COURSE TITLE : AC MACHINES LAB -1
COURSE CODE : 5039
COURSE CATEGORY : A
PERIODS/WEEK : 6
PERIODS/SEMESTER : 78
CREDITS : 3

Course Outcome:

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	1	To understand the losses of transformer.
	2	To analyze the performance of transformer.
	3	To understand the characteristics of three phase motors
	4	To analyze the performance of three phase motors

LIST OF EXPERIMENTS

1. To collect name plate data of AC machines and identification of power supply controls in the laboratory.
2. To conduct polarity test on Single phase transformer.
3. To determine efficiency and regulation of a transformer by direct loading at various power factors.
4. To pre-determine efficiency and regulation of a transformer by direct loading at various power factors & to plot output v/s efficiency and PF v/s regulation.
5. To conduct OC and SC tests on a single phase transformer to determine values of equivalent circuit parameters and to draw equivalent circuits referred to primary and secondary.
6. To form a transformer bank of three single phase transformer in star-delta mode and determine efficiency at various loads.
7. To dismantle and assemble a slip ring induction motor and identify parts.
8. To dismantle and assemble DOL, Star-delta starters and starter for slip ring induction.
9. To conduct polarity test on three phase Induction motor.
10. To run a three phase induction motor by a TPDT switch in star and in delta and measure line and phase currents, line and phase voltages in both cases.
11. To conduct no load test on a three phase induction motor and separate no load losses.
12. To conduct no load and blocked rotor tests on a three phase induction motor, determine values of equivalent circuit parameters & to draw equivalent circuit and circle diagram.
13. To conduct load test on a three phase induction motor and to plot performance characteristics.

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