

LAB LESSON PLAN	
Govt.Polytechnic sambalpur,Rengali	
Name of the Faculty:Pritish Chandra Tripathy	Academic Year:2024-25
Course Code.: PR 2	Course Name:Applied Physics-1 lab
Program: Diploma first year	Branch:Mechanical/civil/Agriculture
Year/Semester: Ist & 2nd	Section: A,B,E

sl no	week	time(min)	lecture no.	Experiments to be performed	Teaching Method
1	1st	120	1	Introduction to physics lab regarding record maintenance, safety rules and guidelines.	Chalkboard
		120	2	EXPERIMENT-1 (To measure length, radius of a given cylinder, a test tube and a beaker using a vernier caliper and find volume of each object) Introduction of the instrument and demonstration of experiment	Chalkboard
2	2nd	120	3	Observation and calculation by students	Chalkboard
		120	4	Record writing by the students, record checking and viva voce.	Chalkboard
3	3rd	120	5	EXPERIMENT-2 (Determination of diameter of wire, solid ball and thickness of cardboard using a screw gauge.) Introduction of the instrument and demonstration of Experiment	Chalkboard
		120	6	Observation and calculation by students	Chalkboard
4	4th	120	7	Record writing by the students, record checking and viva voce.	Chalkboard
		120	8	EXPERIMENT-3 (Determination of radius of curvature of a convex and concave mirror using a spherometer.) Introduction of the instrument and demonstration of Experiment	Chalkboard
5	5th	120	9	Observation and calculation by students	Chalkboard
		120	10	Record writing by the students, record checking and viva voce.	Chalkboard
6	6th	120	11	EXPERIMENT-4 (verify triangle law and parallelogram law of forces.) Demonstration of Experiment & Observation and calculation by students.	Chalkboard
		120	12	Observation and calculation by students	Chalkboard
7	7th	120	13	Record writing by the students, record checking and viva voce.	Chalkboard
		120	14	EXPERIMENT-5 (Determination of force constant of a spring using hook's law.) Introduction of the instrument and demonstration of Experiment.	Chalkboard
8	8th	120	15	Observation and calculation by students	Chalkboard
		120	16	Record writing by the students, record checking and viva voce.	Chalkboard
9	9th	120	17	EXPERIMENT-6 (To verify law of conservation of mechanical energy from potential energy to kinetic energy.) Introduction of the instrument and demonstration of Experiment.	Chalkboard

		120	18	Observation and calculation by students	Chalkboard
10	10th	120	19	Record writing by the students, record checking and viva voce..	Chalkboard
		120	20	EXPERIMENT-7 (To find the moment of inertia of a fly wheel.) Introduction of the instrument and demonstration of Experiment.	Chalkboard
11	11th	120	21	Observation and calculation by students	Chalkboard
		120	22	Record writing by the students, record checking and viva voce.	Chalkboard
12	12th	120	23	EXPERIMENT-8 (To find the viscosity of a given liquid (glycerine) by stokes law.) Introduction of the instrument and demonstration of Experiment.	Chalkboard
		120	24	Observation and calculation by students .	Chalkboard
13	13th	120	25	Record writing by the students, record checking and viva voce.	Chalkboard
		120	26	EXPERIMENT-9 (Find the coefficient of linear expansion of the material of the rod.) Introduction of the instrument and demonstration of Experiment.	Chalkboard
14	14th	120	27	Observation and calculation by students.	Chalkboard
		120	28	EXPERIMENT-10 (To measure room temperature and temperature of a hot bar using mercury thermometer and convert it into different scale.) Introduction of the instrument and demonstration of Experiment.	Chalkboard
15	15th	120	29	Observation and calculation by students.	Chalkboard
		120	30	Record checking and viva voce.	Chalkboard

*Pritish Chandra Tripathy*

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(Guest Faculty in Physics)

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