

Department: Electronics & Communication Engineering (ECE)

S.No	Name of the Laboratory	Year	Semester
1	COMMUNICATION SYSTEMS AND CIRCUITS-I	II	IV
2	ANALOG ELECTRONICS I & II	II	III & IV
3	DIGITAL CIRCUITS AND SYSTEMS – I,II	III	V
4	MICROPROCESSOR SYSTEM – I LAB	III	VI
5	TELECOMMUNICATION NETWORKS LAB	III	VI
6	ORCAD AND MAT LAB	IV	VII & VIII
7	OPTICAL COMMUNICATION	IV	VII
8	MOBILE & SATELLITE COMMUNICATION LAB	IV	VIII
9	EMBEDDED SYSTEMS LAB	IV	VIII
10	CONSUMER ELECTRONICS LAB	IV	VIII

DEPARTMENT: ELECTRONICS & COMMUNICATION ENGG. (ECE)

NAME OF LAB : COMMUNICATION SYSTEMS AND CIRCUITS-I

EQUIPMENT AVAILABLE:-

<u>S.No.</u>	<u>NAME OF EQUIPMENT</u>	<u>QUANTITY</u>
1.	Amplitude Modulation Kit	2
2.	Analog Signal Sampling & Reconstruction Kit	2
3.	Data Formulating Trainer	2
4.	Data Reformatting Trainer	2
5.	Analog C.R.O	4
6.	Digital C.R.O	3
7.	Delta Modulation Kit	2
8.	Frequency Modulation Kit	2
9.	Digital Function Generator	1
10.	PAM Kit	2
11.	PCM Kit	2
12.	PWM Kit	2
13.	PPM Kit	2

DEPARTMENT: ELECTRONICS & COMMUNICATION ENGG. (ECE)**NAME OF LAB: ANALOG ELECTRONICS I & II**

S.No.	NAME OF EQUIPMENT	QUANTITY
1.	Junction diode Rectifier & filter Characteristics ETB – 81	1
2.	Diode & Zener diode ETB – 51	1
3.	Zener Regulated Power Supply ETB-109	1
4.	Analog C R O	9
5.	Transistor Characteristics ETB – 52	1
6.	Transistor Biasing Techniques ETB – 105	1
7.	FET Characteristics ETB – 53	1
8.	MOSFET Characteristics ETB – 78	1
9.	OP-AMP Mathematical Operations ETB-151	1
10.	OP-AMP Applications ETB-152	1
11.	Two Stage R.C. Coupled Amplifier ETB-45	1
12.	Digital Multimeter	1
13.	Digital Autorange Multimeter	6
14.	Band Lop in a Semi Conductor device	1
15.	Analog Function Generator	3
16.	Digital Function Generator	9
17.	A.C.Millivoltmeter Omega	2
18.	Bread Board	7
19.	Voltmeter D.C. (Analog Type)	
	(i) 0 -IV	3
	(ii) 0 -5V	3
	(iii) 0-10V	3
	(iv) 0-15V	3
	(v) 0-20V	3
	(vi) 0-25V	3
	(vii) 0-30V	3
	(viii) 0-40V	3
	(ix) 0-50V	
20.	Ammeter D.C. (Analog Type)	
	(i) 0 -100 MA	3
	(ii) 0 -200 MA	3
	(iii) 0- 500 MA	3
	(iv) 0- 1m A	3
	(v) 0- 5 m A	3
	(vi) 0-10 mA	3
	(vii) 0-20 mA	3
	(viii) 0-30 mA	3
	(ix) 0- 40 mA	3
	(x) 0 -50 mA	3
	(xi) 0 – 200 mA	3
21.	D.C. Power Supplies (500 mA)	
	0-10v + 0-10v	8
	0-12v + 0-20v	5
	0-IV + 0-6v + 0-15v	6
	0-IV + 0- IV + 0-IV + 15 V	6
	0-30 V	3
	+ 15VDC	10

DEPARTMENT: ELECTRONICS & COMMUNICATION ENGG. (ECE)

NAME OF THE LAB: DIGITAL CIRCUITS AND SYSTEMS – I,II

<u>S.No.</u>	<u>NAME OF EQUIPMENT</u>	<u>QUANTITY</u>
1.	Bread Board	10
2.	Digital Multimeter	03
3.	Power Supplies 5VDC, 500Ma	10
4.	Digital Logic Trainer (TTL) ‘Omega’ LTB 81	01
5.	Digital Logic Trainer (CMOS) ‘Omega’ LTB 842	01
6.	Digital IC Trainer (TTL) ‘Omega’ LTB 843	
7.	Digital Lab Scientech ST 2611	01
	(a) Logic Gates DBO1	01
	(b) Universal Gates DBO2	01
	(c) EX-OR Gate Implementation DBO3	01
	(d) Code Conversion (Binary to Gray) & (Gray to Binary) DBO6	01
	(e) Code Conversion (BCD to Exced-3 Code) DBO7	01
	(f) Binary Adder/Subtractor DBO8	01
	(g) Encoder/Decoder DBO9	01
	(h) Mux/Demux DB10	01
	(i) Shift Register DB12	01
	(j) 4-bit Synchronious Binary Counter DB 13	01
	(k) 4-bit Ripple Counter DB 14	01
	(l) BCD to 7 segment Decoder DB15	01
	(m) Digital to Analog Convertor DB16	01
	(n) Analog to Digital Convertor DB22	01
	(o) Power Supply for Digital Board ADO1	01
	(p) Flop flops DB11	01
8.	ICs As per requirement	
9.	Computer Systems	30
10.	ORCAD Capture	05 user
11.	ORCAD PSPICS A/D	02 user

NAME OF LAB : MICROPROCESSOR SYSTEM – I LAB**EQUIPMENT AVAILABLE:**

<u>S.No</u>	<u>NAME OF EQUIPMENT</u>	<u>QUANTITY</u>
1.	8085 Microprocessor Trainer ‘OMEGA’ OE J Q5 A	4
2.	Microprocessor Development System (VMC –ICE 8085 P)	8
3.	Stepper Motor Controller Module with Motor (Vinytics)	2
4.	Traffic Light controller Module	2
5.	Solid State Relay Module Sr. No. 92801 (IF – 7)	1
6.	Dual D to A Converter Module Sr. No. 92408 (IF-3)	1
7.	ADC Module for OEG -31 Sr. No. 92295 (IF-2)	1
8.	16-Channel A to D Converter Module, Sr.No. 92293(IF-1)	1
9.	Triggering of a Thyristor Module (IF-14)	1
10	Motor Interface Module (IF-13)	1
11	Digital IC Tester Module (IF-11)	1
12	Switch and LED Module (IF-5)	1
13	Digital to Analog Convertor Module (IF-4)	1
14	Logic Controller Card	1
15	8279 Study Card	2
16	8155 Study Card	2
17	8212 Study Card	2
18	8253 Study Card	2
19	8255 Study Card	2

NAME OF THE LAB: TELECOMMUNICATION NETWORKS LAB
EQUIPMENT AVAILABLE:

<u>S.No.</u>	<u>NAME OF EQUIPMENT</u>	<u>QUANTITY</u>
1.	D.T.M.F Telephone Trainer	1
2.	I.S.D.N. Trainer	1
3.	Variable Binary Data Generator	2
4.	Transmission Line Trainer	3
5.	10 MHZ Microcontroller based Modulation Pulse Generator	4
6.	Digital Multimeter	2
7.	PAM-PPM-PWM Modulation & demodulation trainer	3
8.	30 MHz Microcontroller CRO	3
9.	TDM Pulse Code Modulation / Transmitter Trainer	2
10.	Delta, Adaptive & Delta Sigma Mod./demodulation Trainer	2
11.	1 MHz Function Generator	5
12.	TDM Pulse Code Modulation receiver Trainer	2

NAME OF LAB: ORCAD AND MAT LAB
EQUIPMENTS AVAILABLE

<u>S.No.</u>	<u>Name of Equipments</u>	<u>Quantity</u>
1.	Computer Systems	30
2.	ORCAD Capture	05 user
3.	ORCAD PSPICE AID	02 user
4.	MAT Lab 7.0	10 user
5.	SIMULINK 6.0	05
6.	Signal Processing Tool Box 6.2	05
7.	Filter Design Tool Box 3.0	05
8.	Communication Tool Box	05
9.	Communication Block Set	05
10.	Control System Tool Box 6.0	05

NAME OF LAB: OPTICAL COMMUNICATION

EQUIPMENTS AVAILABLE

<u>S.No.</u>	<u>Name of Equipments</u>	<u>Quantity</u>
1.	30 MHz Microcontroller CRO	6
2.	Advanced Fiber Optic Trainer (dual Channel)	6
3.	Multiplexer/demultiplexer coder/decoder trainer	2
4.	Optical Transducer Trainer	1
5.	Laser Optics Trainer	1
6.	Optical Power Meter	6