| III Year-II Semester | | L | T | P | C |
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## ELECTRICAL MACHINES – II LABORATORY (R1631026)

**Prerequisite Course:** **Electrical machines-1 and Electrical machines-1I**

**CourseDescriptionandObjectives:** To analyze the performance of various electrical machines

**CourseOutcomes:**

Upon completion of the course, the student will be able to achieve the following outcomes.

| Cos | Course Outcomes | POs |
|---|---|---|
| 1 | Able to assess the performance of single phase and three phase induction motors | 2 |
| 2 | Able to control the speed of three phase induction motor. | 2 |
| 3 | Able to predetermine the regulation of three–phase alternator by various methods. | 2 |
| 4 | Able to find the Xd/ Xqratio of alternator and asses the performance of three–phase synchronous motor. | 2 |

**Syllabus:**

**Any 10 of the Following Experiments are to be conducted**

1. Brake test on three phase Induction Motor
2. No–load & Blocked rotor tests on three phase Induction motor
3. Regulation of a three –phase alternator by synchronous impedance &m.m.f. Methods
4. Regulation of three–phase alternator by Potier triangle method
5. V and Inverted V curves of a three—phase synchronous motor.
6. Determination of Xd and Xq of a salient pole synchronous machine
7. Equivalent circuit of single phase induction motor
8. Speed control of induction motor by V/f method.
9. Determination of efficiency of three phase alternator by loading with three phase induction motor.
10. Power factor improvement of single phase induction motor by using capacitors and load test on single phase induction motor