SUBJECT NO-EE29002, SUBJECT NAME- Electrical Machines Lab.

LTP- 0-0-3,CRD- 2

SYLLABUS :-

1. No load, Short circuit and Load test on a single phase transformer.2. Study of various three phase transformer connections and measurement of third harmonic voltage.3. Hopkinsons test on d.c. shunt machines.4. O.C.C and load characteristic of a d.c shunt generator.5. No load, blocked rotor and load test on a three phase induction motor.6. No load, blocked rotor and load test on a single phase induction motor.7. Open circuit, short circuit and ZPF tests of alternator and estimation of regulation by various methods.8. Synchronisation and V-curves of a synchronous motor.At the end it is recommended, that each student has to appear in LAB TEST individually.Further to the above, If time permits, suitable number of experiments may be chosen from the following list.10. Fields test on d.c series motors.11. Sumpners test on transformers.12. Speed control of 3-phase induction motor using variable voltage, variable frequency sinusoidal source.13. Study of starters for d.c and a.c motors.Operation of induction machine as an isolated generator- estimation of suitable capacitance for self excitation.