

**DEPARTMENT OF ELECTRICAL ENGINEERING
ELECTRICAL MACHINES LABORATORY**

B. Tech EEE (EE3091D ELECTRICAL MACHINES LAB-S5)

List of Experiments

- 1.a) Open Circuit Characteristics of self-excited DC Shunt Generator
- 1.b) Load Test on DC Shunt Generator
- 2.a) Brake test DC shunt Motor
- 2.b) Brake test DC series Motor
- 3 Swinburne's test on dc shunt machine
- 4 Hopkinson test on DC Machine
- 5 Retardation test on DC Machine
- 6 Sumpner's test or Back-to-Back test on single phase Transformers
- 7.a) Separation of losses in a single-phase transformer
- 7.b) Polarity test on single phase transformer and three phase connection of single-phase transformer
- 8 Scott connection of Transformers
- 9.a) OC and SC Test on Single Phase Transformer
- 9.b) Load Test on Single Phase Transformer

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**DEPARTMENT OF ELECTRICAL ENGINEERING
ELECTRICAL MACHINES LABORATORY**

B. Tech EEE (EE3092D ELECTRICAL MACHINES LAB II-S6)

List of Experiments

- 1.a) No load and blocked rotor test on a 3-phase squirrel cage induction motor
- 1.b) Load test on a 3-phase squirrel cage induction motor
- 2.a) No load and blocked rotor test on a 3 phase slip ring induction motor
- 2.b) Load test on a 3-phase slip ring induction motor
- 3 No load and blocked rotor test on a single phase induction motor
- 4 Operation of a dc machine coupled induction machine as an induction generator
- 5.a) Load test on a 3-phase squirrel cage induction motor with its stator winding connected in different pole combination
- 5.b) Load test on a 3-phase squirrel cage induction motor with its stator winding connected in delta and star
- 6 Speed control of a 3-phase squirrel cage induction motor by variable frequency method
- 7 Predetermination of voltage regulation of 3-phase alternator by EMF, MMF and ZPF method
- 8 Slip test on a salient pole alternator and predetermination of voltage regulation
- 9 Synchronization of 3-phase alternator to the supply mains and plotting of V-curves and inverted V-curves

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B. Tech (EE2093D ELECTRICAL MEASUREMENTS AND MACHINES LAB-S3ME)

List of Experiments

- 1 Characteristics of Linear Resistance and Incandescent Lamp
- 2 Measurement of High and Low Resistance Using Voltmeter and Ammeter
- 3 Measurement of Voltage Current and Power in RLC Series and Parallel Circuit and Determination of Phasor Relation and Verification by Calculation
- 4 Calibration of Single-Phase Energy Meter
- 5 Measurement of Power in 3-Phase AC Circuit
- 6 Load Test on Single Phase Transformer
- 7 OC And SC Test on Single Phase Transformer
- 8.a) Open Circuit Test on DC Shunt Generator
- 8.b) Load Test on DC Shunt Generator
- 9 Load Test on DC Shunt Motor
- 10 Load Test on Three Phase Squirrel Cage Induction Motor
- 11 Load Test on Three Phase Slip Ring Induction Motor

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