

LABORATORY ASSIGNMENT /SHEET /JOB /PROJECT ACTIVITY PLANNING (LP)

Academic Year: 2025-26 (EVEN)

Date: 15/012/2025

Institute Name: K. K. Wagh Polytechnic, Nashik

MSBTE Code: 0078

Program and Code: Electrical Engineering (EE)

Course Code & Abbr.:316328 (MEE)

Course Name: Maintenance of Electrical Equipment (MEE) **Name of Faculty:** Mr J. M. Patil/Ms.K.V.Ahire

Class: TYEE-Tesla

Semester: 6th

Scheme: K

Learning Hrs. 64

● **Teaching-Learning & Assessment Scheme:**

Course Code	Course Title	Abbr	Course Category	Learning Scheme						Credits	Paper Duration	Assessment Scheme									
				Actual Contact Hrs/Week			SLH	NLH	Theory				Based on LL & TSL Practical				Based on SL		Total Marks		
				CL	TL	LL			FA-TH			SA-TH	Total		FA-PR		SA-PR			SLA	
													Max	Min	Max	Min	Max	Min		Max	Min
316328	MAINTENANCE OF ELECTRICAL EQUIPMENTS	MEE	DSC	4	-	4	2	10	5	3	30	70	100	40	25	10	25#	10	25	10	175

Abbreviations: CL- Class Room Learning , TL- Tutorial Learning, LL-Laboratory Learning, SLH-Self Learning Hours, NLH-Notional Learning Hours, FA - Formative Assessment, SA -Summative assessment, IKS – Indian Knowledge System, SLA - Self Learning Assessment
Legends: @ Internal Assessment, # External Assessment, ** On Line Examination, @\$ Internal Online Examination

● **COURSE LEVEL LEARNING OUTCOMES (COS)**

- CO1 - Follow safety norms to prevent accidents while using electrical equipment.
- CO2 - Test electrical equipment.
- CO3 - Maintain rotating electrical machines.
- CO4 - Maintain single phase and three phase transformers.
- CO5 - Maintain insulation systems of electrical equipment

● **COs, Practical Laboratory Learning Outcome (LLOs) and Mapping:**

Pr. No	COs	LLO	Name of Experiments/Assignment/ Sheet/ Job/ Project Activity	Planned Date A/B/C		Actual date of Performance	Remark
				From	To		
1	CO1	1.1	* Demonstration of Fire extinguisher available in the institute.	A-15/12/2025 B-16/12/2025 C-17/12/2025	A-15/12/2025 B-16/12/2025 C-17/12/2025	A- B- C-	
2	CO1	2.1	* Demonstration of artificial respiration (Any convenient method)	A-15/12/2025 B-16/12/2025 C-17/12/2025	A-15/12/2025 B-16/12/2025 C-17/12/2025	A- B- C-	
3	CO1	3.1	* Measurement of earth resistance of electrical laboratory equipment	A- 22/12/2025 B- 23/12/2025 C-24/12/2025	A- 22/12/2025 B- 23/12/2025 C-24/12/2025	A- B- C-	
4	CO1	4.1	*Protective class of a given electric equipment.	A- 22/12/2025 B- 23/12/2025 C-24/12/2025	A- 22/12/2025 B- 23/12/2025 C-24/12/2025	A- B- C-	
5	CO1	5.1	* Visit BIS portal (bis.gov.in) for getting ISI mark/obtaining a license for electrical equipments and	A- 29/12/2025 B- 30/12/2025 C- 31/12/2025	A- 29/12/2025 B- 30/12/2025 C- 31/12/2025	A- B- C-	

			prepare a report for it.				
6	CO2	6.1 6.4	* Dismantle and reassemble the given electrical machine and identify the various parts.	A- 29/12/2025 B- 30/12/2025 C- 31/12/2025	A- 29/12/2025 B- 30/12/2025 C- 31/12/2025	A- B- C-	
7	CO2	7.1	* Use of instruments for testing/maintenance of given electrical equipment.	A- 05/01/2026 B- 06/01/2026 C- 07/01/2026	A- 05/01/2026 B- 06/01/2026 C- 07/01/2026	A- B- C-	
8	CO2	8.1	* Testing of given 70 W or higher rating LED for ingress of water to confirm the IP rating.	A- 05/01/2026 B- 06/01/2026 C- 07/01/2026	A- 05/01/2026 B- 06/01/2026 C- 07/01/2026	A- B- C-	
9	CO3	9.1	Maintainance of given induction motor.	A- 12/01/2026 B- 13/01/2026 C- 14/01/2026	A- 12/01/2026 B- 13/01/2026 C- 14/01/2026	A- B- C-	
10	CO4	10.1	Maintainance of given transformer.	A- 12/01/2026 B- 13/01/2026 C- 14/01/2026	A- 12/01/2026 B- 13/01/2026 C- 14/01/2026	A- B- C-	
11	CO3	11.1 11.2	Diagnosis and rectification of faults for a ceiling fan running slow.	A- 19/01/2026 B- 20/01/2026 C- 21/01/2026	A- 19/01/2026 B- 20/01/2026 C- 21/01/2026	A- B- C-	
14	CO3	14.1	* Reduced voltage running up test of three phase induction motor	A- 19/01/2026 B- 20/01/2026 C- 21/01/2026	A- 19/01/2026 B- 20/01/2026 C- 21/01/2026	A- B- C-	
16	CO3	16.1	Measurement of phase winding resistance of a three-phase induction motor by V-I method.	A- 02/02/2026 B- 03/02/2026 C- 04/02/2026	A- 02/02/2026 B- 03/02/2026 C- 04/02/2026	A- B- C-	
17	CO4	17.1	* Phasing out test of the three-phase transformer.	A- 02/02/2026 B- 03/02/2026 C- 04/02/2026	A- 02/02/2026 B- 03/02/2026 C- 04/02/2026	A- B- C-	
18	CO4	18.1	* Polarity test of three phase transformer.	A- 09/02/2026 B- 10/02/2026 C- 11/02/2026	A- 09/02/2026 B- 10/02/2026 C- 11/02/2026	A- B- C-	
19	CO4	19.1	Back-to-Back test on two identical single-phase transformers.	A- 09/02/2026 B- 10/02/2026 C- 11/02/2026	A- 09/02/2026 B- 10/02/2026 C- 11/02/2026	A- B- C-	
20	CO5	20.1	Dielectric strength test of transformer oil.	A- 16/02/2026 B- 17/02/2026 C- 18/02/2026	A- 16/02/2026 B- 17/02/2026 C- 18/02/2026	A- B- C-	
21	CO5	21.1	Test insulation resistance and dielectric strength of the windings of a single-phase induction motor	A- 16/02/2026 B- 17/02/2026 C- 18/02/2026	A- 16/02/2026 B- 17/02/2026 C- 18/02/2026	A- B- C-	
24	CO5	24.1	Measurement of insulation resistance of three phase induction motor.	A- 23/02/2026 B- 24/02/2026 C- 25/02/2026	A- 23/02/2026 B- 24/02/2026 C- 25/02/2026	A- B- C-	
25	CO5	25.1	Measurement of insulation resistance of single-phase transformer.	A- 23/02/2026 B- 24/02/2026 C- 25/02/2026	A- 23/02/2026 B- 24/02/2026 C- 25/02/2026	A- B- C-	
26	CO5	26.1	Measurement of insulation resistance of three phase	A- 02/03/2026 B- 10/03/2026 C- 04/03/2026	A- 02/03/2026 B- 10/03/2026 C- 04/03/2026	A- B- C-	

			transformer.				
--	--	--	--------------	--	--	--	--

ASSESSMENT METHODOLOGIES/TOOLS:

A. Formative assessment (Assessment for Learning) (FA-TH)

- Continuous assessment based on process and product related performance indicators. Each practical will be assessed considering
 - 60% weightage is to process
 - 50% weightage to product

B. Summative Assessment (Assessment of Learning) (SA-TH)

- Continuous Assessment based on Process and Product related performance indicators. Each practical will be assessed considering
 - 60% weightage to Process
 - 50% weightage to Product

Mr J. M. Patil /Ms. K.V.Ahire
(Name & Signature of Faculty)

Prof.S. B. Pawar
(Name & Signature of HOD)