

$$\begin{aligned} \text{Therefore, \% error} &= \left| \frac{\text{Standard value} - \text{observed value}}{\text{standard value}} \right| \times 100\% \\ &= \dots \dots \dots \\ &= \dots \dots \dots \\ &= \dots \dots \dots \% \end{aligned}$$

RESULT:

The resistance of the given wire has been found to be and the resistivity of the material of given wire has been found to be with error.

CONCLUSION:

Thus, the resistance and the resistivity of given wire is found by using meter bridge.

SOURCES OF ERROR:

1. Error may be due to loose connection of the circuit.
2. Error may be due to inaccurate measurement of null point.
3. Error may be due to resistance of connecting wires.
4. Error may be due to non-uniform thickness of experimental wire.
5. Error may be due to change in resistance of wire with change in temperature.
6. Error may be due to carelessness of experimenter.

PRECAUTIONS:

1. Connections should be neat and clean.
2. Connecting wires should not be very long.
3. Balanced point should be carefully identified.
4. Jockey should be pressed gently over the bridge wire.
5. Switch off the circuit for a while after identifying a null point.