

LABORATORY INSTRUCTION MANUAL

Basic Electrical Engineering Lab. Manual

**1st Year
1st & 2nd Semester**

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JIS College of Engineering

(An Autonomous Institution)

NAAC and NBA Accredited Institution

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LIST OF EXPERIMENT

1. Characteristics of Fluorescent lamps.
2. Characteristics of Tungsten filament lamps.
3. Verification of Thevenin's Theorem.
4. Verification of Superposition Theorem.
5. Study the RLC Series Circuit.
6. Speed Control of DC Shunt Motor.
7. Study of the Equivalent Circuit of a Single phase Transformer.
8. Verification of Norton's Theorem.
9. Calibration of MI type Ammeter and Voltmeter.

Instructions:

1. Understand the equipment to be tested and apparatus to be used.
2. Select proper type (i.e. AC or DC) and proper range of meter.
3. Do not touch live terminal.
4. Use suitable wires (type and size).
5. All connections should be tight.
6. Do not leave loose wires (i.e. wires not connected).
7. Get the connections checked before switching ON the supply by the instructor.
8. Never exceed the permissible values of current, voltage and/or speed of any machine, apparatus, wire, load etc.
9. Increase or decrease the load and applied voltage gradually (not suddenly).
10. Switch OFF the power supply and disconnect the circuit after completion of Experiments.