

LABORATORY PRACTICAL PLANNING

Academic Year: 2025-26 (EVEN)

Date-15/12/2025

Institute Name: K. K. Wagh Polytechnic, Nashik

MSBTE Code: 0078

Program and Code: Information Technology (IF)

Course Code & Abbr.: 312302 (BEE)

Course Name: Basic Electrical & Electronics Engineering

Name of Faculty: Mr.R.J.Shinde

Class: FYIF-PARAM Semester: Second Scheme: K

Course Index: CO202 Learning Hrs.:45

Teaching-Learning & Assessment Scheme:

Course Code	Course Title & Abbr	Course Category	Learning Scheme						Credits	Paper Duration (Hrs.)	Assessment Scheme										Total Marks
			Actual Contact Hrs/Week			SLH	NLH	Theory			Based on LL & TSL Practical				Based on SL						
			CL	TL	LL			FA TH			SA TH	Total		FA-PR		SA-PR		SLA			
			Max	Max	Max			Min			Max	Min	Max	Min	Max	Min	Max	Min			
312302	Basic Electrical & Electronics Engineering (BEE)	AEC	4	-	4	2	10	5	1.5	30	70*#	100	40	50	20	50@	20	50	20	250	

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)

Students will be able to achieve & demonstrate the following COs on completion of course based learning

- CO4 - Use relevant diode in different electronic circuits.s
- CO5 - Use BJT and FET in various electronic circuits.
- CO6 - Use various types of sensors and transducers.

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

Sr. No	LLO	Practical Title	Planned Date	Performance Date	Remark	Related Self Learning
1	LLO 16.1	Connect the Zener diode in the circuit and test its operation in forward and reverse bias mode.	A- 15/12/2025 B- 16/12/2025 C- 17/12/2025	A- B- C-		
2	LLO 17.1	*Determine the voltage regulation by using Zener diode under variable input and output conditions.	A- 22/12/2025 B- 23/12/2025 C-24/12/2025	A- B- C-		
3	LLO 18.1	Check the output waveform of L, C and π filters on CRO of rectifier circuit.	A-29/12/2025 B-30/12/2025 C-31/12/2025	A- B- C-		
4	LLO 19.1	*Make the input and output connections of UPS and measure the output voltage under online and offline mode.	A-05/01/2026 B-06/01/2026 C-07/01/2026	A- B- C-		
5	LLO 20.1	*Make the input, output connections and check the operation of UPS under normal and overload condition.	A-12/01/2026 B-13/01/2026 C-14/01/2026	A- B- C-		

LABORATORY PRACTICAL PLANNING

Academic Year: 2025-26 (EVEN)

Date: 15/12/2025

Institute Name: K. K. Wagh Polytechnic, Nashik

MSBTE Code: 0078

Program and Code: Information Technology (IF)

Course Code & Abbr.: 312302 (BEE)

Course Name: Basic Electrical & Electronics Engineering

Name of Faculty: Mr.R.J.Shinde

Class: FYIF-PARAM **Semester:** Second **Scheme:** K

Course Index: CO202 **Learning Hrs.:**45

Pr. No	LLO	Name of Experiments/Assignment/ Sheet/ Job/ Project Activity	Planned Date	Actual date of Performance	Remark	Related Self Learning
6	LLO 21.1	*Test input /output characteristics of NPN transistor in CE configuration.	A-19/01/2026 B-20/01/2026 C-21/01/2026	A- B- C-		
7	LLO 22.1	Test input /output characteristics of NPN transistor in CB configuration.	A-02/02/2026 B-03/02/2026 C-04/02/2026	A- B- C-		
8	LLO 23.1	*Check the switch ON and switch OFF condition of LED by using transistor.	A-09/02/2026 B-10/02/2026 C-11/02/2026	A- B- C-		
9	LLO 24.1	Determine the Drain and Transfer characteristics of FET.	A-16/02/2026 B-17/02/2026 C-18/02/2026	A- B- C-		
10	LLO 25.1	*Measure temperature of liquid using RTD (PT-100) transducer.	A-23/02/2026 B-24/02/2026 C-25/02/2026	A- B- C-		
11	LLO 28.1	*Measure the resistance of LDR in varying light intensity.	A-02/03/2026 B-10/03/2026 C-04/03/2026	A- B- C-		
12	LLO 29.1	Measure displacement using LVDT.	A-09/03/2026 B-17/03/2026 C-11/03/2026	A- B- C-		
** Study of Flip-Flop.		3 rd week of March.				

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 1) 60% weightage is to process 2) 40% weightage to product

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

- End semester examination, Lab performance, Viva voce

Mr.R.J.Shinde
(Name & Signature of Staff)

Ms. M. S. Karande
(Name & Signature of HOD)