

*Electrical Machines Laboratory-I is very fundamental laboratory of Electrical Engineering Department. It is equipped with single-phase transformer, D.C. generator, D.C. motor and various electrical & electronics measuring instruments. The purpose of this lab is to give hands on experience on single-phase transformer, D.C. motor and D.C. generator. This laboratory is used for the undergraduate 2<sup>nd</sup> year 2<sup>nd</sup> semester students for course EE 292.*

### **The course outcomes:**

At the end of the course the student will be able to

1. Conduct different tests on single-phase transformer.
2. Connect and operate two single phase transformers in parallel.
3. Connect and control the speed of D.C. shunt motor using armature control and field control methods.
4. Obtain the characteristic of D.C. series motor.
5. Obtain the characteristic of D.C. shunt and D.C. compound generator.

### **Assessment Criteria:**

1. Regular attendance to classes.
2. Experimental result and lab report.
3. End semester final examinations.