1. Explain the basic components of an energy audit.

2. Prepare the Industrial audit report.

3. Write short notes on load curve and load duration curve.

4. The annual costs of operating a 15000 kW thermal power station are as follows:
   - Cost of plant=Rs. 1080 per kW
   - Interest, insurance, taxes and Depreciation on plant =5%
   - Cost of primary distribution system=Rs. 600000
   - Interest, insurance, taxes and Depreciation on primary distribution system=5%
   - Cost of secondary distribution system=Rs. 1080000
   - Interest, insurance, taxes and Depreciation on secondary distribution system=5%
   - Maintenance of secondary distribution system=Rs. 216000
   - Plant Maintenance cost: (i) Fixed cost= Rs. 36000 (ii) variable cost= Rs. 48000
   - Operating costs= Rs. 720000
   - Cost of coal= Rs. 7.2 per kN, consumption of coal=300000 kN
   - Dividend to stock holders= Rs. 1200000, Energy loss in transmission=10%,
   - Maximum demand=14000 kW, Diversity factor=1.5, load factor=0.7

   Determine: (i) charge per kW per year and (ii) rate per kWh

5. Describe the parameters which need to be monitored regularly to assess and improve the performance of air compressors.

6. Explain the different types of Fans and their significance. Also state the arrangements of fan to improve its efficiency.

7. Define all the terms consider for economic calculation of power plant engineering.

8. What are depreciation method and sinking fund method?