

33076- Electrical Machine Design Practical

DETAILED SYLLABUS

List of Experiments

1. By simple experiment, verify the magnetic laws using Coil, permanent magnet and Galvanometer.
2. Verify the rotating magnetic field with stator and ball.
3. Measure magnetic flux using flux meter.
4. Using Crawler test the windings.
5. Design a 1 phase 1 KVA ,230/15V core type transformer and assemble the core.
6. Design a 1 phase 1KVA, 230/15V shell type transformer and assemble the core.
7. Design 3 phase 1 KVA transformer and assemble winding, core, etc.,
8. Design 3 phase 1 KVA transformer (delta/star connected) and wind one coil set.
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9. Design armature for 5 KWdc machine and insert one coil set.
10. Design field pole for 5 KWdc machine and assemble one pole and insert in the body.
11. Assemble the given dc machine (pole, inter pole, armature, commutator, brush etc).
12. Design and assemble ceiling fan.
13. Design and assemble a 3 HP induction motor.
14. Design and assembled 3phase 3HP synchronous motor.
15. Dismantle and assemble a 3 phase wound rotor induction motor.
16. Design and assembled 1phasesalient pole 5KVA alternator.