

UTKAL GOURAV MADHUSUDAN INSTITUTE OF TECHNOLOGY, RAYAGADA**Academic Lesson Plan for 2nd Semester – 2025 (Summer)**

Name of the teaching faculty: Sri Bhabani Sankar Patnaik

Guest Faculty (Physics)

Discipline : Common (Civil / Electrical / E&TC / Mechanical Engg.)

Dept. : Department of Mathematics & Science

Semester : 2nd

Subject : PR2 : Applied Physics –II Laboratory

No of Periods per week: 2

Total Periods: 30

Sessional : 25 Marks,

End Semester Exam.: 25 Marks,

Total Marks : 50 Marks

Week	Period	Experiment	Topics to be covered
1st	1 st		Introduction to Physics lab, about safety measures, about maintenance of practical records.
	2 nd		Introduction to the students about use of different lab equipments and how to handle them safely.
2nd	1 st	Expt-1	To determine and verify the timeperiod of a cantilever .
	2 nd		Discussing viva question.
3rd	1 st	Expt-2	To verify laws of reflection from a plane mirror / interface.
	2 nd		Record correction and discuss viva question .
4th	1 st	Expt-2	To verify laws of reflection from a plane mirror / interface.
	2 nd		Discussing viva question and record correction.

5th	1 st	Expt-3	To verify laws of refraction (Snell's law) using a glass slab.
	2 nd		Checking practical record and discuss viva question.
6th	1 st	Expt-3	To verify laws of refraction (Snell's law) using a glass slab.
	2 nd		Checking practical record and discuss viva question.
7th	1 st	Expt-4	To determine focal length and magnifying power of a convex lens.
	2 nd		Checking practical record and discuss viva question.
8th	1 st	Expt-5	To verify Ohm's law by plotting a graph between current and potential difference.
	2 nd		Checking practical record and discuss viva question.
9th	1 st	Expt-6	To verify law of resistance in series and parallel combination.
	2 nd		Checking practical record and discuss viva question.
10th	1 st	Expt-7	To find resistance of a galvanometer by half deflection method.
	2 nd		Checking practical record and discuss viva question.
11th	1 st	Expt-7	To find resistance of a galvanometer by half deflection method.
	2 nd		Checking practical record and discuss viva question.

12th	1 st	Expt-8	To convert a galvanometer into an ammeter.
	2 nd		Checking practical record and discuss viva question.
13th	1 st	Expt-9	To convert galvanometer into a voltmeter.
	2 nd		Checking practical record and discuss viva question.
14th	1 st	Expt-10	To draw V-I characteristics of a semiconductor diode (Ge, Se) and determine its knee voltage.
	2 nd		Checking practical record and discuss viva question.
15th	1 st		Discussing viva question and record correction.
	2 nd		Revising the performed experiment and doubt clearing.

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