

DISCIPLINE ELECTRICAL	SEMESTER 5 TH	NAME OF THE TEACHING FACULTY: NRUSINGH CHARAN BEHERA
SUBJECT: ENERGY CONSERVATION & AUDIT LAB	NO.OFDAYS/WEEK CLASS ALLOTTED – 60Hr(4P/week)	SEMESTER FROM DATE:01.07.20265 to 05.11.20265
WEEK	CLASS /DAY	PRACTICAL TOPICS
1st	E ₁ /E ₂	Identify star labelled electrical apparatus and compare the data for various star ratings.
2nd	E ₁ /E ₂	Determine the '% loading' of the given loaded Induction motor.
3rd	E ₁ /E ₂	Determine the reduction in power consumption in star mode operation of Induction motor compared to delta mode.
4th	E ₁ /E ₂	Use APFC unit for improvement of p. f. of electrical load
5TH	E ₁ /E ₂	Compare power consumption of different types of TL with choke, electronic ballast and LED lamps by direct measurements.
6TH	E ₁ /E ₂	Determine the reduction in power consumption by replacement of lamps in a classroom / laboratory
7 TH	E ₁ /E ₂	Determine the reduction in power consumption by replacement of Fans and regulators in a classroom / laboratory.
8 TH	E ₁ /E ₂	Collect electricity bill of an industrial consumer and suggest suitable tariff for energy conservation and its impact on energy bill.
9 TH	E ₁ /E ₂	Collect electricity bill of a commercial consumer and suggest suitable tariff for conservation and reduction of its energy bill.
10 TH	E ₁ /E ₂	Collect electricity bill of a residential consumer and suggest suitable meansfor conservation and reduction of the energy bill.
11 TH	E ₁ /E ₂	Estimate energy saving by improving power factor and load factor for given cases.
12 TH	E ₁ /E ₂	Prepare a sample energy audit questionnaire for the given industrial facility.
13 TH	E ₁ /E ₂	Prepare an energy audit report (Phase-I)
14 TH	E ₁ /E ₂	Prepare an energy audit report (Phase-II)
15 TH	E ₁ /E ₂	Prepare an energy audit report (Phase-III)


 02.3.2025
 SIGNATURE OF FACULTY
 Sr. Lect. Electrical