**EXPERIMENT 1**

**OHM’S LAW**

Aim: To find the resistance per unit length of a given wire, by plotting graph between potential difference and current.

Theory:

V α I or V= IR

**Circuit Diagram:**

**Observations:**

|  |  |  |  |
| --- | --- | --- | --- |
| Sl. No | Voltage (V) Volts | Current (I)Ampere | Resistance (R)Ω |
|  01 |  |  |  |
| 02 |  |  |  |
| 03 |  |  |  |
| 04 |  |  |  |
| 05 |  |  |  |

Mean Resistance of the given wire = Ω

Length of the given wire = cm

Resistance per unit length = Ω/cm

(Graph)

**Result:** The graph between V and I is a straight line.

 Resistance of the given wire = Ω/cm