

Department of Electronics and Communication Engineering

BASIC ELECTRICAL ENGINEERING LABORATORY



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FACILITIES (HARDWARE)

S. NO.	EQUIPMENT	QUANTITY
1	Auto Transformer	5
2	DC Power Supply	11
3	Digital Multi Meter	40
4	Rheostat	4
5	Ammeter	10
6	Voltmeter	10
7	Wattmeter	5
8	Bread Board	10
9	RLC Component	400
10	Hook up Wire	5 bundles
11	Plier	3



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SEMESTER-I/II (B.TECH- COMMON FOR ALL)

SUBJECT CODE: BEC-110 Room No.- E-210

LIST OF EXPERIMENTS

- 1. To study the various instruments and equipment used in Basic Electrical Engineering Lab.
- 2. To implement the given circuit on the breadboard and verify Ohm's law.
- 3. To implement the given circuit on the breadboard and verify Kirchoff's current law & Kirchoff's voltage law.
- 4. To implement the given circuit on the breadboard and verify the Reciprocity theorem.
- 5. To implement the given circuit on the breadboard and verify Thevenin's theorem.
- 6. To implement the given circuit on the breadboard and verify the Maximum power transfer theorem.
- 7. To implement the given circuit on the breadboard and verify the Superposition theorem.
- 8. To implement the given circuit on the breadboard and measure power and power factor in a single phase AC circuit using the three ammeters method.
- 9. To measure power and power factor in a single phase AC circuit using the three voltmeter method.
- 10. To determine the power factor, true power, apparent power, and reactive power using resistance, choke coil, and capacitor.
- 11. To perform an open circuit test on a single phase transformer and calculate its equivalent circuit parameters.



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DO'S AND DON'TS

DO'S **DON'TS** • Enter and leave the lab as per the • Do not leave the lab without timetable. prior permission of the Lab Indiscipline Maintain strict charge or Technical Assistant. silence in the lab. • Do not bring or eat any eatable Disconnect the power source before item in the lab. servicing or repairing electrical • Do not make noise or shout in the equipment. lab. a keen observer Be • Do not disturb the decorum or while performing experiments in the lab. aesthetic view of the lab. Keep your bags in the rack and the • Do not make circuit changes or consumable items back to their perform any wiring when power original position after finishing off is on. the experiment in the lab. • Do not touch anything if your • Powered equipment can be hot! Be hands are wet. The "one-hand" cautious when handling equipment approach is safest. after it has been operated. • Do not modify or delete any

system files on any lab computer.

are absolutely sure that the

• Do not pull wires out until you

circuit is completely dead.

Do your wiring, setup, and a

careful circuit checkout before

applying power.