## **KIIT POLYTECHNIC, BHUBANESWAR**

## **LESSON PLAN**

## Session (2022 - 2023)

Discipline: CSE/ Electrical/	Semester: 2nd,	Name of the faculty:
ETC	Summer /2023	Sukanta Kumar Rout <b>Email</b> Id:rsukantfpy@kp.kiit.ac.in
Subject: Engineering	No. of Days/week: 02	Start Date: 20/03/2023
Physics Practical (Pr-2a)	(2 periods / Day) Experiments will be performed in small groups of 5 to 6 students	End Date: 27/06/2023

Week	Class Day	Practical Topics
1 <sup>st</sup>	1st	Familiarization with various shapes, measuring instruments like slide caliper, screw gauge and spherometer
	2nd	Find the least count of the different measuring instruments.
2nd	1st	<ul> <li>To Find the Cross-Sectional Area of a Wire Using Screw Gauge</li> <li>To Find the Volume of a Solid Cylinder Using a Vernier Calipers</li> <li>To Determine the Radius of Curvature of a Convex Surface Using a Spherometer</li> <li>To Verify Ohm's Law by Ammeter – Voltmeter Method</li> </ul>
	2nd	<ul> <li>To Find the Cross-Sectional Area of a Wire Using Screw Gauge</li> <li>To Find the Volume of a Solid Cylinder Using a Vernier Calipers</li> <li>To Determine the Radius of Curvature of a Convex Surface Using a Spherometer</li> <li>To Verify Ohm's Law by Ammeter – Voltmeter Method</li> </ul>
3rd	1st	<ul> <li>To Find the Cross-Sectional Area of a Wire Using Screw Gauge</li> <li>To Find the Volume of a Solid Cylinder Using a Vernier Calipers</li> <li>To Determine the Radius of Curvature of a Convex Surface Using a Spherometer</li> <li>To Verify Ohm's Law by Ammeter – Voltmeter Method</li> </ul>

	2nd	• To Find the Cross-Sectional Area of a Wire Using Screw Gauge
		• To Find the Volume of a Solid Cylinder Using a Vernier Calipers
		• To Determine the Radius of Curvature of a Convex Surface Using a
		Spherometer
		• To Verify Ohm's Law by Ammeter – Voltmeter Method
4th	1st	To Find the Cross-Sectional Area of a Wire Using Screw Gauge
		• To Find the Volume of a Solid Cylinder Using a Vernier Calipers
		• To Determine the Radius of Curvature of a Convex Surface Using a
		Spherometer
		• To Verify Ohm's Law by Ammeter – Voltmeter Method
	2nd	Repeat Class/Defaulter
5th	1st	• To Find the Volume of a Hollow Cylinder Using a Vernier Calipers
		• To Find the Thickness and Volume of a Glass Piece Using Screw
		Gauge
		• To Determine the Radius of Curvature of a Concave Surface Using a
		Spherometer
		• To Trace Lines of Force Due to A Bar Magnet with North Pole Pointing
		North and Locate the Neutral Points
	2nd	• To Find the Volume of a Hollow Cylinder Using a Vernier Calipers
		• To Find the Thickness and Volume of a Glass Piece Using Screw
		Gauge
		• To Determine the Radius of Curvature of a Concave Surface Using a
		Spherometer
		• To Trace Lines of Force Due to A Bar Magnet with North Pole Pointing
		North and Locate the Neutral Points
6th	1st	To Find the Volume of a Hollow Cylinder Using a Vernier Calipers
		• To Find the Thickness and Volume of a Glass Piece Using Screw
		Gauge
		• To Determine the Radius of Curvature of a Concave Surface Using a
		Spherometer
		• To Trace Lines of Force Due to A Bar Magnet with North Pole Pointing
		North and Locate the Neutral Points
	2nd	To Find the Volume of a Hollow Cylinder Using a Vernier Calipers
		• To Find the Thickness and Volume of a Glass Piece Using Screw
		Gauge

		To Determine the Radius of Curvature of a Concave Surface Using a     Spherometer
		• To Trace Lines of Force Due to A Bar Magnet with North Pole Pointing
		North and Locate the Neutral Points
7th	1st	• To Find the Volume of a Hollow Cylinder Using a Vernier Calipers
		• To Find the Thickness and Volume of a Glass Piece Using Screw
		Gauge
		• To Determine the Radius of Curvature of a Concave Surface Using a
		Spherometer
		• To Trace Lines of Force Due to A Bar Magnet with North Pole Pointing
		North and Locate the Neutral Points
	2nd	Repeat Class
8th	1st	<ul> <li>To Trace Lines of Force Due to A Bar Magnet with North Pole Pointing South and Locate the Neutral Points</li> <li>To Determine the Angle of Prism</li> </ul>
		• To Find the Time Period of a Simple Pendulum and Determine
		Acceleration Due to Gravity (g)
		<ul> <li>To Determine the Angle of Minimum Deviation By I – D Curve Method</li> </ul>
	2nd	<ul> <li>To Trace Lines of Force Due to A Bar Magnet with North Pole Pointing South and Locate the Neutral Points</li> <li>To Determine the Angle of Prism</li> </ul>
		• To Find the Time Period of a Simple Pendulum and Determine
		Acceleration Due to Gravity (g)
		• To Determine the Angle of Minimum Deviation By I– d Curve Method
9th	1st	<ul> <li>To Trace Lines of Force Due to A Bar Magnet with North Pole Pointing South and Locate the Neutral Points</li> <li>To Determine the Angle of Prism</li> </ul>
		• To Find the Time Period of a Simple Pendulum and Determine
		Acceleration Due to Gravity (g)
		<ul> <li>To Determine the Angle of Minimum Deviation By I – D Curve Method</li> </ul>
<u> </u>	2nd	<ul> <li>To Trace Lines of Force Due to A Bar Magnet with North Pole Pointing South and Locate the Neutral Points</li> <li>To Determine the Angle of Prism</li> </ul>
		• To Find the Time Period of a Simple Pendulum and Determine

		Acceleration Due to Gravity (g)
		<ul> <li>To Determine the Angle of Minimum Deviation By I – D Curve Method</li> </ul>
10th	1st	<ul> <li>To Trace Lines of Force Due to A Bar Magnet with North Pole Pointing South and Locate the Neutral Points</li> <li>To Determine the Angle of Prism</li> <li>To Find the Time Period of a Simple Pendulum and Determine Acceleration Due to Gravity (g)</li> <li>To Determine the Angle of Minimum Deviation By I – D Curve Method</li> </ul>
11th	2nd	Repeat Class
12th	1st	Repeat Class for experiment 1,2 & 3
	2nd	Repeat Class for experiment 4,5 & 6
13th	1st	Repeat Class for experiment 7,8 & 9
	2nd	Repeat Class for experiment 10,11 & 12
14th	1st	Practice Test
	2nd	Practice Test