

# ELECTRICAL MACHINES-1

## List of Experiments

1. (a) To obtain the open circuit characteristics of a self-excited DC shunt generator  
(b) To conduct a load test on DC Shunt Generator and to draw its load characteristics from the obtained data.
2. To conduct load test on a DC Series Motor and to find its efficiency
3. To conduct load test on A DC shunt motor and to find its Speed torque characteristics and efficiency
4. To obtain speed control of DC shunt motor by
  - (a) Varying armature voltage with field current constant
  - (b) Varying field current with armature voltage constant
5. To determine the efficiency and regulation of a 1- $\emptyset$  transformer by conducting
  - (a) Open circuit test and short circuit test and to draw equivalent circuit.
  - (b) To determine the efficiency and voltage regulation of a single phase transformer by load test.
6. To check the polarity of given single phase transformer and to check the parallel operation of the two transformers.
7. To obtain a balanced two phase supply from three phase system by using Scott connection
8. To obtain efficiency and regulation of a single phase transformer by Sumpner's (back to back) test.