1. A cover page. On the cover page, include all names and student ID numbers for your group.

Section 1:

Introduction. This section should briefly present the objectives of the prac and a background about the system used. Additionally, please include a brief pictorial explanation explaining how to foretell the direction of the precession based on the rotor rotation direction.

The purpose of this lab is to record, measure, model, simulate and dynamic system and compare the results to an actual physical system. In order for the model and actual systems to match the model must be robust and the initial conditions of the simulation must match reality. The laboratory involved recording the rotation of a gyroscope whose

Section 2: Modelling.

This section should include a detailed description of the steps used to arrive at the equations of motion and all relevant assumptions about the system and its behaviour. This section should not look like a documentation of MATLAB code, but rather, like a book extract. Note: your model should reflect the actual gyroscope system seen in the prac – do not blindly base your modelling on the assignment description!

Short period of time

Section 3:

Choosing Parameter Values and Initial Conditions. In this section you should explain the logic you have applied during the process of selecting the parameter values and initial conditions until a satisfactory match was obtained.

Section 4:

Concluding Analysis. In this section you are required to comment about both the similarity between the simulation-based video and the real-life video as well as any differences between them (and the sources of the differences). Was the procedure performed helpful for your ability and confidence to model dynamic systems?

Appendices (optional):

you can include any necessary useful instructions on how to run your MATLAB files so that the animation works. Any comments or long derivations not suitable for the main body of the report. The appendices are not counted in the page count.