| 22EE102  | Basic Electrical and Electronics Engineering Laboratory | L | T | P | С |
|--|---|---|---|---|---|
| (Common to Civil, Mechanical and Computer science Engineering) |   | 0 | 0 | 2 | 1 |

## **Course Objectives:**

1. To impart hands on experience in use of measuring instruments, testing in transformers, and house wiring practices.

## LIST OF EXPERIMENTS:

- 1. Verification of Kirchhoff's laws.
- 2. Verification of Superposition theorem.
- 3. Measurement of three-phase power in three-phase circuits.
- 4. Determination losses in single phase Transformer.
- 5. Demonstration of cut-out sections of machines: induction machine (squirrel cage rotor), and single-phase induction motor.
- 6. Speed control of DC shunt motor.
- 7. Study of basic safety precautions, measuring instruments voltmeter, ammeter, multimeter, and Electrical components.
- 8. VI Characteristics of PN Junction diode.
- 9. House wiring
- 10. Wiring for Fluorescent lamp.

|                  |     | Total : 30 Periods   |  |  |
|------------------|-----|--|--|--|
| Course Outcomes: |     |  |  |  |
| Upon o           | com | pletion of this course, the students will be able to:            |  |  |
| CO1              | :   | Get an exposure to DC and AC circuits.                           |  |  |
| CO2              | :   | Understand to determine losses in transformer.                   |  |  |
| CO3              | :   | Know the parts of single-phase and three phase induction motors. |  |  |
| CO4              | :   | Get an exposure electron devices.                                |  |  |
| CO5              | :   | Make electrical connections by wires of appropriate ratings.     |  |  |