

## II B.Tech I Sem

## 15AEE07-ELECTRICAL ENGINEERING PRACTICE LAB

L	T	P	C
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**Course objectives for Electrical Engineering Practice lab:**

1. To know about different tools, abbreviations and symbols in electrical engineering
2. To learn about types of measuring instruments to measure electrical quantities
3. To gain knowledge on different types of earthing and earth resistance.
4. To study different types of wiring.

**Course outcomes for Electrical Engineering Practice lab:**

1. Able to demonstrate knowledge on different tools, abbreviations and symbols used in electrical engineering.
2. Able to measure different electrical quantities using measuring instruments.
3. Able to demonstrate how to troubleshoot the electrical equipments (like fans, grinder, motors etc.).
4. Able to do wiring and earthing for residential houses.
  1. Study of introduction to electrical tools, symbols and abbreviations.
  2. Study of types and sizes of wires and making "T" joint and straight joint for wires.
  3. Measurements of electrical quantities (like voltage, current, power, power factor in RLC circuits)
  4. Study of measurements of energy (using single phase and three phase energy meter) by connecting different loads.
  5. Study of Earthing and Measurement of Earth Resistance.
  6. Study and performance of residential wiring (using Energy Meter, Fuses, Switches, indicator, Lamps, etc)
  7. Study of types of wiring (flouroscent lamp wiring, high pressure nmercury lamp wiring., etc)
  8. Study of various electrical gadgets(CFL, LED, PV cell, induction motor transformer etc)
  9. Assembly of choke or small transformer.
  10. Study of trouble shooting of electrical equipments( fan, iron box, mixer-grinder, etc)
  11. Introduction to basics of electronic components: Solder Practice, Multi-Meter, Power Supply.

**Reference:**

Lab manual of electrical engineering by TTTI, Chennai.

*V. S. S. S.*  
BOS - chairman