 Microprocessor Trainer Kit with Power Supply	20
2	8051 Microcontroller Trainer Kit with Power Supply	15
3	Traffic Light Control Interfacing Card Compatible with 8086 & 8051 Trainers	5
4	Stepper Motor Control Interfacing Compatible with 8086 & 8051 Kits	5
5	Digital Clock Interfacing Board Compatible with 8086 & 8051 Kits	5
6	Keyboard and Display Interface Board Compatible with 8086 & 8051 Kits	5
7	Printer Interfacing Card Compatible with 8086 & 8051 Kits	5
3	A/D And D/A Interfacing Card Compatible with 8086 & 8051 Kits	5
9.	Serial And Parallel Interfacing Card Compatible with 8086 & 8051 Kits	5



## VLSI DESIGN LABORATORY

## LIST OF MAJOR EQUIPMENTS

SL. NO	NAME OF THE EQUIPMENTS / SOFTWARE	QUANTITY
1.	Xilinx FPGA Software	15
2.	Tanner Software	12 User License
3.	PCs	30



#### **OPTICAL AND MICROWAVE LABORATORY**

### LIST OF MAJOR EQUIPMENTS

SL.NO	NAME OF THE EQUIPMENTS / SOFTWARE	QUANTITY
1.	Trainer Kit for Carrying Out LED and PIN Diode Characteristics, Digital Multi Meter, Optical Power Meter	
2.	Trainer Kit for Determining the Mode Characteristics, Losses in Optical Fiber	2
3.	Trainer Kit for Analyzing Analog and Digital Link Performance, 2 Mbps PRBS Data Source, 10 Mhz Signal Generator, 20 Mhz Digital Storage Oscilloscope	2
4.	Kit for Measuring Numerical Aperture and Attenuation of Fiber	2
5.	MM/SM Glass and Plastic Fiber Patch Chords with ST/SC/E2000 Connectors	2 Set
6.	Leds with ST / SC / E2000 Receptacles – 650 / 850 Nm	2 Set
7.	PIN Pds With ST / SC / E2000 Receptacles – 650 / 850 Nm	2 Set
8.	Microwave Test Bench at X Band to Determine Directional Coupler Characteristics	2
9.	Microwave Test Bench at X Band And Antenna Turn Table to Measure Radiation Pattern of Horn Antenna, 2 Horn Antennas	2

Microwave Test Bench at X Band to Determine VSWR for Isolator and Circulator, VSWR Meter, Isolator, Circulator, E Plane Tee, H Plane Tee	2
 Microwave Test Bench at X Band, Variable Attenuator, Detector and 20 Mhz Digital / Analog Oscilloscope	2

