ELECTRICAL MEASUREMENTS AND INSTRUMENTATION LABORATORY

The aim of the Electrical Measurements Laboratory is to reinforce the students with an adequate experience in the measurement of different quantities and also to expertise in handling the instruments. The students get exposed with basic operations of sensors and their real time usage. It also provides facilities to train the students in the measurement of displacement, resistance, inductance, torque and angle etc., and on AC, DC bridges The knowledge on sensors and signal conditioning circuits help the students to implement them in various projects and real time applications.

The outcomes of laboratory is:

1. Upon completion of study of the course should be able to calibrate and test single phase energy meter, calibrate PMMC voltmeter and calibrate LPF wattmeter.
2. Student should be able to measure resistance, inductance and capacitance.
3. Students should be able to measure 3-Φ active power and reactive power.
4. Students should be able to test current transformers and dielectric strength of oil. Students should be able to calibrate LVDT and resistance strain gauge.

Facilities:

- Transformer oil testing set up
- Single Phase Energy Meter (02 Nos)
- DC Potentiometer
- Kelvin's Double Bridge
- Schering and Anderson's Bridge
- Current Transformers (06 Nos)
- Strain Guage Kit
- LVDT Kit
- Dynamometer power factor meter
- Thermostat
- Resistance Temperature Detector
- Thermocouple
- Thermistor
- Bidirectional energy meter
- Encoders

- Speed
- Pressure and distance measurement set ups
- Watt meters.

PHOTOS: