

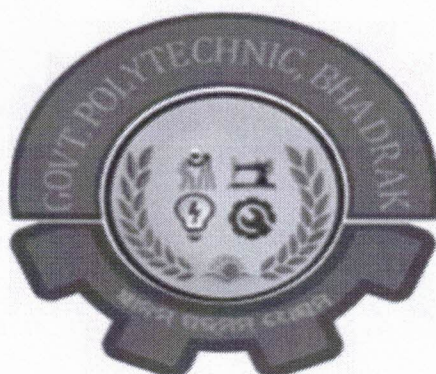
LESSON PLAN

SUBJECT: APPLIED PHYSICS-I LAB

BRANCH: COMMON (MECHANICAL & TEXTILE)

SEMESTER: 1ST (2024-25)

NAME OF THE FACULTY: ASEEMA BARIK



GOVERNMENT POLYTECHNIC, BHADRAK

HOD, Math & Sc

H.O.D. Math & Sc (I/c)

Academic Coordinator

Principal
Govt. Polytechnic, Bhadrak
Bhadrak

LESSON PLAN FOR WINTER SEMESTER – 2024
Dept. of Math & Science, Govt. Polytechnic, Bhadrak

Name of the Faculty: Aseema Barik
 Course Code: Pr-2
 Theory: Applied Physics-I Lab
 Total Periods : 30
 Examination: Winter(2024)
 Sem: 1ST

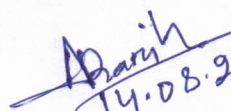
Sessional: 25
 End Sem. Exam: 25
 Total Mark : 50
 Class Start : 16.08.2024

Discipline: Math & Science	Semester: 1 ST (2024)	Name of the Teaching Faculty : Aseema Barik
Subject: Applied Physics-I Lab	No. of Days/per week class allotted: 1 day/ 2 classes	Semester from date: 16.08.2024 To Date: 11.12.2024 No. of Weeks: 15
Week	Class Day	Practical/ Topics
1 st	1 ST	<ul style="list-style-type: none"> Importance of experimentation and accurate measurement Instruction of maintaining lab record Introduction to vernier caliper, screw gauge, spherometer
	2 ND	<ul style="list-style-type: none"> Measurement of length, radius of a given cylinder (solid) using vernier caliper
2 nd	1 ST	<ul style="list-style-type: none"> Measurement of length, radius of a given cylinder (hollow) using vernier caliper
	2 ND	<ul style="list-style-type: none"> Determination of diameter of a wire using screw gauge
3 rd	1 ST	<ul style="list-style-type: none"> Determination of diameter of a solid ball using screw gauge
	2 ND	<ul style="list-style-type: none"> Determination of radius of curvature of a convex mirror using a spherometer
4 th	1 ST	<ul style="list-style-type: none"> Determination of radius of curvature of a concave mirror using a spherometer

	2 ND	<ul style="list-style-type: none"> ▪ Demonstration to verify triangle and parallelogram law of forces
5 th	1 ST	<ul style="list-style-type: none"> ▪ Demonstration to verify law of conservation of mechanical energy(PE to KE)
	2 ND	<ul style="list-style-type: none"> ▪ Demonstration to find the co-efficient of friction between wood and glass using a horizontal board
6 th	1 ST	<ul style="list-style-type: none"> ▪ Demonstration to find the co-efficient of linear expansion of the material of a rod
	2 ND	<ul style="list-style-type: none"> ▪ Measurement of room temperature and temperature of a hot bath using mercury thermometer and convert into different scales
7 th	1 ST	<ul style="list-style-type: none"> ▪ Lab practice by the students of group <ul style="list-style-type: none"> ✓ Alpha – Measurement of length, radius of given cylinder using vernier caliper ✓ Beta – Diameter of a wire using screw gauge ✓ Gamma – Diameter of a solid ball using screw gauge
	2 ND	<ul style="list-style-type: none"> ▪ Lab practice by the students of group <ul style="list-style-type: none"> ✓ Alpha – Diameter of a wire using screw gauge ✓ Beta – Diameter of a solid ball using screw gauge ✓ Gamma – Measurement of length, radius of given cylinder using vernier caliper
8 th	1 ST	<ul style="list-style-type: none"> ▪ Lab practice by the students of group <ul style="list-style-type: none"> ✓ Alpha – Diameter of a solid ball using screw gauge ✓ Beta – Measurement of length, radius of given cylinder using vernier caliper ✓ Gamma – Diameter of a wire using screw gauge
	2 ND	<ul style="list-style-type: none"> ▪ Lab practice by the students of group <ul style="list-style-type: none"> ✓ Alpha – Radius of curvature of convex/concave surface using spherometer ✓ Beta – Verify triangle and parallelogram law of forces ✓ Gamma – Find co-efficient of friction between wood and glass
9 th	1 ST	<ul style="list-style-type: none"> ▪ Lab practice by the students of group <ul style="list-style-type: none"> ✓ Alpha – Verify triangle and parallelogram law of forces ✓ Beta – Find co-efficient of friction between wood and glass ✓ Gamma – Radius of curvature of convex/concave surface using spherometer

	2 ND	<ul style="list-style-type: none"> ▪ Lab practice by the students of group <ul style="list-style-type: none"> ✓ Alpha – Find co-efficient of friction between wood and glass ✓ Beta – Radius of curvature of convex/concave surface using spherometer ✓ Gamma – Verify triangle and parallelogram law of forces
10 th	1 ST	<ul style="list-style-type: none"> ▪ Lab practice by the students of group <ul style="list-style-type: none"> ✓ Alpha – Verify law of conservation of mechanical energy ✓ Beta – Find the co-efficient of linear expansion of a rod ✓ Gamma – Measure room temperature and temperature of hot bath using mercury thermometer
	2 ND	<ul style="list-style-type: none"> ▪ Lab practice by the students of group <ul style="list-style-type: none"> ✓ Alpha – Find the co-efficient of linear expansion of a rod ✓ Beta – Measure room temperature and temperature of hot bath using mercury thermometer ✓ Gamma – Verify law of conservation of mechanical energy
11 th	1 ST	<ul style="list-style-type: none"> ▪ Lab practice by the students of group <ul style="list-style-type: none"> ✓ Alpha – Measure room temperature and temperature of hot bath using mercury thermometer ✓ Beta – Verify law of conservation of mechanical energy ✓ Gamma – Find the co-efficient of linear expansion of a rod
	2 ND	<ul style="list-style-type: none"> ▪ Re-practice on the basis of necessity ▪ Record correction
12 th	1 ST	<ul style="list-style-type: none"> ▪ Demonstration to find the moment of inertia of a flywheel
	2 ND	<ul style="list-style-type: none"> ▪ Demonstration to find the viscosity of a given liquid(Glycerin) by Stoke's law
13 th	1 ST	<ul style="list-style-type: none"> ▪ Demonstration to determine the atmospheric pressure at a place using Fortin' barometer
	2 ND	<ul style="list-style-type: none"> ▪ Lab practice by the students of group <ul style="list-style-type: none"> ✓ Alpha – To find the moment of inertia of a flywheel ✓ Beta – To find the viscosity of a given liquid(Glycerin) by Stoke's law ✓ Gamma – To determine the atmospheric pressure at a place using Fortin' barometer
14 th	1 ST	<ul style="list-style-type: none"> ▪ Lab practice by the students of group <ul style="list-style-type: none"> ✓ Alpha – To find the viscosity of a given liquid(Glycerin) by Stoke's

		law ✓ Beta – To determine the atmospheric pressure at a place using Fortin' barometer ✓ Gamma – To find the moment of inertia of a flywheel
	2 ND	▪ Lab practice by the students of group ✓ Alpha – To determine the atmospheric pressure at a place using Fortin' barometer ✓ Beta – To find the moment of inertia of a flywheel ✓ Gamma – To find the viscosity of a given liquid(Glycerin) by Stoke's law
15 th	1 ST	▪ Record checking and viva
	2 ND	▪ Record checking and viva


 14.08.2024
 Signature of the Faculty