To Assemble The Components Of a Given Electrical Circuit

Aim

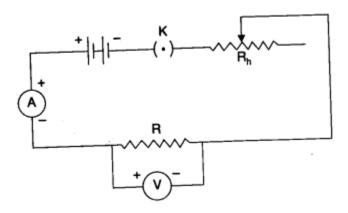
To assemble the components of a given electrical circuit.

Apparatus and material

Apparatus: A voltmeter and an ammeter of appropriate range, a battery, a rheostat, one way key.

Material: An unknown resistance or resistance coil, connecting wires, a piece of sand paper.

Diagram



Procedure

- 1. Connect the components (Resistors, inductors etc.) in series with each other as shown in diagram and then in series with the battery.
- 2. Connect the ammeter in series with the circuit, to measure the current.
- 3. Connect the voltmeter in parallel to the resistor, to measure the potential difference.
- 4. Connect the switch in series with the battery.
- 5. Assembly of the electrical components in electric circuit is complete.

Utility

It is used for measuring an unknown resistance (see Experiment 2: Section A).