Electrical Machine Laboratory	
Sl. No.	**Title of the Experiments**
Electrical Machine - I	
01	Study of the characteristics of a separately excited DC Generator.
02	To Study the Characteristics of a DC motor.
03	To study of methods of speed control of a DC Motor.
04	To Study the Characteristics of a DC Compound Generator (Short Shunt).
05	Measurement of Speed of DC Series Motor as a Function of Load Torque.
06	Polarity test on a 1-Φ Transformer
07	Determination of the equivalent circuit of a single-phase Transformer and efficiency
08	Study of different connections of three phase transformer: A. 3-Φ to 3-Φ conversion: (a) delta – delta, (b) wye – wye, (c) V – V B. 3-Φ to 6-Φ conversion: (a) delta – double wye, (b) delta – double delta. C. 3-Φ to 2-Φ conversion by Scott connection.
09	Study of parallel operation of single-phase transformers.
10	Determination of temperature rise and efficiency of the transformer. (Back to back test)
Electrical Machine - II	
11	Different methods of starting of a 3 phase Cage Induction Motor & their comparison [DOL, Auto transformer &Star-Delta]
12	Study of equivalent circuit of three phase Induction motor by no load and blocked rotor test.
13	Study of performance of wound rotor Induction motor under load
14	Study of performance of three phase squirrel- cage Induction motor – *determination of iron-loss, friction &windage loss.*
15	Speed control of 3 phase squirrel cage induction motor by different methods & their comparison *[voltage control & frequency control]*.
16	Speed control of 3 phase slip ring Induction motor by rotor resistance control.

17	Determination of regulation of Synchronous machine by A. Potier reactance method. B. Synchronous Impedance method.
18	Determination of equivalent circuit parameters of a single-phase Induction motor.
19	Load test on single phase Induction motor to obtain the performance characteristics.
20	To determine the direct axis resistance [X_d] & quadrature reactance [X_q] of a 3-phase synchronous machine by slip test.
21	Load test on wound rotor Induction motor to obtain the performance characteristics.
22	To make connection diagram to full pitch & fractional slot winding of 18 slot squirrel cage Induction motor for 6 poles & 4 pole operation.
23	To study the performance of Induction generator.
24	Parallel operation of 3 phase Synchronous generators.
25	V-curve of Synchronous motor.