



SYNERGY SCHOOL OF ENGINEERING, DHENKANAL

Discipline Electrical Engineering Subject:- Energy Conservation & Audit Lab No. of week	Semester:- 5 th Sem	Name of the teaching faculty:- MANMOHAN PANDA		
	No. of Days/week class Allotted :-4 No. of class	No. of Weeks:-15 Session 2026-2027 (Winter) Starting Date - 01/07/2026 Ending Date - 05/11/2026	Experiments to be Done	
			Date of Delivery	
			G1	G2
1 st	1 st	Identify star labelled electrical apparatus and compare the data for various star ratings		
	2 nd	Identify star labelled electrical apparatus and compare the data for various star ratings		
2 nd	1 st	Identify star labelled electrical apparatus and compare the data for various star ratings		
	2 nd	Determine the '% loading' of the given loaded Induction motor		
3 rd	1 st	Determine the '% loading' of the given loaded Induction motor		
	2 nd	Determine the '% loading' of the given loaded Induction motor		
4 th	1 st	Determine the reduction in power consumption in star mode operation of Induction motor compared to delta mode		
	2 nd	Determine the reduction in power consumption in star mode operation of Induction motor compared to delta mode		
5 th	1 st	Determine the reduction in power consumption in star mode operation of Induction motor compared to delta mode		
	2 nd	Use APFC unit for improvement of p. f. of electrical load.		
6 th	1 st	Use APFC unit for improvement of p. f. of electrical load.		
	2 nd	Use APFC unit for improvement of p. f. of electrical load.		
7 th	1 st	Compare power consumption of different types of TL with choke, electronic ballast and LED lamps by direct measurements		
	2 nd	Compare power consumption of different types of TL with choke, electronic ballast and LED lamps by direct measurements		
8 th	1 st	Compare power consumption of different types of TL with choke, electronic ballast and LED lamps by direct measurements		
	2 nd	Determine the reduction in power consumption by replacement of lamps in a classroom / laboratory		
9 th	1 st	Determine the reduction in power consumption by replacement of lamps in a classroom / laboratory		

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10 th	2 nd	Determine the reduction in power consumption by replacement of lamps in a classroom / laboratory		
	1 st	Determine the reduction in power consumption by replacement of Fans and regulators in a classroom / laboratory		
11 th	2 nd	Determine the reduction in power consumption by replacement of Fans and regulators in a classroom / laboratory		
	1 st	Determine the reduction in power consumption by replacement of Fans and regulators in a classroom / laboratory		
12 th	2 nd	Prepare an energy audit report (Phase-I)		
	1 st	Prepare an energy audit report (Phase-I)		
13 th	2 nd	Prepare an energy audit report (Phase-II)		
	1 st	Prepare an energy audit report (Phase-II)		
14 th	2 nd	Prepare an energy audit report (Phase-III)		
	1 st	Prepare an energy audit report (Phase-III)		
15 th	2 nd	Prepare an energy audit report (Phase-III)		
	1 st	Prepare an energy audit report (Phase-III)		

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Prepared by

Manmohan Panda

Lect. EE

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