LESSON PLAN

Semester:- 2nd

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	1st	Introduction about Vernier Calipers
	2nd	Discussion and practice to find volume of a solid cylinder by using a Vernier Calipers.
	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.
2nd	1st	Submission of record and Viva for the volume of a solid cylinder by using a Vernier Calipers.
	2nd	Discussion and practice to find volume of a hollow cylinder by using a Vernier Calipers.
	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.
3rd	1st	Submission of record and Viva for the volume of a hollow cylinder by using a Vernier Calipers.
	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.
4th	1st	To find the cross sectional area of a wire by using a screw gauge.
	2nd	Submission of record and Viva for the cross sectional area of a wire by using a screw gauge.
	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.
5th	1st	To find the thickness and volume of a glass piece using a screw gauge.
	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 day	Theory/ Practical Topics
6th	1st	To determine the radius of curvature of convex surface using a Spherometer.
	2nd	To determine the radius of curvature of convex surface using a Spherometer.
	3rd	Submission of record and Viva for the radius of curvature of convex surface using a Spherometer.
	4th	Discussion and practice to determine the radius of curvature of concave surface using a Spherometer.
7th	1st	To determine the radius of curvature of concave surface using a Spherometer.
	2nd	To determine the radius of curvature of concave surface using a Spherometer.
	3rd	Submission of record and Viva for the radius of curvature of concave surface using a Spherometer.
	4th	Discussion and practice to determine the angle of Prism.
8th	1st	To determine the angle of Prism.
	2nd	To determine the angle of Prism.
	3rd	To determine the angle of Prism.
	4th	Submission of record and Viva for the angle of Prism.
9th	1st	Discussion and practice to determine the angle of Minimum Deviation by I ~ D curve method.
	2nd	To determine the angle of Minimum Deviation by I ~ D curve method.
	3rd	To determine the angle of Minimum Deviation by I ~ D curve method.
	4th	To determine the angle of Minimum Deviation by I ~ D curve method.
10th	1st	Submission of record and Viva for the angle of Minimum Deviation by I ~ D curve method.
	2nd	Discussion and practice to trace lines of force due to a bar magnet with North pole pointing North and locate the neutral points.
	3rd	To trace lines of force due to a bar magnet with North pole pointing North and locate the neutral points.
	4th	To trace lines of force due to a bar magnet with North pole pointing North and locate the neutral points.
11th	1st	To trace lines of force due to a bar magnet with North pole pointing North and locate the neutral points.
	2nd	To trace lines of force due to a bar magnet with North pole pointing North and locate the neutral points.
	3rd	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.
	4th	Discussion and practice to trace lines of force due to a bar magnet with North pole pointing South and locate the neutral points.

Week	Class day	Theory/ Practical Topics
12th	1st	To trace lines of force due to a bar magnet with North pole pointing South and locate the neutral points.
	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
15th	1st	To verify Ohm's Law by Ammeter – Voltmeter method
	2nd	To verify Ohm's Law by Ammeter – Voltmeter method
	3rd	To verify Ohm's Law by Ammeter – Voltmeter method
	4th	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
2. Text Book of Physics for Class XII (Part-I, Part-II) N.C.E.R.T
3. Text Book of Engineering Physics by Barik, Das, Sharma, Kalyani Publisher
4. Concepts in Physics by H. C. Verma, Vol. I & II, Bharti Bhawan Ltd. New Delhi

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