Name	
Date	
Lab session (Day & time)	
Lab partner	

M3 Centripetal Force Lab Report

A. Answer the following questions BEFORE the lab session (6 pts each)

1. Using words and a mathematical expression to describe the relationship between the centripetal force and angular velocity in uniform circular motion.

2. In Part I of the experiment, you are asked to plot the logarithm of the measured centripetal force as a function of the logarithm of the angular velocity in linear scales. What should the curve look like? If a linear function is used to fit the data, what is the meaning of the fitted slope?

3. Using words and a mathematical expression to describe the relationship between the centripetal force and radius in uniform circular motion.

4. In Part II of the experiment, you are asked to plot the measured centripetal force as a function of radius in linear scales. What should the curve look like? If a linear function is used to fit the data, what are the expected values of the intercept and slope?