

**Proposal  
for  
Extension of Autonomous Status**

**List of Lab Equipment's  
Department of Electrical  
Engineering**

**Amritsar Group of Colleges,  
Amritsar**

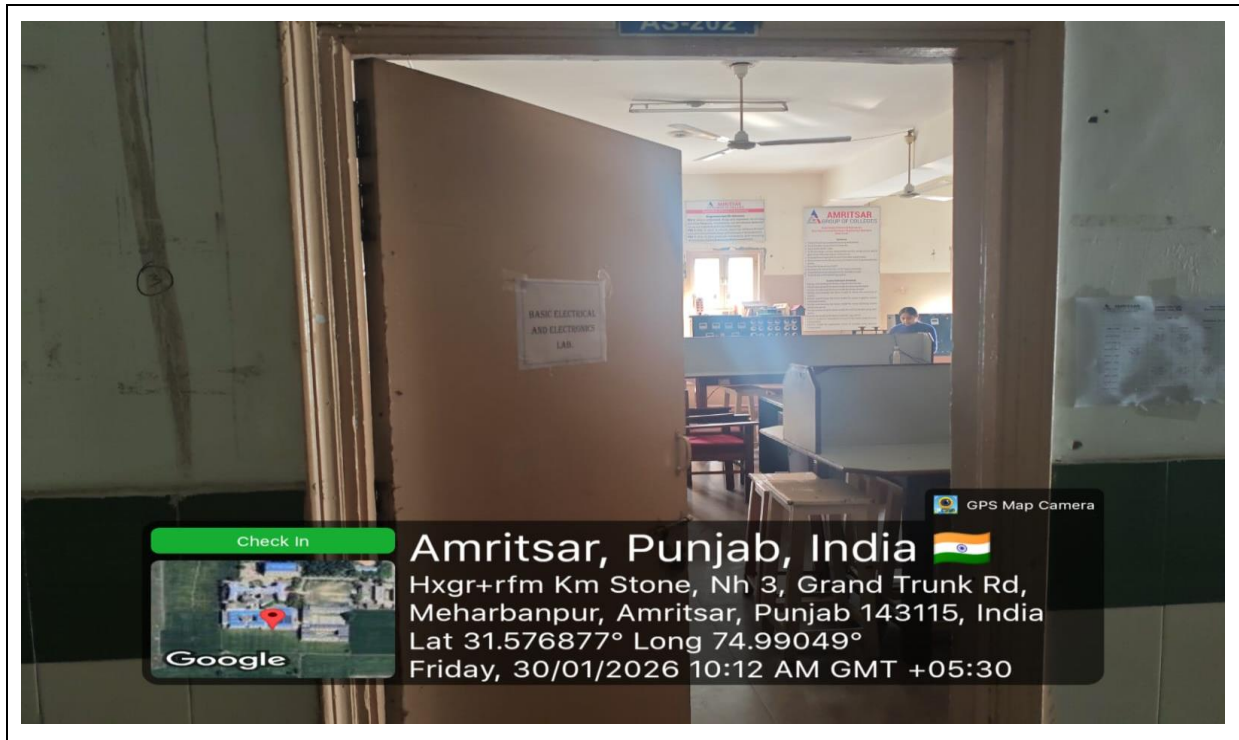
(Autonomous College since 2014)

(NAAC Grade "A" in 3<sup>rd</sup> Cycle)

<b>S. No</b>	<b>Laboratory / Workshop</b>	<b>Page Numbers</b>
1	Semiconductor Lab	1-3
2	Electrical Measurement Lab	4-7
3	Power Electronics Lab	8-11
4	Fundamentals of Electrical and Electronics Engineering Lab	12-22

Name of the Laboratory: Semiconductor Lab.



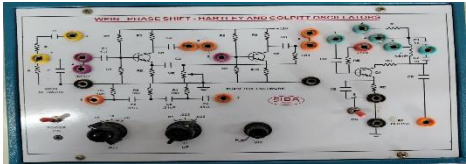
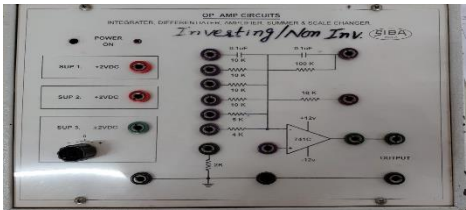
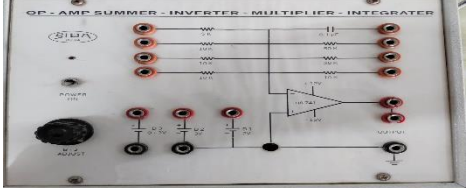

Picture of the Lab (Outside – showing the name plate)





Picture of the Lab (Inside – showing a wider view of the lab)



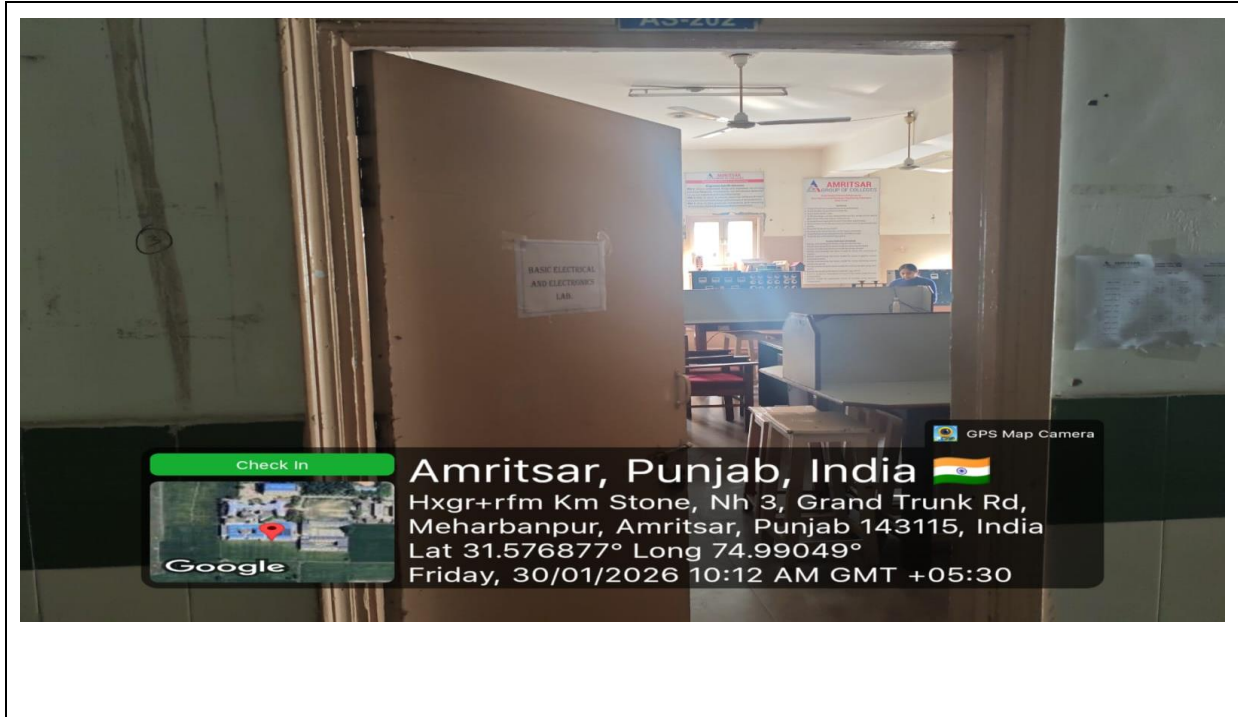
**Details of the Laboratory Equipment's**

S. N.	Name of Equipment	Description / Specification of the Equipment	Quantity	Normal Picture
1	Zener diode voltage regulator characteristics Kit	SIBA INDIA	4	
2	Transistor (BJT) Characteristics Kit	SIBA INDIA	5	
3	Wein-Phaseshift-Hartley-Colpitt Oscillator Kit	SIBA INDIA	3	
4	Op-Amp Circuits Kit	SIBA INDIA	1	
5	Op-Amp Summer-Inverter-Multiplier-Integrate Kit	SIBA INDIA	2	
6	Digital Storage Oscilloscope	NVIS Technologies Pvt. Ltd (100MHz, 500MSa/s)	3	

7	Function Generator	SIBA INDIA	3	
8	Millivoltmeter	SIBA INDIA	2	

Name of the Laboratory: Electrical Measurement and Instrument Lab.

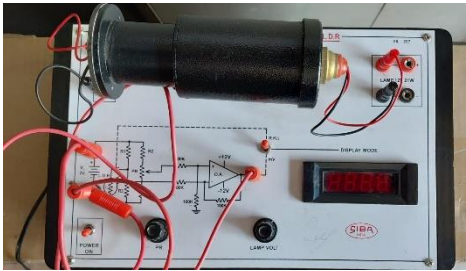




**Picture of the Lab (Outside – showing the name plate)**






**Picture of the Lab (Inside – showing a wider view of the lab)**



**Details of the Laboratory Equipment's**

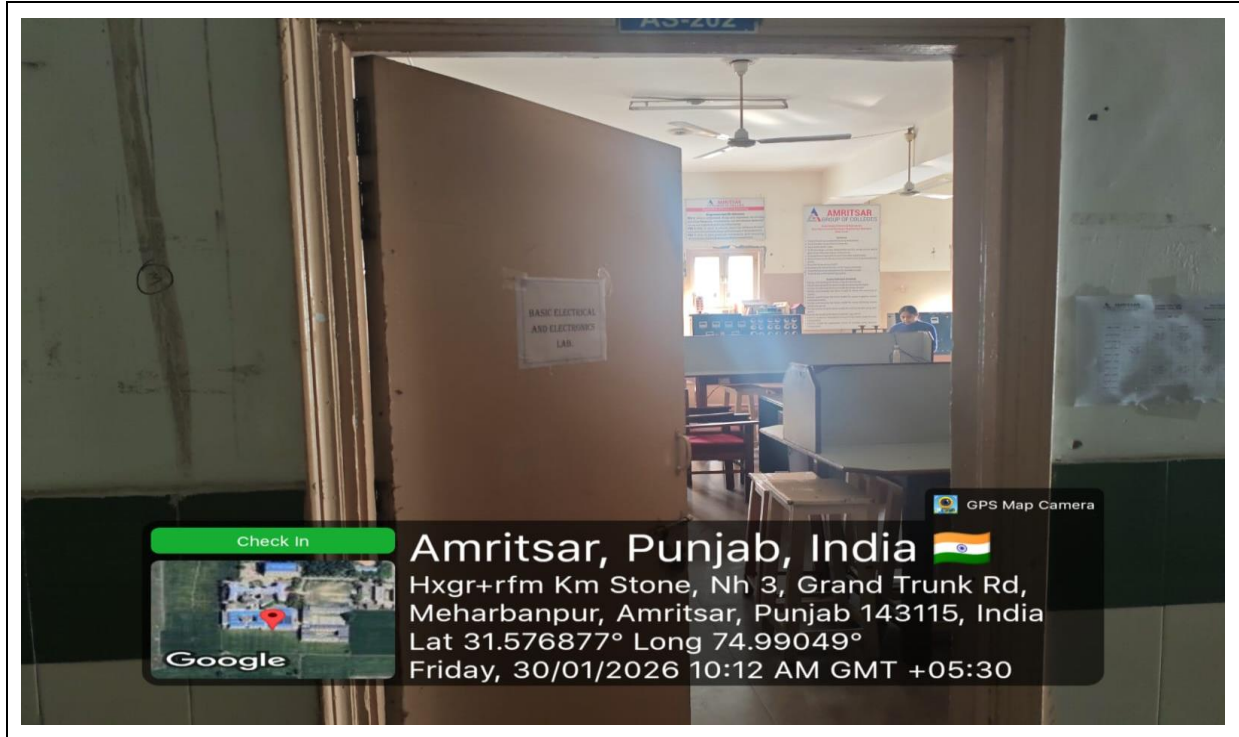
S. N.	Name of Equipment	Description / Specification of the Equipment	Quantity	Normal Picture
1	LDR + Photocell Sensor Kit	SIBA INDIA	3	 A white PCB-based kit with a black cylindrical sensor, a red LED, and a digital display. It includes a circuit diagram and various electronic components.
2	RTD Kit	SIBA INDIA	5	 A white PCB-based kit for measuring temperature using an RTD. It features a digital display, a potentiometer, and a circuit diagram.
3	Earth Tester	Dej 500V	1	 A red rectangular device with a silver handle and a scale on the front. The scale is labeled 'M.L.T. 500V' and 'DEJ'.
4	CRO	NVIS Technologies Pvt. Ltd	3	 A digital storage oscilloscope (DSO) with a screen and various control knobs and buttons on the right side.
5	Function Generator	Sciencetech	3	 A white function generator with a digital display and multiple output ports on the front panel.

6	LVDT Kit	SIBA INDIA	1	
7	LCR – Q – Meter Kit	Aplab	5	
8	LCR Meter Kit	NVIS	2	
9	Schering Bridge Kit	SIBA INDIA	3	
10	Electronic Null Detector for AC Bridge	SIBA INDIA	4	
11	Electronic Null Detector for AC/DC Bridge	SIBA INDIA	2	

12	Constant Current Power Supply	Omega	2	 <p>OMEGA CONSTANT CURRENT POWER SUPPLY (1.5 VOLT AT 10 AMP) TYPE CCP-1.5 (11) POWER FUSE 10mA OFF ON 230V AC 50Hz Amp. CURRENT ADJ. OUTPUT 1.5V AT 10Amps OMEGA ELECTRONICS, JAIPUR 302006 (INDIA)</p>
13	Electromagnetic Power Supply	SIBA INDIA	1	 <p>ELECTROMAGNET POWER SUPPLY EPS- SIBA AMP POWER ON CURRENT ADJUST CL OUTPUT</p>
14	Unknown CX Schering Bridge	Satish Bros	2	 <p>UNKNOWN CX SCH BDG SATISH BROS - 133001</p>

Name of the Laboratory: Power Electronics Lab.


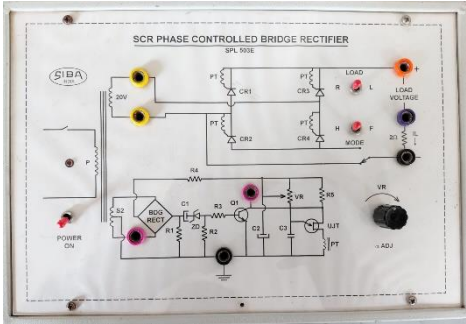
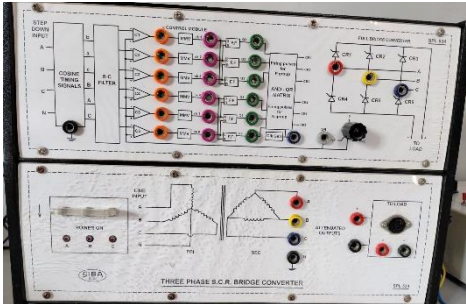

**Picture of the Lab (Outside – showing the name plate)**

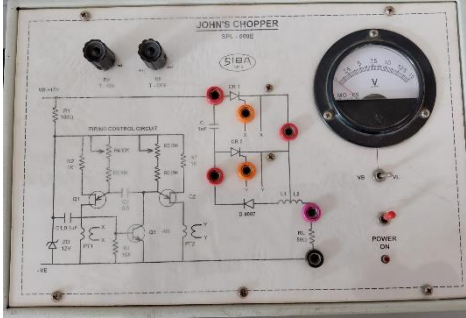
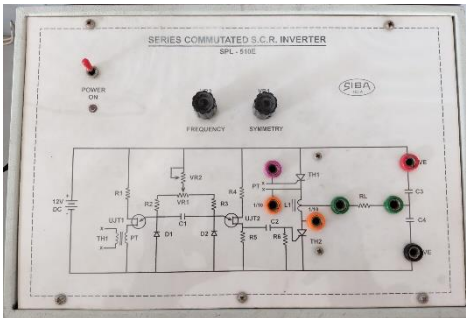
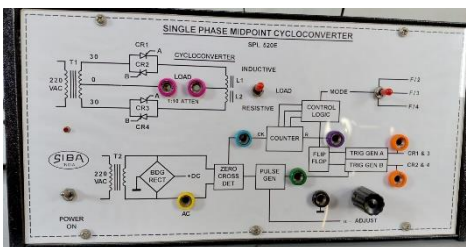
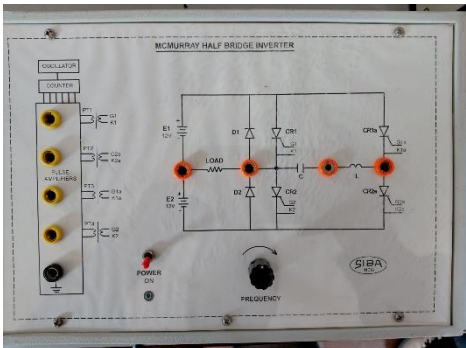
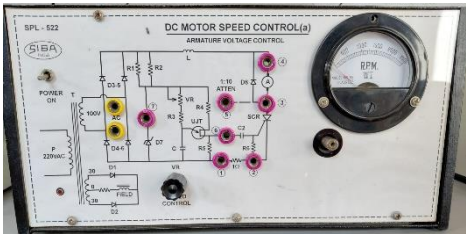


**Picture of the Lab (Inside – showing a wider view of the lab)**



**Details of the Laboratory Equipment's**

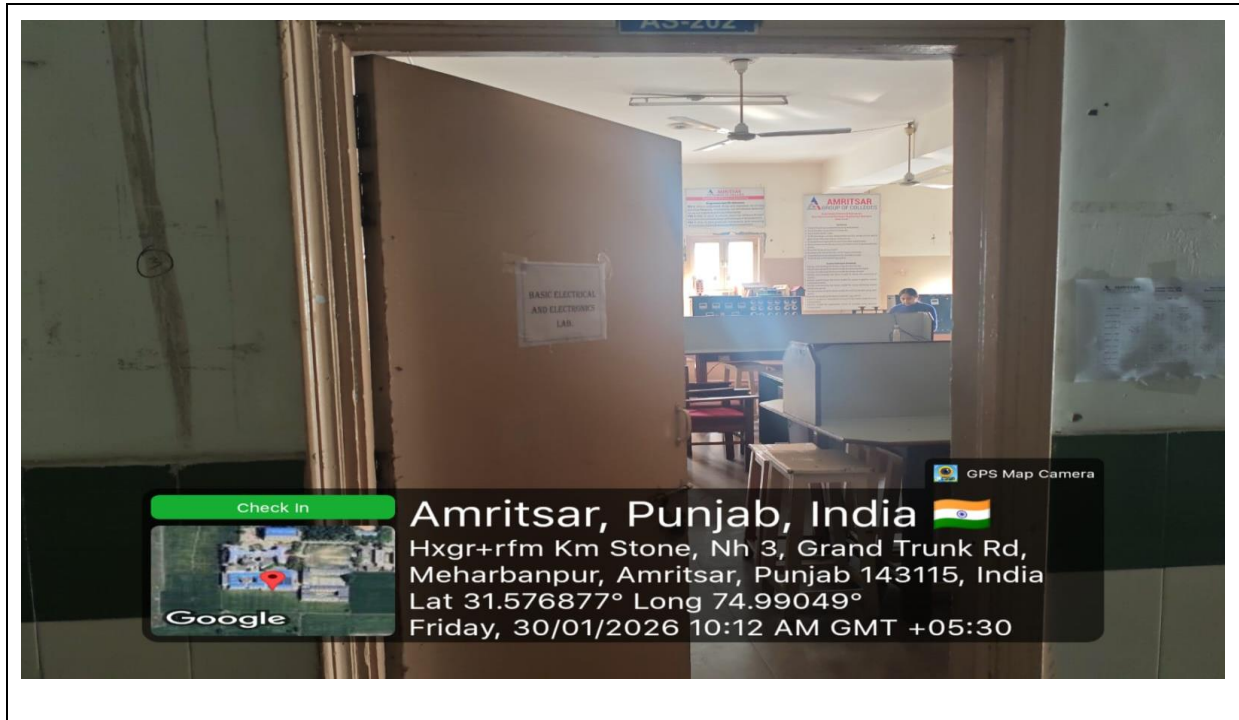
S. N.	Name of Equipment	Description / Specification of the Equipment	Quantity	Normal Picture
1	SCR Characteristics Apparatus	SIBA India	1	
2	SCR Single Phase Half / Full Wave Rectifier	SIBA India	1	
3	Three-Phase Fully Controller Converter	SIBA India	1	
4	UJT Characteristics Kit	SIBA India	1	

5	Jone's Chopper Kit	SPL – 508E	1	
6	Series Inverter Using SCR	SIBA India	1	
7	Single – Phase Cyclo-Converter	SPL – 520E	1	
8	MC-Murray Inverter	SIBA India	1	
9	D.C Motor Control using SCR with RPM Meter	SIBA India	1	

<p>10</p>	<p>Single phase Induction Motor Speed Control</p>	<p>SPL – 516A</p>	<p>1</p>	
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Name of the Laboratory: Fundamentals of Electrical and Electronics Engineering Lab.





Picture of the Lab (Outside – showing the name plate)







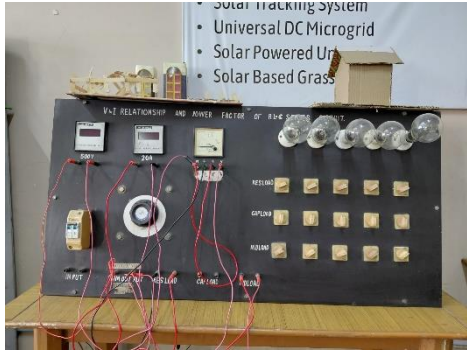



Picture of the Lab (Inside – showing a wider view of the lab)









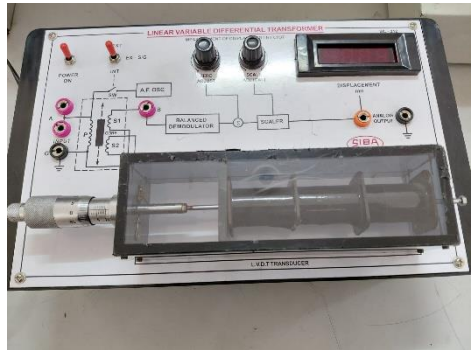

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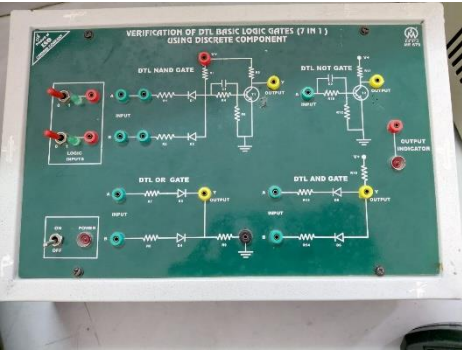
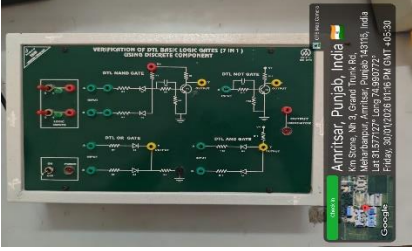
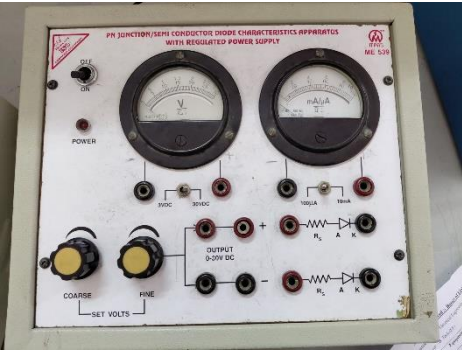


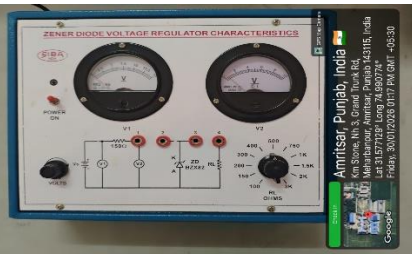
S. N.	Name of Equipment	Description / Specification of the Equipment	Quantity	Normal Picture	Geotagged Picture
1	Speed Control of D.C Shunt motor (EEE/BEEE/PL-1)	Panel	1		
2	Polarity and Ratio Test (EEE/BEEE/PL-5)	Panel	1		

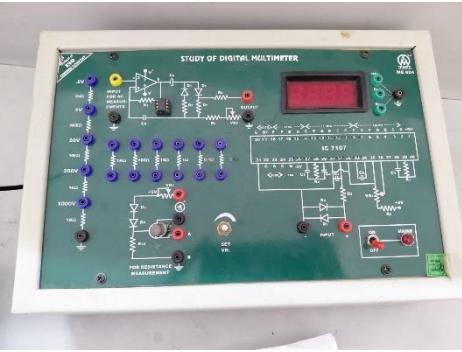
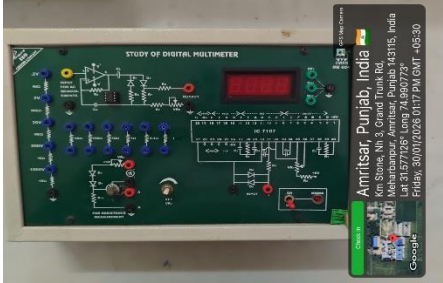


3	Constant of Single-Phase Energy Meter (EEE/BEEE/PL-4)	Panel	1		
4	Open Circuit & Short Circuit test of Single-Phase Transformer (EEE/BEEE/PL-3)	Panel	1		

5	V & I Relationship and Power Factor of R-L-C Series circuit (EEE/BEEE/PL-2)	Panel	1		
6	Measurement of Power & Power Factor by Two Wattmeter Method (EEE/BEEE/PL-7)	Panel	1		


7	Conversion of Transformers (EEE/BEEE/PL-6)	Panel	1		
8	Panel for 3 Phase Induction Motor (EEE/BEEE/PL-9)	Panel	1		



9	Line Voltage - Phase Voltage & Line Current -Phase Current Relationship in 3 Phase (EEE/BEEE/PL-8)	Panel	1		
10	LVDT Kit	SIBA India	2		

11	Verification of Logic Gate Kit	MARS ME 679	2		
12	PN Junction with Regulated Power Supply Kit	MARS ME 539	1		
13	Voltage Stabilization Characteristic of Zener diode Kit	SIBA India	1		

14	Study of Digital Multi meter kit	MARS ME 604	1		
15	Solar Pannel 18V DC	Green Power	1		

16	Millivoltmeter	MECO-V	3		
17	Milli current meter	MECO-V	4		

18	Regulated Dual DC Power Supply 0 – 32V DC	Aplab	4		
19	Digital Multimeter	Mastech, HADYUE,CHY, WHD Z	4		

20	Transformer Single Phase Star & Delta connection		3		
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