Wheatstone's Bridge & Potentiometer

Spoken Tutorial Project
https://spoken-tutorial.org
National Mission on Education through ICT
http://sakshat.ac.in
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16 July 2020

Learning Objectives

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- **Simulate the working of wheatstone bridge**

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- **Solve a numerical based on wheatstone bridge**

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- **Simulate the working of potentiometer**

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System Requirements

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- **Ubuntu Linux OS v 16.04**

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- **Firefox Web Browser v 62.0.3**

Pre-requisities

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- **Learner should be familiar with Apps on Physics**

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- For pre-requisities tutorials please visit this site https://spoken-tutorial.org

Apps on Physics

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- **Wheatstone's Bridge**

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- **Potentiometer**

Unknown Resistance

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- **R1 and R2 are sliding resistance**
- **R3 is comparable resistance**

Assignment

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- **In the circuit change the value of comparable resistance to 100 ohms and sliding resistance to 65 ohms**
- **Calculate the unknown resistance of the circuit**

Ohm's Law

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- $V = IR$
  $= 0.049 \times 39.5$
  $= 1.933V$

Tabular Column

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Length	Resistance R	Current I	Voltage V=IR

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Length	Resistance R	Current I	Voltage V=IR
0.1	10.3	0.098	1.01
0.2	19.3	0.097	1.87
0.3	30.0	0.096	2.88
0.4	40.0	0.095	3.82
0.5	50.0	0.095	4.76

Assignment

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- **Change the values of resistance of the appliance to 500 ohms, 700 ohms, 800 ohms**

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- **Change the values of resistance of the appliance to 500 ohms, 700 ohms, 800 ohms**
- **Find the output voltage**

Summary

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- **Simulated the working of wheatstone bridge**
- **Solved a numerical based on wheatstone bridge**
- **Simulated the working of potentiometer**

Summary

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- **Solved a numerical based on potentiometer**

Acknowledgement

- **These Apps were created by Walter-fendt and his team**

About the Spoken Tutorial Project

- **Watch the video available at https://spoken-tutorial.org/What_is_a_Spoken_Tutorial**
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Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- **Conducts workshops using spoken tutorials**
- **Gives certificates to those who pass an online test**
- **For more details, please write to contact@spoken-tutorial.org**

Forum for specific questions

- Questions in THIS Spoken Tutorial?
- Visit https://forums.spoken-tutorial.org
- Choose the minute and second where you have the question
- Explain your question briefly
- The Spoken Tutorial project will ensure an answer

You will have to register to ask questions

Acknowledgement

Spoken Tutorial project is supported by

- **National Mission on Education through ICT (NMEICT)**
- **Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT)**

MHRD, Government of India