

## **GYAN SAGAR COLLEGE OF ENGINEERING**

New Scheme Based On AICTE Flexible Curricula

**Electrical & Electronics Engineering, VII-Semester**

### **Energy Audit Lab**

#### **LIST OF EXPERIMENTS**

- 1) To study the need of energy conservation and audit.
- 2) To study the uses and technical specification of all relevant energy auditing instruments.
- 3) To perform experiment to collect data of all energy auditing instruments with respect to their inputs and also analyze the collected data.
- 4) To perform experiment for comparative analysis of all luminaries (Incandescent lamp, Florescent lamp(FL), Compact FL and LED) using energy auditing instruments.
- 5) To study of different lighting systems, such as commercial, factory, flood and decorative etc.
- 6) To study applications of solar energy with respect to photovoltaic and thermal.
- 7) To study performance assessment of motors for energy conservation using auditing.
- 8) To study the different techniques for power factor improvement and its benefits.
- 9) To study the criteria and types of energy efficient motors.
- 10) To study the comparative analysis between standard and energy efficient motors.
- 11) Case study of net metering as a future technique to optimize electrical energy utilization.
- 12) Case study of energy audit of your departmental building.