EE102 Elements of Electrical Engineering Lab

L-T-P-Cr: 0-0-3-1

Objective: To verify characteristics of various electrical parameters, material properties, various theorems, to start and run of various electrical machines taught in Elements of Electrical Engineering course work through experiments.

List of the Experiments 1. To obtain B-H curve of a given magnetic material.

2. Verification of Kirchhoff’s law. 3. Verification of Superposition theorem.

4. Verification of Thevenin’s and Norton’s theorem. 5. To study of R-L-C series and parallel circuit.

6. Study of resonance in series R-L-C circuit.

7. Measurement of power and power factor in a single-phase ac circuit using one watt method.

8. Power measurement in three-phase star connected circuit with balanced and unbalanced load using two-wattmeter method.

9. Measurement of energy by single-phase energy meter.

10. Starting and reversing of a dc shunt motor.

11. Study of 3-phase starters.

12. To start and run a 3-phase induction motor.

13. To find out the turns ratio of a single-phase transformer.

14. To perform open and short circuit test of single-phase transformer.

15. Study of V-I characteristics of different lamps.

Note: Minimum ten experiments are required to be performed