Course Number and Name

BEE3L2 & Electrical Machines Laboratory – I

Credits and Contact Hours

2 & 45

Course Coordinator's Name

Mrs.AnithaSampathkumar

Text Books and References

Text Books:

1. DEPARTMENT LABORATORY MANUAL

Course Description

To expose the students to the operation of D.C. machines and transformers and give them Experimental skill.

Experimental skill.							
Prerequisites	Co-requisites						
Nil	Electrical Machines-I						
required, elective, or selected elective (as per Table 5-1)							
Required							

Course Outcomes (COs)

CO1: To rig up circuits for testing a given machine.

CO2:To obtain the performance characteristics of machines.

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

COs/SOs	a	b	c	d	e	f	g	h	i	j	k	1
CO1	Н	Н	L	L	Н	M	M	L	L	L	L	L
CO2	Н	Н	L	L	M	M	M	L	L	L	L	L

List of Topics Covered

I LIST OF EXPERIMENTS FOR ELECTRICAL ENGINEERING LAB

- 1. 1Open Circuit characteristics of DC shunt generator
- 2. Load characteristics of separately excited generator
- 3. Load characteristics of DC shunt generator
- 4. Load characteristics of DC shunt generator
- 5. Speed control of DC shunt motor
- 6. Swinburne's test
- 7. Hopkinson's test
- 8. Load test on single phase transformer
- 9. Open Circuit and short circuit test on single phase transformer
- 10. Sumpener's test
- 11. Parallel operation of single phase transformers
- 12. Three phase transformer connections, scott connections.
- 13. Field's test on DC series motor
- 14. Separation of no load losses In a single phase transformer
- 15. Study of DC starters