

# LESSON PLAN



**SUB: ELECTRICAL MACHINE LAB - II**

**BRANCH:- ELECTRICAL ENGG.**

**SEMESTER: 5<sup>th</sup>**

**SESSION: 2025-2026**

**NAME OF FACULTY: NIBEDITA HO**



**GOVERNMENT POLYTECHNIC,  
BHADRAK**

Hod, Electrical

**HOD (ELECT.)  
G.P. BHADRAK**

Academic Co-ordinator

**Academic Co-ordinator**

Principal

Govt. Polytechnic, Bhadrak

**Principal  
Govt. Polytechnic  
Bhadrak**

<b>Discipline:</b> Electrical Engg.	<b>Semester:</b> 5 <sup>th</sup>	<b>Name of the Teaching Faculty :</b> Nibedita Ho
<b>Subject:</b> Electrical Machine Lab - II	<b>No. of Days/per week class allotted: 6</b>	<b>Semester from date: 14.07.2025 to 15.11.2025</b>  <b>No. of Weeks:15</b>
<b>Week</b>	<b>Class Day</b>	<b>Theory</b>
1 <sup>st</sup>	E2	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.
	E1	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.
	E2	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.
	E1	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.
2 <sup>nd</sup>	E2	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.
	E1	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.
	E2	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.
	E1	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.
3 <sup>rd</sup>	E2	Study and Practice of connection & Reverse the direction of rotation of 3 Phase Induction motor.
	E1	Study and Practice of connection & Reverse the direction of rotation of 3 Phase Induction motor.
	E2	Study and Practice of connection & Reverse the direction of rotation of 3 Phase Induction motor.
	E1	Study and Practice of connection & Reverse the direction of rotation of 3 Phase Induction motor.
4 <sup>th</sup>	E2	Study and Practice of connection & Reverse the direction of rotation of Single Phase Induction motor.
	E1	Study and Practice of connection & Reverse the direction of rotation of Single Phase Induction motor.
	E2	Study and Practice of connection & Reverse the direction of rotation of Single Phase Induction motor.
	E1	Study and Practice of connection & Reverse the direction of



		rotation of Single Phase Induction motor.
5 <sup>th</sup>	E2	OC and SC test of alternator and determination of regulation by synchronous impedance method.
	E1	OC and SC test of alternator and determination of regulation by synchronous impedance method.
	E2	OC and SC test of alternator and determination of regulation by synchronous impedance method.
	E1	OC and SC test of alternator and determination of regulation by synchronous impedance method.
6 <sup>th</sup>	E2	OC and SC test of alternator and determination of regulation by synchronous impedance method.
	E1	OC and SC test of alternator and determination of regulation by synchronous impedance method.
	E2	Determination of regulation of alternator by direct loading.
	E1	Determination of regulation of alternator by direct loading.
7 <sup>th</sup>	E2	Determination of regulation of alternator by direct loading.
	E1	Determination of regulation of alternator by direct loading.
	E2	Parallel operation of two alternators and study load sharing.
	E1	Parallel operation of two alternators and study load sharing.
8 <sup>th</sup>	E2	Parallel operation of two alternators and study load sharing.
	E1	Parallel operation of two alternators and study load sharing.
	E2	Measurement of power of a 3-phase Load using two wattmeter method and verification of the result using one 3- phase wattmeter.
	E1	Measurement of power of a 3-phase Load using two wattmeter method and verification of the result using one 3- phase wattmeter.
9 <sup>th</sup>	E2	Measurement of power of a 3-phase Load using two wattmeter method and verification of the result using one 3- phase wattmeter.
	E1	Measurement of power of a 3-phase Load using two wattmeter method and verification of the result using one 3- phase wattmeter.
	E2	Connection of 3-phase energy meter to a 3-phase load.
	E1	Connection of 3-phase energy meter to a 3-phase load.

10 <sup>th</sup>	E2	Connection of 3-phase energy meter to a 3-phase load.
	E1	Connection of 3-phase energy meter to a 3-phase load.
	E2	Connection of 3-phase energy meter to a 3-phase load.
	E1	Connection of 3-phase energy meter to a 3-phase load.
11 <sup>th</sup>	E2	Heat run test of 3-phase transformer.
	E1	Heat run test of 3-phase transformer.
	E2	Heat run test of 3-phase transformer.
	E1	Heat run test of 3-phase transformer.
12 <sup>th</sup>	E2	Study of an O.C.B.
	E1	Study of an O.C.B.
	E2	Study of an O.C.B.
	E1	Study of an O.C.B.
13 <sup>th</sup>	E2	Study of induction type over current /reverse power relay.
	E1	Study of induction type over current /reverse power relay.
	E2	Study of induction type over current /reverse power relay.
	E1	Study of induction type over current /reverse power relay.
14 <sup>th</sup>	E2	Study of Buchholz's relay.
	E1	Study of Buchholz's relay.
	E2	Study of Buchholz's relay.
	E1	Study of Buchholz's relay.
15 <sup>th</sup>	E2	Study of an earth fault relay.
	E1	Study of an earth fault relay.
	E2	Study of an earth fault relay.
	E1	Study of an earth fault relay.

  
SIGNATURE OF FACULTY

Lect.in Elect.Engg.  
Govt.Poly.Bhadrak