Course Number and Name

BEE4L1&Electrical Machines Laboratory-II

Credits and Contact Hours

2 & 45

Course Coordinator's Name

Mrs.Anitha Sampath Kumar

Text Books and References

Text Books:

Lab Manual

Course Description

To expose the students to the operation of synchronous machines and induction motors and give them experimental skill

Prerequisites	Co-requisites					
Nil	Electrical Machines-II					
required, elective, or selected elective (as per Table 5-1)						

Required

Course Outcomes (COs)

CO1: Understand the characteristics and performance of AC machines.

CO2: Gain knowledge about speed control techniques of induction machines.

Student Outcomes (SOs) from Criterion 3 covered by this Course												
COs/SOs	а	b	с	d	e	f	g	h	i	j	k	1
CO1	Н	Н	L	L	Н	Μ	М	L	L	L	L	L
CO2	Н	Н	L	L	М	М	М	L	L	L	L	L

List of Topics Covered

LIST OF EXPERIMENTS:

- 1. Regulation of alternator by EMP and MMF method
- 2. Regulation of alternator by potier ASA method
- 3. Regulation of salient pole alternator slip test
- 4. Load test on alternator
- 5. Study of A.C. starters
- 6. V and inverted V curve of synchronous motor.
- 7. Brake test of three phase squirrel cage induction motor.
- 8. No load and blocked rotor tests on three phase induction motor and circle diagram and equivalent circuit
- 9. Load test on single phase induction motor.
- 10. Equivalent circuit and predetermination of performance of single phase induction motor.
- 11. Load test on three phase induction motor
- 12. Load test on three phase slip ring induction motor
- 13. Synchronizing and parallel operation by dark lamp, bright lamp and synchronoscope methods.