BHAGWAN PARSHURAM INSTITUTE OF TECHNOLOGY

Department of Electrical and Electronics Engineering

1. **Name of the Lab:** Electrical Science Lab
2. **Status / List of Instruments /Equipment:**

S. No.	Name of Equipment	Quantity	Details
1.	Ammeters	21	Assorted
2.	Voltmeters	12	Assorted
3.	Wattmeter	6	Assorted
4.	Tachometers	1	60-50,000Rpm
5.	Single phase Auto Transformers	6	15A, 0-260V
6.	Three Phase Auto Transformer	1	15A, 0-470V
7.	Transformers	3	Assorted
8.	Rheostat	5	5A-5Ω, 5A-100Ω
9.	Induction motor	1	3φ, 2 HP 1400Rpm
10.	DC motors	2	1440 Rpm,220 V
11.	Inductive load	3	1 KVA, 4A
12.	Starters	4	Assorted
13.	Circuit theorems verification kits	3	Trainer kit to verify various circuits theorems
14.	Energy meter	3	Assorted
15.	DC power supply	1	5A, 0-12V
16.	Digital multimeter	2	--
17.	Oscilloscopes	3	Analog type

3. **Up-gradation undertaken as per new technological developments and requirements of the course curriculum:**

Regular maintenance incorported in labs. Experiments are supported by softwares like MATLAB 2024a, Turnitin, Turbo C+, Scilab 6.1.

BHAGWAN PARSHURAM INSTITUTE OF TECHNOLOGY

Department of Electrical and Electronics Engineering

1. **Name of the Labs:** Electrical Machines lab, Power System lab
2. **Status / List of Instruments /Equipment:**

S. No.	Name of Equipment	Quantity	Details
1.	3- Phase Induction motor	1	1 HP / 0.75 KW, 1440 RPM
2.	D.O.L Starter	1	3 HP, 415V, Relay Range 4-6.5A
3.	Star-Delta starter	1	3-phase, 400V, 50 Hz, Relay Range: 9-14A
4.	DC shunt generator: coupled with DC shunt motor	1 set	1.0 kW, 230 V, DC
5.	DC compound generator: coupled with DC shunt motor	1 set	1.0 kW, 230 V DC
6.	Alternators: coupled with DC shunt motors	3 sets	2 kVA, 415 V, 3-phase, 50 Hz AC
7.	DC shunt motors	4	2 HP and 0.5 HP, 230 V DC
8.	Transformers	5	1-ph., 230 V and 3-ph. 415 V
9.	AC motors	5	2 HP and 1 HP
10.	Variacs	4	1-phase and 3-phase
11.	Loads	7	Assorted
12.	Starters fixed in panels	11	Assorted
13.	Tachometers	4	Digital
14.	Frequency meters fixed in panels	2	--
15.	Power factor meters in panels	2	--
16.	Wattmeters	7	Assorted
17.	Rheostats	13	Assorted
18.	Rubber Mats	13	--
19.	Panel for Z & Y parameters of the given transmission line.	1	Experimental setup
20.	Panel for ABCD parameters of the given transmission line.	1	Experimental setup
21.	Panel for image parameters of the given transmission line.	1	Experimental setup
22.	Kit for cable fault locator.	1	Experimental Kit
23.	Megger	1	Instrument to measure earth resistance.
24.	Kit to draw equi-potential lines for single layer cable.	1	Experimental Kit
25.	Multimeter	2	Analog type
26.	Panel for operating characteristics of IDMT relay.	1	Experimental setup
27.	Panel for operating characteristics of an instantaneous over current relay.	1	Experimental setup
28.	Panel for operating characteristics of an over voltage relay.	1	Experimental setup
29.	Panel for operating characteristics of directional over current relay.	1	Experimental setup
30.	Kit for operating characteristics of MCB	1	Experimental Kit
31.	Kit to study three phase fault as practical application in transmission line.	1	Experimental Kit

32.	Panel for single line to ground fault as practical application in transmission line.	1	Experimental setup
33.	Panel for C.T testing by silsbee's method	1	Experimental setup
34.	Tong tester	2	Experimental setup
35.	Experimental set up for thermal relay & fuse characteristics	1	Experimental setup
36.	LCR meter	2	-
37.	Computer	1	HP, Intel core i3 CPU, 2 GB RAM with 17-inch monitor

3. **Up-gradation undertaken as per new technological developments and requirements of the course curriculum:** Yes

BHAGWAN PARSHURAM INSTITUTE OF TECHNOLOGY

Department of Electrical and Electronics Engineering

1. **Name of the Labs:** Power Electronics Lab, Network and Analysis Lab, Electric Energy Conservation Lab
2. **Status / List of Instruments /Equipment:**

S. No.	Name of Equipment	Quantity	Details
1.	Bread board	5	--
2.	Ammeters	3	Assorted
3.	Voltmeters	1	Assorted
4.	H, Y parameter kit	1	Experimental kit
5.	Power supplies	5	0-15V
6.	Multimeters	5	Digital
7.	To study series inverter using SCR complete set-up	1	Experimental Kit
8.	To study the Morgan & John's Chopper circuit complete set-up	1	Experimental Kit
9.	To study ac phase control circuit using Triac complete set-up	1	Experimental Kit
10.	SCR characteristics trainer set-up with meters	1	Trainer Kit
11.	Triac/Diac characteristics trainer set-up with meters	1	Trainer Kit
12.	UJT characteristic and relaxation oscillator set-up with meter	1	Trainer Kit
13.	Experimental set-up for speed control of D.C. motor using SCR with LCD display	1	Complete setup
14.	Experimental set-up for UJT trigger circuit with meter for SCR	1	Complete setup
15.	Experimental set-up for RC trigger circuit for SCR with voltmeter	1	Complete setup
16.	Experimental set-up of speed control of A.C. motor using SCR with LCD display	1	Complete setup
17.	Commutation circuits of SCR trainer kit	1	Complete setup
18.	MOSFET characteristics trainer set-up with meters	1	Trainer Kit
19.	FET characteristics trainer set-up with meters	1	Trainer Kit
20.	CRO	3	Analog
21.	Rubber Mats	2	For safety purpose
22.	Experimental set-up for studying polar plot of different lamps	1	Complete setup
23.	Experimental set-up to verify inverse square law for intensity of light and measurement of light intensity of different bulbs.	1	Complete setup
24.	Experimental set-up for C.T. testing by null detection method	1	Complete setup
25.	Complete set-up for single phase energy meter calibration/testing	1	Complete setup

26.	Experimental set-up for measurement of power using C.T. and P.T.	1	Complete setup
27.	Experimental set-up for improvement of power factor	1	Complete setup
28.	Lux meter	2	To measure luminous flux
29.	Digital clamp meter	1	Digital
30.	Induction cooktop, heater, steel utensils for thermal efficiency comparison experimental setup	1	Experimental setup
31.	Experimental setup for power factor improvement of three-phase induction motor	1	Experimental setup
32.	Power factor improvement of single-phase induction motor	1	Experimental setup
33.	Ceiling fan (dedicated for experimental work)	1	230V, 50 Hz, 1-phase induction motor
34.	Fan regulators	01 each	electronic, resistance type
35.	Stroboscope	1	-
36.	Experimental setup for tube light connection	1	Experimental setup
37.	Electronic, Al and Cu ballast	01 each	-
38.	Experimental set to study electronic starter of a miniature tube light	1	Experimental setup
39.	Digital ammeters	2	-
40.	Digital wattmeter	1	-
41.	Pf meter	1	-

3. **Up-gradation undertaken as per new technological developments and requirements of the course curriculum:** Yes

BHAGWAN PARSHURAM INSTITUTE OF TECHNOLOGY

Department of Electrical and Electronics Engineering

1. **Name of the Lab:** Introduction to Control Systems Lab, Circuits & Systems Lab
2. **Status / List of Instruments /Equipment**

S. No.	Name of Equipment	Quantity	Details
1.	Bread board	6	Assorted
2.	Ammeters	6	Assorted
3.	Voltmeters	6	Assorted
4.	Computer desktop	1	HP,Intel core i3 CPU, 2 GB RAM with 17 inch monitor
5.	Power supplies	5	0-15V
6.	Multimeters	2	Digital
7.	A.C. servo motor kit.	1	Experimental kit to find speed-torque characteristic
8.	D.C. servo motor kit.	1	Experimental kit to find speed-torque characteristic
9.	Synchro transmitter-receiver pair kit.	1	Experimental kit
10.	Oven temperature controllers kit (P-I-D)	1	Experimental kit
11.	Stepper motor Kit.	1	Experimental kit
12.	P.I.D controller Kit.	1	Experimental kit
13.	D.C. Position Control Kit.	1	Experimental kit
14.	Relay control scheme.	1	
15.	Multimeters	4	2 Analog + 2 Digital
16.	C.R.O. (Tektronix)	2	Digital
17.	Compensator Kit	1	Experimental kit
18.	Digital Control Trainer Kit	1	Experimental kit
19.	Digital phase meter kit	2	-
20.	Linear variable differential transformer kit	1	-
21.	Linear system simulator kit.	1	-
22.	Stepper motor trainer kit with 8085 microprocessor	1	-
23.	Lift control module with PLC kit	2	-
24.	Pick and Place Module Kit	1	-

3. **Up-gradation undertaken as per new technological developments and requirements of the course curriculum:** Yes

BHAGWAN PARSHURAM INSTITUTE OF TECHNOLOGY

Department of Electrical and Electronics Engineering

1. **Name of the Lab:** Electric Drives Lab, EEMI Lab, Electrical Engineering Workshop Lab
2. **Status / List of Instruments /Equipment:**

S. No.	Name of Equipment	Quantity	Details
1.	Single phase electromechanical energy meter	1	5-30A, 230V, Induction type
2.	Single phase electronic energy meter	1	-
3.	Three phase electronic energy meter	1	-
4.	Kelvin's Double Bridge	1	Experimental Trainer Kit
5.	Maxwell's Bridge	1	Experimental Trainer Kit
6.	Hay's Bridge	1	Experimental Trainer Kit
7.	Anderson's Bridge	1	Experimental Trainer Kit
8.	Owen's Bridge	1	Experimental Trainer Kit
9.	Desauty's Bridge	1	Experimental Trainer Kit
10.	Schering Bridge	1	Experimental Trainer Kit
11.	Tri vector meter	1	A measuring instrument to measure active, reactive and apparent power
12.	Three phase fully controlled bridge converter (panel)	1	Experimental setup
13.	Experimental Kit for speed control of DC motor through chopper	1	Experimental setup
14.	Working panel for speed control of Induction motor (V/F control)	1	Experimental setup
15.	Micro controller-based speed control of DC motor (kit)	1	Experimental setup
16.	Experimental kit for single phase half-controlled DC Drive	1	Experimental setup
17.	Panel of MOSFET controlled three phase voltage source inverter	1	Experimental setup
18.	CRO	2	Analog type
19.	Kit for closed loop control of BLDC motor	1	Experimental setup
20.	Multimeter	2	Analog type
21.	Rubber Mats	4	For safety purpose

3. **Up-gradation undertaken as per new technological developments and requirements of the course curriculum:** Yes

BHAGWAN PARSHURAM INSTITUTE OF TECHNOLOGY

Department of Electrical and Electronics Engineering

1. **Name of the Lab:** Computer Lab
2. **Status / List of Instruments /Equipment:**

Hardware

S. No.	Name of Equipment	Quantity	Details
1.	Computers (DESKTOP)	30	HP i5-6500 @ 3.20GHz, SSD-512 GB, RAM-16 GB, TFT-18.5"
2.	Printer	01	HP-1020 laser jet
3.	Networking Switch	02	Networking Switch RAC D-Link 24 Port Switch
4.	UPS	01	Nexus 10kVA
5.	Web Camera	03	Logitech 270
6.	Headphone with MIC	03	Zebronics

Software

S.No.	Name of Software	Licensed/Open Source
1.	Microsoft Windows 10	Licensed
2.	Office 2016	Licensed
3.	MATLAB 2024a	Licensed
4.	Turbo C++	Open Source
6.	Scilab 6.1.1	Open Source

3. **Up-gradation undertaken as per new technological developments and requirements of the course curriculum:**
   - Purchased license of MATLAB2024a
   - Purchased Turnitin software for Plagiarism check.
   - RAM of all the computers is upgraded from 4 GB to 16GB.

BHAGWAN PARSHURAM INSTITUTE OF TECHNOLOGY

Details of the Laboratories

1. **Name of the Lab: Applied Chemistry & EVS Lab**

2. **Status / List of Instruments /Equipments**

1. Hot Plate 2. Conductivity meter 3. Distillation Unit 4. Oven 5. Incubator 6. Colorimeter 7. Turbidity Meter 8. Dessicator 9. Digital Balance 10. pH Meter

3. **Up-gradation undertaken as per new technological developments and requirements of the course curriculum** Yes

Mechanical Labs

(1)

Name Of Program :- B.Tech -1st Sem

S.No	Name of	Major Equipment	Quantity	List of
1	Engineering Graphics lab	There are 60 drawing table with seating stool , and wooden models box (01) containing some basic geometrical solids	61	

Name of Laboratory:- Workshop (Welding) (2)

S.No	Name of Laboratory	Major Equipment	Quantity	List of Equipment Added During Previous years
1	Workshop(Welding Shop)	Are Welding M/C	1	
2		Are Welding holder with cable	2	
3		Are Welding Earth Cable with Holder	1	
4		Apron	8	
5		Are WeldingScreen	9	
6		Acetylen Gas Cylinder	1	
7		Blow Lamp	1	
8		Chipping Hammer	2	
9		Esab Make Welding Tourch (Blow Pipe)	1	
10		Gas Cutter	1	
11		Goggales Gas Welding	21	
12		Gas lighter	2	
13		Head Shieled	3	
14		Hand Gloves Leather	7pair	
15		Oxygen Gas Cylinder	1	
16		Regulator Oxygen Cylinder	1	
17		Regulator Acetylon Cylinder	1	
18		Tong	7	

Name Of Program :- B.Tech -1st Sem

Name of Laboratory:- Workshop (Sheet Metal) (3)

S.No	Name of	Major Equipment	Quantity	List of
1	Workshop (Sheet Metal)	Bench Vice	4	
2		Bench Shear	1	
3		Block Square(8"X6")	1	
4		Snip(Abiation Tin)	10	
5		Hand Shear big	1	
6		Mallet (Big)	25	
7		Mallet (Small)	13	
8		Plier(Wire cutter)	4	
9		Riveting Hammer	2	
10		Snip (Large,12")	4	
11		Snip(Small,10",8")	15+2=17	
12		Wire Gauge	3	

Name Of Program :- B.Tech -1st Sem

...e of Laboratory :- Workshop (Fitting Shop)

S.No		Major Equipment	Quantity	List of
1		Bench Vice	36	
2		Cross Peen Hammer	17	
3		Chisel 6"	2	
4		Centre punch	21	
5		C Clamp 6"	6	
6		C Clamp 8"	6	
7		Drilling M/C	1	
8		Die Set	1set	
9		Die Handle	3	
10		Die Cutting outside	4	
11		Drill Bit	15	
12		Ball peen Hammer	2	
13		Bevel Protractor	5	
14		Grinding M/C	1	
15		Hand Hacksaw	20	
16		Power Hacksaw	1	
17		Hand Vice	14	
18	Workshop (Fitting Shop)	Hammer Straight Face	10	
19		Hand Hacksaw Plastic Frame	25	
20		Inside Caliper	6	
21		Surface Plate 24"×18 "	1	
22		Scriner 6"	15	
23		Screw Pitch Gange	1	
24		Spanner	1set	
25		Sledge Hammer	1	
26		Divider	5	
27		Swage Block	1	
28		Scale Steel Rule	39	
29		Screw Driver	3	
30		File Flat 12"	9	
31		File Flat 10"	2	
32		File Flat smooth 10"	16	
33		File Flat Smooth Triangular 5"	11	
34		File Smooth Triangular 6"	20	
35		File Rough Halfround 12"	20	
36		File rough halfround 10"	9	
37		File Smooth Halfround 6"	16	
38		File round 12"	3	
39		File Round 10"	2	
40		File round 8"	8	
41		File Square 12"	2	
42		File Square 8"	4	
43		File Square 6"	10	
44		Odd leg Caliper 6"	6	
45		Outside Caliper	7	
46		Nose Plier	5	
47		Number Punch set	1set	
48	Workshop (Fitting Shop)	Allen key set	1set	
49		Ajustable Wrench	1	
50		Anvil(50kg)	2	

51		Letter Punch	1set	
52		Levelor Aluminium	1	
53		Pipe Wrench (8",12")	1+1=2	
54		Rail	3	
55		Unniversal Marking Gange	2	
56		Try Square 6",8"	9+5=14	
57		Try Squre With Scale 6"	5	
58		Vice Drilling	2	
59		Vee Block 3"	4	
60		Drill Set	1	

Name Of Program :- B.Tech -1st Sem

Name of Laboratory :- Workshop(Machine Shop) **(5)**

S.No		Major Equipment	Quantity	List of Equipment
1	Workshop(Machine Shop)	Lathe Machine(4.5')	1	
2		Threading Tool(12mmx4")	1	
3		Turning Tool Bit(12mmX4")	6	
4		Grooving Tool	1	
5		Knurling Tool	1	
6		Revolving Centre	1	
7		Vernier Caliper(8")	1	
8		Outside Micrometer(0-25mm)	1	
9		Outside Micrometer(25-50 mm)	1	
10		Tool Holder(12mm)	1	
11		Parting Tool holder	1	
12		Parting Tool bit	1	
13		Drill Chuck With sleeve	1	
14		Radius Gauge	1	
15		CenterDrill	5	
14		Radius Gauge	1	
15		CenterDrill	5	

NO-8

APPLIED PHYSICS LAB-I

S. No.	NAME OF THE LABORATORY	MAJOR EQUIPMENTS	QTY	LIST OF EQUIPMENTS ADDED DURING PREVIOUS YEARS
1	Applied Physics	Bar Pendulum Set with steel strips, Wall Bracket and Knife Edges	4	
2	-do-	Kater's Pendulum with wall bracket and weights	2	
3	-do-	Flywheel with counter weights	2	
4	-do-	Newton's Rings set up (Compact Type)	3	
5	-do-	Polarimeter –Half Shade with glass tube, Cylinders etc.	2	
6	-do-	Diffraction Grating	2	
7	-do-	He- Ne Laser with Optical Bench and Uprights	4	
8	-do-	Optical Fibre	2m	
9	-do-	Sodium Vapour Lamp with Leak Transformers	4	
10	-do-	Mercury Vapour Lamps with Choke	4	
11	-do-	Digital Weighing Machine	2	
12	-do-	Stop Watch	12	
13	-do-	Screw Gauge	10	
14	-do-	Vernier Callipers	9	
15	-do-	Prism	9	
16	-do-	Magnifying Glass	8	
17	-do-	Aneroid Barometer	1	
18	-do-	Meter Scale	7	
19	-do-	Planck's Constant Kit	4	
20	-do-	L.E.D. Set	2	
21	-do-	Spirit Level	4	
22	-do-	Spectrometer	9	
23	-do-	Thermometer -110°C	5	
24	-do-	Therometer-250°C	15	
25	-do-	R F Oscillator	4	
26	-do-	Table Lamps	14	
27	-do-	Ultrasonic Grating (Beaker, Clamps and Crystal)	2	

APPLIED PHYSICS LAB-II

S. No.	NAME OF THE LABORATORY	MAJOR EQUIPMENTS	QTY	LIST OF EQUIPMENTS ADDED DURING PREVIOUS YEARS
1	Applied Physics	e/m using Thomson method Kit with compass Box and Bar Magnets	2	
2	-do-	Digital Multimeter	4	
3	-do-	Carey Foster's Bridge	2	
4	-do-	Meter Bridge	1	

No-8

S. No.	NAME OF THE LABORATORY	MAJOR EQUIPMENTS	QTY	LIST OF EQUIPMENTS ADDED DURING PREVIOUS YEARS
5	-do-	Resistance Box-Unknown(Bakelite case)	2	
6	-do-	Galvanometer	11	
7	-do-	One Way key	12	
8	-do-	Battery Eliminator(2-12V/ 5 A)	11	
9	-do-	Resistance Box Manganin Coils 0.01-1 ohm	2	
10	-do-	Resistance Box Manganin Coils 1- 10 ohm	6	
11	-do-	Resistance Box Manganin Coils 1-5K ohm	2	
12	-do-	Resistance Box Manganin Coils 1-10K ohm	2	
13	-do-	Lechlanche Cell with Porous Pot and Zinc rod	2	
14	-do-	Porous Pot and Zinc rod	8	
15	-do-	Rheostat	4	
16	-do-	Ammonium Chloride	2 Kg	
17	-do-	Rubber Tubings (8mm Bore)	15m	
18	-do-	Cathode Ray Oscilloscope	3	
19	-do-	Thermocouple with sand bath	2	
20	-do-	Heating Plate	4	
21	-do-	Function Generator	4	
22	-do-	Zener Diode Kit	2	
23	-do-	Charging and Discharging Kit	3	
24	-do-	Thermometer -110°C	5	
25	-do-	Therometer-250°C	15	
26	-do-	Bar Magnet 2"	4	
27	-do-	Four Probe Set up (Crystal, Thermometer, Oven)	2	
28	-do-	Hall Effect Set up (Power supply, Gaussmeter, Digital Meter, Electromagnets, Crystal)	1	
29	-do-	Borosil Beaker	6	
30	-do-	D.C.C. wire SWG 24	1 Kg	
31	-do-	Copper Vessel	6	
32	-do-	Measuring Flask	4	
33	-do-	Melde's Set up with EM Coils, Tuning Fork and Weights	2	
34	-do-	Platinum Resistance thermometer	1	
35	-do-	Computer	1	
36	-do-	Extension board '5A'	2	

For

BHAGWAN PARSHURAM INSTITUTE OF TECHNOLOGY

8a(i) Details of the Laboratories

1.Name of the Lab:

i. Analog Electronics Lab (Room No 7)

ii. R & D & Optical and Wireless Comm. LAB/Optical Comm (Room No 307)

iii. Communication Systems Lab (Room No 305)

iv. DLCD Lab (Room No 314)

v. Signal & System and Microelectronics Lab (Room No 401-A)

vi. MICROWAVE, Transmission Lines, Waveguides and Antenna Design / Consumer Electronics (Room No 316)

S.No	NAME OF LABORATORY	ECE DEPARTMENT : MAJOR EQUIPMENTS	
1	ROOM NO.-7 ANALOG ELECTRONICS / ELECTRONICS LAB	NAME OF EQUIPMENT	QUANTITY
		CRO SM-410	6
		DEMO CRO ME-1209	1
		DSO SDS-E SERIES	3
		MULTIMETER M92	14
		FUNCTION GENERATOR FGL	4
		TRIPLE POWER SUPPLY RPS-2301M	7
		DIGITAL TO ANALOG CONVERTOR DL-DAC	4
		ANALOG TO DIGITAL CONVERTOR DL-ADC	4
		LCR METER 9304T	5
		FREQUENCY COUNTER 4093	1
		SETUP VOLTMETER AND AMMETER SETUP NV6032	2
		FREQUENCY METER	1
		WAVE ANALYSER KIT	1
		DSO	05
		CRO	05
		FUNCTION GENERATOR	13
		TRIPLE POWER SUPPLY	10
		DIGITAL MULTIMETER	26
		ANALOG LAB TRAINER ST(2612)	02
		CET CHARACTERISTICS OMEGA (011)	01
		CET CHARACTERISTICS AB-04	01
		CBT CHARACTERISTICS OMEGA-012	01
		CBT CHARACTERISTICS MODEL AB-02	01
		CCT CHARACTERISTICS OMEGA 024	01
		CCT CHARACTERISTICS AB-06	01
		DARLINGTON PAIR AMPLIFIER OMEGA ETB-138	02
		DIODE & ZENER DIODE CHARACTERISTICS OMEGA ETB-51	01

1	**ROOM NO.-7 ANALOG ELECTRONICS/ ELECTRONICS LAB**	**NAME OF EQUIPMENT**	**QUANTITY**
		DIODE CHARACTERISTICS AB-01	01
		FET CHARACTERISTICS AB-08	01
		FET CHARACTERISTICS ETB-53 OMEGA	01
		JUNTION DIODE RECTIFIER & FILTER CHARACTERISTICS ETB-81	01
		LOG & ANTILOG AMPLIFIER AB-110	02
		MOSFET CHARACTERISTICS	02
		OP-AMP AS DIFFERENTIATIOR AND INTEGRATOR	03
		OP-AMP AS INVERTING AND NON-INVERTING AMPLIFIER	02
		OP-AMP AS ADDER /SUBTRACTOR OMEGA	02
		PHASE SHIFT OSCILLATOR AB-65	02
		RECTIFIER MODEL AB-09	01
		SCR CHARACTERISTICS	01
		TWO STAGE RC COUPLED AMPLIFIER ETB-45	01
		RC COUPLED AMPLIFIER AB-18	01
		TRANSISTOR FEED BACK AMPLIFIER ETB-56	02
		UJT CHARACTERISTICS ETB-73	01
		V TO I & I TO V CONVERTER AB-30	02
		WEIN BRIDGE OSCILLATOR AB-66	02
		*** SEE Lab boards**	15
		***DSO**	**03**
		***FUNCTION GENERATOR**	**03**
		***TRIPLE POWER SUPPLY**	**03**
		***DIGITAL MULTIMETER**	**03**
		***New purchase 12/03/2025,27/09/2025**	

2	**ROOM NO.-307 R & D Optical and Wireless Comm. LAB/Optical Comm. Systems and networks**	**NAME OF EQUIPMENT**	**QUANTITY**
		FIBER OPTIC TRAINER KIT	06
		MULTIPLEXER/DEMULTIPLEXER / DECODER TRAINER	02
		OPTICAL POWER METER	02
		CONNNECTOR MAKING AND SPLICINIG KIT	02
		DSO	01
		LASER FIBER OPTIC TRAINER/ TRANSMETER/ RECIVER	04
		MULTIMETER	01
3	**LAB NO. -305 COMM. SYSTEM Lab ANALOG COMMUNICATION, DIGITAL COMMUNICATION, Digital Signal Processing, Database Management System, Linux, WSN, Mobile Computing, IOT Lab**	**NAME OF EQUIPMENT**	**QUANTITY**
		COMPUTER SYSTEMS **HP i-7, 13th Gen,** DELI712TH GEN PC- 14, 10 KVA UPS-MICROTEK	32
		DSO	2
		CRO	07
		DATA GENERATOR	04
		DM, ADM & DELAT SIGMA MODULATION & DEMODULATION TRAINER	04
		DATA FORMATING AND CARRIER MOD Tx. TRAINER	02
		CARRIER DEMOD.& DATA REFORMATING Rx. TRAINER	02
		DSB/SSB/AM Tx. TRAINER	02
		DSB/SSB/AM Rx. TRAINER	01
		FM MOD./DEMOD. TRAINER	01
		PAM, PPM AND PWM MOD. & DEMOD. TRAINER	02
		QAM. TRAINER	01
		SAMPLING AND RECONSTRUCTION TRAINER	01
		DPCM TRAINER	01
		FDM MOD./DEMOD. TRAINER	03

		NAME OF EQUIPMENT	QUANTITY
		TDM PULSE AMP. MOD./DEMOD/ TRAINER	01
		TDM/PCM/MOD TX/RX	02 sets
		UPS, 10 KVA (Microtek), Sept. 2022.	1
		Analog Sampling & Reconstruction Trainer Kit (Model **No. :CT-ASRK)**	02
		ASK Modulation/Demodulation Kit. **(Model No. :CT-ASK)**	2
		FSK Modulation/Demodulation Kit. **(Model No. :CT-FSK)**	2
		PSK Modulation/ Demodulation Kit. **(Model No. :CT-PSK)**	2
		Amplitude Modulation/Demodulation (DSB-FC/SSB-SC)Trainer Kit **Model 2201/ CT-DSB/SSB-T, Model 2202 /CT-DSB/SSB-R**	2
		Frequency Modulation/Demodulation Trainer Kit **Model 2203/CT-FMTR**	3
		Phase Modulation/Demodulation Trainer Kit **Model CT-PM**	3
		Super Heterodyne AM Receiver Trainer Kit. **Model CT-SRT**	3
		***Amplitude Mod. & Demod. Omega ETB-96**	02
		***Differential & Pulse Code Modulation & Demod. Trainer Omega ETB-221**	02
		NAME OF EQUIPMENT	**QUANTITY**
		***IOT Lab (Raspberry Pi , LCD Display, OLED Display,microswitch, high vat 9v, preaset,buzzer,pressure sensor,air quality ensor,potentiometer,lcd,pulse sensor,soil moisture sensor,etc.)**	52
		*** SEE Lab boards**	05
		***New Purchase 18/03/2025,21/03/2025,07/04/2025, 27/09/2025)**	

4	**ROOM NO.-314 Digital Logic and Computer Design**	**Digital Kits**	**Quantity**
		COMPUTER SYSTEMS	30
		10 KVA UPS-MICROTEK	1
		cod conversion	2
		4 bit synchronous	2
		Encoder-Decoder	2
		4 bit binary ripple counter	2
		Multiplexer/demux.	2
		cod conversion	2
		Analog to Digital	2
		Binary adder subtractor	2
		Flip flop	2
		Digital to analog converter	2
		Binary to grey and greay to binary	**2**
		4 Bit Shift Register	2
		Tripple power supply	12
		Bread board	10
		CRO	2
		Digital lab trainer	1
		MULTIMETER	11
		Kits	22
		Dual power supply	6

5	**ROOM N0.-316 MICROWAVE, Transmission Lines, Waveguides and Antenna Design / Consumer Electronics**	**NAME OF EQUIPMENTS**	**QUANTITY**
		KLYSTRON POWER SUPPLY	05
		VSWR METER	07
		GUNN POWER SUPPLY	02
		KLAYSTRON MOUNT	05
		KLAYSTRON TUBE	05
		ISOLATOR	07
		VARIABLE ATTEANUTOR	07
		SLOTTED SECTION	07
		TUNABLE PROBE	07
		DETECTOR MOUNT	07
		MOVABLE SHORT	07
		MATCHED TERMINATION	08
		WAVE GUIDE STANDS	30
		SLIED SCREW TUNER(S.S TUNER)	07
		COOLING FAN	07
		BNC TO BNC CABLE	04
		NAME OF EQUIPMENTS	**QUANTITY**
		FIXED SHORT	04
		GUNN OSCILLATOR	02
		BNC TO OPEN CABLE	04
		PIN MODULATOR	02
		TNC CABLE	01
		C.R.O SM- 410	11
		DETECTOR MOUNT X-4051	02
		RADIATION PATTERN TURN TABLE X-851	01
		STANDARD GAIN HORN X-5041	02
		FIXED ATTENUTOR 3,6,10 db	03
		MAGIC TEE	01
		NAME OF EQUIPMENTS	**QUANTITY**
		MULTI HOLE D COUPLER 3,10,20 db	03
		THREE PORT CIRCULATOR	01
		E- PLANE TEE	01
		H-PLANE TEE	01
		FREQUNCY METER	07

5	**ROOM N0.-316 Waveguides and Antenna Design / Consumer Electronics, SATELLITE & ANTENNA ,RTE**	**NAME OF EQUIPMENTS**	**QUANTITY**
		COLOR TV	02
		CD/DVD PLAYER TRAINER	02
		STEREO CASSETTE PLAYER	02
		COLOUR TV TRAINER	02
		VCD PLAYER TRAINER	02
		ANTENNA TRAINER KIT	2
		FUNCTION GENERTOR	2
		SATELLITE COMM. TRAINER KIT	1`+
		MULTIMETER	4
		***Tape recorder Dynamic demonstrator cum trainer kit omega DB15**	**01**
		***Frequency response of microphone and speaker kit**	**01**
		***NEW PURCHASE 18/03/2025**	

6	**ROOM NO.- 401-A SIGNAL & SYSTEMS, Microelectronics**	**EQUIPMENT/COMPUTER SYSTEM/ SOFTWARE**	**QUANTITY/ USER**
		Computers Systems	35
		UPS BATTERIES	15
		UPS ONLINE NEXUS	01
		EXTERNAL DVD R/W	02
		8051/251 EVALUATION BOARD. MODEL NO.- ESA KEIL MCBX51	06
		UNIVERSAL PROGRAMMER MODEL NO.- ESA IUP-UXP	02
		LCD (16*2) INTERFACE KIT MODEL NO.- IF LCD	06
		STEPPER MOTER INTERFACE MODEL NO.- IF-STEP	06
		TRAFFIC LIGHT INTERFACE MODEL NO.- IF-TRL	01
		7-SEGMENT LED DISPLAY INTERFACE MODEL NO.- IF-DIS	06
		ELEVATOR INTERFACE MODEL NO.- IF-ELV	01
		TEMPERATURE TXDR INTERFACE MODEL NO.- IF-TXDR ADC	05

		EVALUATION BOARD FOR PHILIPS LPC 214X SERIES FOR ARM. MODEL NO.- ESA KEIL MCB2140	05
		PIC 16F877 BASED MICROCONTROLLER TRAINER KIT. MODEL NO.- ESA SAR PIC03	05
		SPARTAN 3A-EPGA KIT WITH EDWIN	01
		Lunchbox kit	01
8.3 (ii)	Status of instruments/Equipments: working		

8.3(iii) Up-gradation undertaken as per new technological developments and requirements of the course curriculum Yes

Bhagwan Parshuram Institute of Technology
Department of ECE
List of New purchases:Upgragations

S.No	Item Purchased	Quantity	Date of Purchase	Amount
Hardwares				
1.	**Function generator,DSO,Triple power supply,Multimeter**	**12**	**12/03/2025**	**Rs. 210804**
2.	**Analog and Digital Communication kits, RTE kits**	**06**	**18/03/2025**	**Rs 58572**
3.	**IOT Lab Components purchased (Raspberry Pi , LCD Display, OLED Display,microswitch, high vat 9v, preaset,buzzer,pressure sensor,air quality sensor,potentiometer,lcd,pulse sensor,soil moisture sensor,etc.)**	**52**	**21/03/2025, 07/04/2025**	**Rs 16618**
4	**Consumable items (Diodes, ICs , Leds etc.)**		**Aug.24-July25**	**Rs 11000/-**
5	**SEE Lab boards**	**15**	**27/09/2025**	**Rs. 66375**
Softwares				
6	**Matlab Software**	**Full campus Suit *Renewal**	**08/04/2025**	**Rs 7,64,430/-**