PHYS1417 Basic physics

1417-2 LABORATORY REPORT

Experiment 2. Charge-to-mass ratio e/m of electron

Student Name: _____   Student No.: _____

Group No.: _____   Date: _____

Q1. Derive the expression 7 for e/m ratio.

Q2. Complete the table and plot a graph of V_o against I^2. Measure the gradient of your graph. Deduce the specific charge, e/m of an electron.

Electron Beam Radius, r = _____

V_0 (V)	I^2 (A^2)

e/m = _____

Q3. What are the purposes of the 6.3V supplies? Why is the tube evacuated?