

LESSON PLAN

SUBJECT: ENGG. PHYSICS LAB.

BRANCH: COMMON

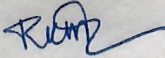
SEMESTER: 1ST (2022-23)

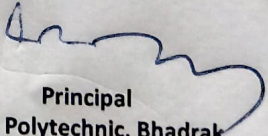
NAME OF THE FACULTY: ASEEMA BARIK



GOVERNMENT POLYTECHNIC, BHADRAK


HOD, Math & Sc


Academic Coordinator


Principal
Govt. Polytechnic, Bhadrak

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LESSON PLAN FOR WINTER SEMESTER – 2022
Dept. of Math & Science, Govt. Polytechnic, Bhadrak

Name of the Faculty : Aseema Barik

Course Code: Pr-2a

Theory: Engg. Phy. Lab

Total Periods : 60

Examination: Winter(2022)

Sem: 1st

Sessional: 50

End Sem. Exam: 50

Total Mark :100

Class Start : 25.10.2022

Discipline:	Semester: 1st (2022)	Name of the Teaching Faculty : Aseema Barik
Subject: Engineering Physics Lab	No. of Days/per week class allotted: 2 days/ 4 classes	Semester from date: 25.10.2022 To Date: 30.01.2023 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 ▪ Demonstration of measurement using vernier caliper
	2 nd	
	3 rd	<ul style="list-style-type: none"> ▪ Measurement of diameter of solid cylinder using vernier caliper
	4 th	
2 nd	1 st	<ul style="list-style-type: none"> ▪ Measurement of height of solid cylinder using vernier caliper ▪ Discussion on working formula, precautions and record writing
	2 nd	
	3 rd	<ul style="list-style-type: none"> ▪ Dictation/instruction on the record writing ▪ Correction of mock record
	4 th	
3 rd	1 st	<ul style="list-style-type: none"> ▪ Measurement of height, inner diameter and outer diameter of hollow cylinder
	2 nd	
	3 rd	<ul style="list-style-type: none"> ▪ Measurement of height, inner diameter and outer diameter of hollow cylinder ▪ Discussion on working formula and precautions
	4 th	

4 th	1 st	<ul style="list-style-type: none"> ▪ Demonstration of measurement using screw gauge and spherometer
	2 nd	
	3 rd	<ul style="list-style-type: none"> ▪ Demonstration of drawing of magnetic lines of force
	4 th	
5 th	1 st	<ul style="list-style-type: none"> ▪ Lab practice by the students of group <ul style="list-style-type: none"> ✓ Alpha – Cross sectional area of thin wire by screw gauge ✓ Beta – Radius of curvature of concave surface using spherometer ✓ Gamma – Drawing magnetic lines of force with magnetic north pointing geographic north
	2 nd	
	3 rd	<ul style="list-style-type: none"> ▪ Lab practice by the students of group <ul style="list-style-type: none"> ✓ Alpha – Drawing magnetic lines of force with magnetic north pointing geographic north ✓ Beta - Cross sectional area of thin wire by screw gauge ✓ Gamma – Radius of curvature of concave surface using spherometer
	4 th	
6 th	1 st	<ul style="list-style-type: none"> ▪ Lab practice by the students of group <ul style="list-style-type: none"> ✓ Alpha – Radius of curvature of concave surface using spheromete ✓ Beta - Drawing magnetic lines of force with magnetic north pointing geographic north ✓ Gamma – Cross sectional area of thin wire by screw gauge
	2 nd	
	3 rd	<ul style="list-style-type: none"> ▪ Re-practice on the basis of necessity ▪ Record correction ▪ Viva
	4 th	
7 th	1 st	<ul style="list-style-type: none"> ▪ Lab practice by the students of group <ul style="list-style-type: none"> ✓ Alpha – Drawing magnetic lines of force with magnetic north pointing geographic south ✓ Beta – Thickness and volume of glass piece using screw gauge ✓ Gamma – Radius of curvature of convex surface using spherometer
	2 nd	
	3 rd	<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 surface using spherometer ✓ Beta - Drawing magnetic lines of force with magnetic north pointing geographic south ✓ Gamma –Thickness and volume of glass piece using screw gauge
	4 th	

8 th	1 st	<ul style="list-style-type: none"> ▪ Lab practice by the students of group <ul style="list-style-type: none"> ✓ Alpha – Thickness and volume of glass piece using screw gauge ✓ Beta - Radius of curvature of convex surface using spherometer ✓ Gamma – Drawing magnetic lines of force with magnetic north pointing geographic south
	2 nd	
	3 rd	<ul style="list-style-type: none"> ▪ Re-practice on the basis of necessity ▪ Record correction ▪ Viva
	4 th	
9 th	1 st	<ul style="list-style-type: none"> ▪ Re-practice on the basis of necessity ▪ Record correction ▪ Viva
	2 nd	
	3 rd	<ul style="list-style-type: none"> ▪ Demonstration of measurement of angle of prism and related theory
	4 th	
10 th	1 st	<ul style="list-style-type: none"> ▪ Practice of determination of angle of prism by the students
	2 nd	
	3 rd	<ul style="list-style-type: none"> ▪ Practice of determination of angle of prism by the students
	4 th	
11 th	1 st	<ul style="list-style-type: none"> ▪ Refraction through prism and demonstration of determination of angle of minimum deviation by I~D curve method
	2 nd	
	3 rd	<ul style="list-style-type: none"> ▪ Practice of determination of angle of minimum deviation by the students
	4 th	
12 th	1 st	<ul style="list-style-type: none"> ▪ Practice of determination of angle of minimum deviation by the students
	2 nd	
	3 rd	<ul style="list-style-type: none"> ▪ Record writing ▪ Viva
	4 th	
13 th	1 st	<ul style="list-style-type: none"> ▪ Demonstration of determination of time period of simple pendulum and value of g
	2 nd	
	3 rd	<ul style="list-style-type: none"> ▪ Practice of determination of time period of simple pendulum and value of g by the students
	4 th	
14 th	1 st	<ul style="list-style-type: none"> ▪ Practice of determination of time period of simple pendulum and value of g by the students
	2 nd	

	3 rd	▪ Record checking and viva
	4 th	
15 th	1 st	▪ Record checking and viva
	2 nd	
	3 rd	▪ Record checking and viva
	4 th	