



**SAKARYA**  
UNIVERSITY

**SAKARYA UNIVERSITY**  
**PHYSICS LABORATORY II**  
**2019-2020**

***EXPERIMENT REPORT***

***EXPERIMENT NUMBER:*** 4

***EXPERIMENT TITLE:*** Magnetic Field at the Centre of a Wire Ring with Current

***DATE:***

***GROUP NUMBER:***

***MEMBERS:***

***DEPARTMENT:***

***NAME-SURNAME:***

***NUMBER:***

***DELIVERY DATE:***

***REPORT SCORE:***

1. Fill in the table below according to the results you obtained in the experiment. (10 point)

Measurement number	Current (A)	Number of turn	Angle of deviation ( ° )	tanθ
<i>Part I</i>				
1				
2				
3				
4				
<i>Part II</i>				
1				
2				
3				
4				

2. Draw  $\tan\theta-I$  and  $\tan\theta$ - Number of turn graphics on millimeter paper. (50 point)

*Answer the following questions by using the graphics you have drawn.*

3. What conclusion did you have about the relationship between the magnetic field intensity in the centre of the ring and the current passing through the ring? (20 point)

4. What conclusion did you have about the relationship between the magnetic field intensity at the centre of the ring and the number of turns? (20 point)

## Graphics

