

**BSPH-107****Applied Physics-II Lab**

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>

**Total Laboratory Load: 4 months (16 Lab period = 2 hrs. each)****Course Outcomes:**

After successful completion of the Physics-I laboratory course, students should be able to:

- CO1: Verify the theoretical formulations/ concepts of physics.
- CO2: Know the art of recording the observations of an experiment scientifically.
- CO3: Learn by doing.
- CO4: Handle and operate the various elements/parts of an experiment.
- CO5: Understand the importance of an experiment in engineering & technology.
- CO6: Preparing for vocational skills at diploma level
- CO7: Standardization of the knowledge acquired

<b>CO/PO Mapping</b>												
<b>S-strong, M-medium and W-weak indicate the strength of correlation</b>												
<b>COs</b>	<b>Programme outcomes (POs)</b>											
	<b>PO 1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PO9</b>	<b>PO10</b>	<b>PO11</b>	<b>PO12</b>
<b>CO1</b>	1	2	1	3	1	2	2	2	2	3	2	1
<b>CO2</b>	1	2	1	2	1	2	2	3	2	2	2	3
<b>CO3</b>	1	1	1	2	2	2	3	2	2	3	3	3
<b>CO4</b>	2	1	2	2	3	2	3	3	3	3	3	3
<b>CO5</b>	1	1	1	2	2	3	2	3	3	2	3	3
<b>CO6</b>	1	1	2	2	1	2	3	3	2	3	3	3
<b>CO7</b>	2	1	1	2	2	3	3	3	3	3	3	2

**BSPH-107**

L	T	P	C
0	0	2	1

**Applied Physics-II Lab****Total Laboratory Load: 4 months (16 Lab period= 2 hrs. each)****List of Experiments:**

1. To establish the current-voltage relationship and verify Ohm's law by using an ammeter and voltmeter, and to determine the value of resistance.
2. To measure the value of resistance using a multi-meter and compare it with the resistance values determined from the color code of resistors.
3. To demonstrate & verify the series and parallel combination of resistors using a multimeter.
4. To find the resistance of a given wire using metre bridge.
5. To determine the resistance of a galvanometer using the half deflection method and calculate its figure of merit.
6. To determine the frequency of electrically maintained tuning fork by using Melde's method.
7. To study the transverse nature of light.
8. To Find the Focal Length of a Concave Lens, Using a Convex Lens.
9. To study the voltage-current (V-I) characteristics of a diode.
10. To investigate the voltage-current (V-I) characteristics of a photocell or solar cell.
11. To convert a galvanometer into an ammeter by adding a shunt resistor in parallel.
12. To convert a galvanometer into a voltmeter by adding a series resistor.