SAKARYA UNIVERSITY

PHYSICS LABORATORY II

2019-2020

EXPERIMENT REPORT

EXPERIMENT NUMBER	2
EXPERIMENT NAME	Kirchhoff's Laws and Wheatstone Bridge
DATE	
GROUP NUMBER	
GROUP MEMBERS	

DEPARTMENT:	
NAME-SURNAME:	
NUMBER:	
DELIVERY DATE:	
REPORT SCORE:	

Measurement and Calculations

1. Draw the electrical circuit. Show the features $\{R(\Omega), V(volt), i(amper)\}$ of the each circuit elements on the figure. ***(20 p.)***

2. Calculate the rheostat value R4 which balances the Wheatstone bridge. ***(25 p.)***

3. Write the following quantities together with their units. ***(15 p.)***

d (Whole length of rheostat) =……

R (All resistance of rheostat)=……

L (Rheostat length balances the Wheatstone bridge)=…….

4. Obtain the rheostat value R_4, which balances the Wheatstone bridge, experimentally from the equation of $R_4 = \frac{LxR}{d}$. ***(25 p.)***

5. Calculate % error by comparing the theoretical and experimental values of R_4 ***(15 p.)***