

# GOVERNMENT POLYTECHNIC ,BARGARH

## Department Of Electrical Engineering

Semester: 5<sup>th</sup>. DIPLOMA

Subject: ELECTRICAL MACHINE LAB-II

Branch: Electrical Engineering

Session: WINTER

No of Period :90 (6p/week)

Name of Faculty: NITESH KU. ACHARYA

Week	Period	Topics to be covered
1	1	Demonstration of Determination of regulation of alternator by direct loading.
	2	Determination of regulation of alternator by direct loading
2	3	Demonstration of OC and SC test of alternator and determination of regulation by synchronous impedance method
	4	OC and SC test of alternator and determination of regulation by synchronous impedance method
3	5	OC and SC test of alternator and determination of regulation by synchronous impedance method
	6	Demonstration of Parallel operation of two alternators and study load sharing
4	7	Parallel operation of two alternators and study load sharing.
	8	Demonstration of earth fault relay & induction type over current relay.
5	9	Study of an earth fault relay
	10	Study of induction type over current / reverse power relay
6	11	Demonstration of Study of Buchholz's relay
	12	Study of Buchholz's relay
7	13	Demonstration of Study of an O.C.B
	14	Study of an O.C.B
8	15	Demonstration of experiments of 3-phase induction motor
	16	Demonstration of experiments of 3-phase induction motor

9	17	Study of (Manual and Semi-automatic) Direct On-Line starter, Star-Delta starter, connection and running a 3-phase Induction motor and measurement of starting current
	18	Study of (Manual and Semi-automatic) Auto transformer starter and rotor resistance starter connection and running a 3-phase induction motor and measurement of starting current
10	19	Study and Practice of connection & reverse the direction of rotation of Three Phase Induction motor
	20	Demonstration of Study and Practice of connection & reverse the direction of rotation of Single-Phase Induction motor.
11	21	Study and Practice of connection & reverse the direction of rotation of Single-Phase Induction motor.
	22	Demonstration of Heat run test of 3-phase transformer
12	23	Heat run test of 3-phase transformer
	24	Demonstration of Connection of 3-phase energy meter to a 3-phase load.
13	25	Connection of 3-phase energy meter to a 3-phase load.
	26	Demonstration of Measurement of power of a 3-phase Load using two wattmeter method and verification of the result using one 3-phase wattmeter
14	27	Measurement of power of a 3-phase Load using two wattmeter method and verification of the result using one 3-phase wattmeter
	28	Remedial classes & Virtual lab
15	29	Comprehensive viva voce
	30	Comprehensive viva voce