## LESSON PLAN

Semester:- 2<sup>nd</sup>

Subject:- Pr.2a - Engg, Physics. Pr.

Branch:- Mechanical Engg. / E&TC Engg.

Name of the Teaching Faculty:- Nirupama Panda

& Bindushree Sahoo

No. of days per week class allotted:-04

Semester from date: 14/3/2022 to date: 18/6/2022

No. of weeks: 15

Week	Class day	Theory/ Practical Topics
	1st	Introduction about Vernier Calipers
	2nd	Discussion and practice to find volume of a solid cylinder by using a Vernier Calipers.
1st	3rd	To find volume of a solid cylinder by using a Vernier Calipers.
	4th	To find volume of a solid cylinder by using a Vernier Calipers.
	1st	Submission of record and Viva for the volume of a solid cylinder by using a Vernier Calipers.
2nd	2nd	Discussion and practice to find volume of a hollow cylinder by using a Vernier Calipers.
2110	3rd	To find volume of a hollow cylinder by using a Vernier Calipers.
	4th	To find volume of a hollow cylinder by using a Vernier Calipers.
	1st	Submission of record and Viva for the volume of a hollow cylinder by using a Vernier Calipers.
3rd	2nd	Introduction about screw gauge.
	3rd	Discussion and practice to find the cross sectional area of a wire by using a screw gauge.
	4th	To find the cross sectional area of a wire by using a screw gauge.
	1st	To find the cross sectional area of a wire by using a screw gauge.
4th	2nd	Submission of record and Viva for the cross sectional area of a wire by using a screw gauge.
Annual Specific States	3rd	Discussion and practice to find the thickness and volume of a glass piece using a screw gauge.
	4th	To find the thickness and volume of a glass piece using a screw gauge.
	1st	To find the thickness and volume of a glass piece using a screw gauge.
5th	2nd	Submission of record and Viva for the thickness and volume of a glass piece using a screw gauge.
	3rd	Introduction about Spherometer
	4th	Discussion and practice to determine the radius of curvature of convex surface using a Spherometer.

Week	Class	
making married and the same below the	day	Theory/ Practical Topics
6th	1st	To determine the radius of
	2nd	To determine the radius of curvature of convex surface using a Spherometer.  To determine the radius of curvature of convex surface using a Spherometer.
	3rd	To determine the radius of curvature of convex surface using a Spherometer.  Submission of record and Viva for the radius of curvature of convex surface using a Spherometer.  Spherometer.  Discussion and the radius of curvature of convex surface using a spherometer.
		Spherometer viva for the radius of curvature of convex surface using a
	4th	Discussion and practice to determine the
7th	1st	Discussion and practice to determine the radius of curvature of concave surface using a To determine the radius of
	2nd	To determine the radius of curvature of concave surface using a Spherometer.
	3rd	To determine the radius of curvature of concave surface using a Spherometer.  Submission of record and Viva for the radius of curvature of concave surface using a Spherometer.  Spherometer.
		Spherometer.
	4th	Submission of record and Viva for the radius of curvature of concave surface using a Spherometer.  Spherometer.  Discussion and practice to determine the radius of curvature of concave surface using a
	1st	Discussion and practice to determine the angle of Prism.  To determine the angle of Prism.
	2nd	To determine the angle of Prism.
8th	3rd	To determine the angle of Prism.
	4th	
Today Street	1st	Submission of record and Viva for the angle of Prism  Discussion and practice to determine the angle of Minimum Deviation by I ~ D curve  To determine the angle of Minimum Deviation by I ~ D curve
_		
9th	2nd	To determine the angle of Minimum Deviation by I ~ D curve
1	3rd	V VERTILITY OF THE STREET
-	4th	To determine the angle of Minimum Deviation by I ~ D curve method.  To determine the angle of Minimum Deviation by I ~ D curve method.  Submission of record and Viva for the angle of Minimum Deviation by I ~ D curve method.
	1st	Submission of record and Viva for the angle of Minimum Deviation by I ~ D curve method.  Discussion and practice to trace lines of formula Deviation by I ~ D curve.
-		method.
10th	2nd	Discussion and practice 4.
		pointing North and
-	2	Discussion and practice to trace lines of force due to a bar magnet with North pole locate the neutral points.  To trace lines of force.
	3rd	to trace lines of force due to a h
to be seen	4th	To trace lines of force due to a bar magnet with North pole locate the neutral points.  To trace lines of force due to a bar magnet with North pole pointing North and locate the neutral points.
	Tul	locate the lines of force due to a but me
	1st	
		locate the and locate the and
11th	2nd	
		locate the part of force due to a bar magnet.
	3rd	To trace lines of force due to a bar magnet with North pole pointing North and locate the neutral points.  Submission of record and Viva for the temporary of the neutral points of the neutral points.
		pole pointing and Viva for the trace to
	4th	pole pointing North and locate the neutral points.  Discussion and practice to trace lines of force due to a bar magnet with North
		Submission of record and Viva for the trace lines of force due to a bar magnet with North pole pointing North and locate the neutral points.  Discussion and practice to trace lines of force due to a bar magnet with North pointing South and locate the neutral points.
		The south and locate the south to the southe

week	Class	Theory/ Practical Topics
	day	
	1st	To trace lines of force due to a bar magnet with North pole pointing South and locate the neutral points.
12th	2nd	To trace lines of force due to a bar magnet with North pole pointing South and locate the neutral points.
	3rd	To trace lines of force due to a bar magnet with North pole pointing South and locate the neutral points.
	4th	To trace lines of force due to a bar magnet with North pole pointing South and locate the neutral points.
13th	1st	Submission of record and Viva for the trace lines of force due to a bar magnet with North pole pointing South and locate the neutral points.
	2nd	Discussion and practice to find the time period of a simple pendulum and determine acceleration due to gravity.
	3rd	To find the time period of a simple pendulum and determine acceleration due to gravity.
	4th	To find the time period of a simple pendulum and determine acceleration due to gravity.
14th	1st	To find the time period of a simple pendulum and determine acceleration due to gravity.
	2nd	To find the time period of a simple pendulum and determine acceleration due to gravity.
	3rd	Submission of record and Viva for the time period of a simple pendulum and determine acceleration due to gravity.
	4th	Discussion and practice to verify Ohm's Law by Ammeter – Voltmeter method
	1st	To verify Ohm's Law by Ammeter – Voltmeter method
15th	2nd	To verify Ohm's Law by Ammeter – Voltmeter method
	3rd	To verify Ohm's Law by Ammeter – Voltmeter method
		Submission of record and Viva for the Ohm's Law by Ammeter – Voltmeter method

- 1. Text Book of Physics for Class XI (Part-I, Part-II) N.C.E.R.T
- Text Book of Physics for Class XII (Part-I, Part-II) N.C.E.R.T
- Text Book of Engineering Physics by Barik, Das, Sharma, Kalyani Publisher
- Concepts in Physics by H. C. Verma, Vol. I & II, Bharti Bhawan Ltd. New Delhi