Course Number and Name

BEE3L3 ELECTRICAL ENGINEERING LAB

Credits and Contact Hours

2 & 45

Course Coordinator's Name

Ms Anitha Sampath Kumar

Text Books and References

Lab Manual

Course Description

To understand the performance of electrical generators, motors and transformers by conducting different tests

Prerequisites	Co-requisites
Basic Electrical & Electronics Engineering Lab	Electrical Machines

required, elective, or selected elective (as per Table 5-1)

required

Course Outcomes (COs)

CO1 : Experimentally verify the performance characteristics of Generators
CO2 :Experimentally verify the performance characteristics of Motors
CO3 :Experimentally verify the performance characteristics of Transformers
CO4 :To verify the performance characteristics of Induction motors.
C05 :To Understand the concepts of alternators
C06 :To verify the performance of compound motors

Student Outcomes (SOs) from Criterion 3 covered by this Course

COs/SOs	a	b	c	d	e	f	g	h	i	j	k
CO1	H			H							
CO2	H	H	H	H	H				M	M	
CO3	H		H	H							
CO4		H		H							
CO5	M			H					M	M	
CO6		H	M	H	H						

List of Topics Covered

List of Experiments:

1. Power Measurements in 3-phase circuits.
2. Swinburne's Test.
3. Speed control of DC Shunt motors
4. Load Test on DC shunt generator
5. OCC and Load Test on DC shunt generator
6. OC and SC tests on Transformers
7. Load Test on Transformer.
8. Regulation of alternator by EMF and MMF methods.
9. Equivalent circuit on Single phase induction motor.
10. Load test on DC Compound motor
11. Speed control of DC Compound motor.
12. Study of DC and AC motor starters.