

PNS SCHOOL OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF ELECTRICAL ENGINEERING

Branch: Electrical Engg.	Semester: 5th	Name of the Demonstrator: Sushree Sangita Prusty.
Subject: EM lab II	No of Classes Alloted in a Week: 2	Duration of Semester: 01.08.2023 - 30.11.2023
Week	Class Day	Theory / Practical Topic
1st	1	Study of Direct on Line starter connection and running a 3-phase Induction motor and measurement of starting current.
	2	Study of Direct on Line starter connection and running a 3-phase Induction motor and measurement of starting current.
2nd	1	Study of Star-Delta starter,connection and running a 3-phase Induction motor and measurement of starting current.
	2	Study of Star-Delta starter,connection and running a 3-phase Induction motor and measurement of starting current.
3rd	1	Study of Auto transformer starter connection and running a 3-phase induction motor and measurement of starting current
	2	Study of Auto transformer starter connection and running a 3-phase induction motor and measurement of starting current
4th	1	Study of rotor resistance starter connection and running a 3-phase induction motor and measurement of starting current
	2	Study of rotor resistance starter connection and running a 3-phase induction motor and measurement of starting current
5th	1	Study and practice of connection and reverse the direction of rotation of Three phase induction motor
	2	Study and practice of connection and reverse the direction of rotation of single phase induction motor
6th	1	Heat run test of 3-phase transformer
	2	Heat run test of 3-phase transformer
7th	1	OC and SC test of alternator and determination of regulation by synchronous impedance method
	2	OC and SC test of alternator and determination of regulation by synchronous impedance method
8th	1	Determination of regulation of alternator by direct loading
	2	Determination of regulation of alternator by direct loading
9th	1	Parallel operation of two alternators and study load sharing
	2	Parallel operation of two alternators and study load sharing
10th	1	Measurement of power of a 3-phase load using two wattmeter method and verification of the result using one 3-phase wattmeter
	2	Measurement of power of a 3-phase load using two wattmeter method and verification of the result using one 3-phase wattmeter

11th	1	Connection of 3-phase energy meter to a 3-phase load
	2	Connection of 3-phase energy meter to a 3-phase load
12th	1	Study of an O.C.B
	2	Study of induction type over current/reverse power relay
13th	1	Study of Buchholz's relay
	2	Study of an earth fault relay

**Signature of the
Demonstrator**

**Signature of the
H.O.D.**

**Signature of the
Principal**