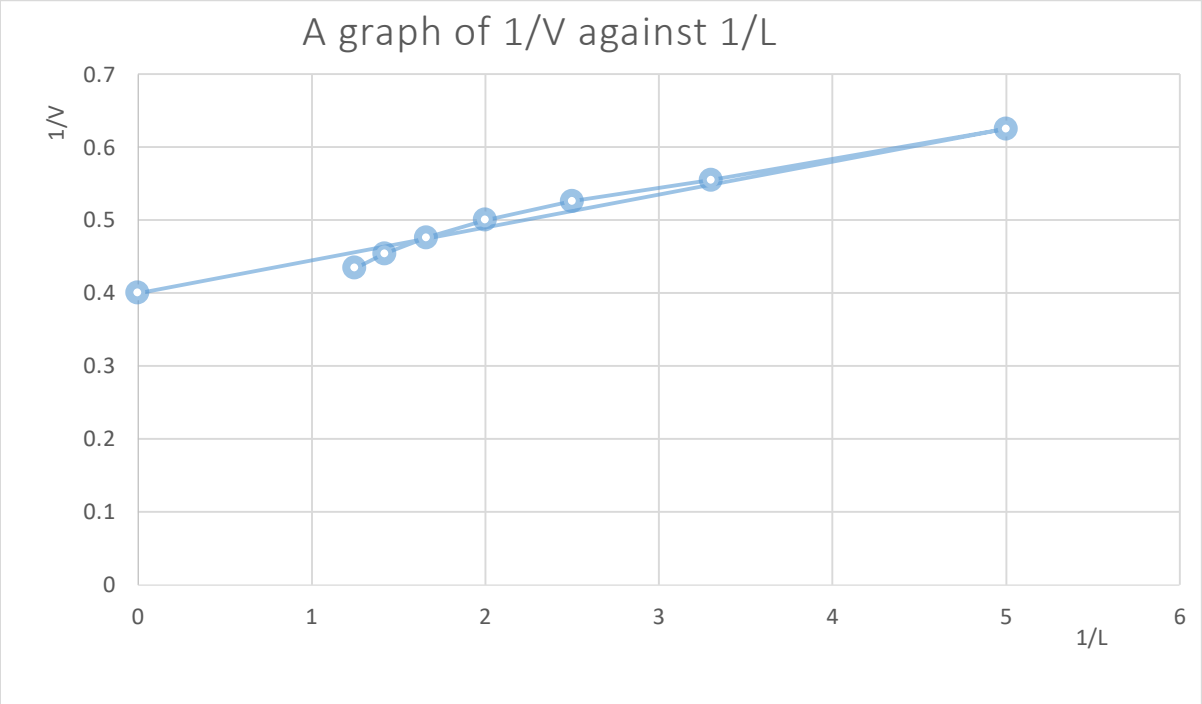
MARKING GUIDE OF DISTRICT PHYSICS PRACTICAL S6 TERM 2 MARKING GUIDE

d)

L(m)	V(v)	1/V(v^{-1})	1/L(m^{-1})
0.2	1.6	0.625	5
0.3	1.8	0.555	3.3
0.4	1.9	0.526	2.5
0.5	2	0.5	2
0.6	2.1	0.476	1.66
0.7	2.2	0.454	1.42
0.8	2.3	0.434	1.25

(12 marks)

e)



(12 marks)

f) C=0.4V^{-1} **(5marks)**

g) $S = \frac{0.73-0.4}{4.5-0} = 0.073 V^{-1} m$ **(3 marks)**

h) $\sigma = \frac{100C}{S} = \frac{100x0.4}{0.073} = 547.9/m$ **(2 marks)**

i) That is because the resistance of the wire increases as its length increases **(2 marks)**

j) The sources of errors are:

-The ends of connecting wires may not be clean

-The connection may not be tight

-The length of the potentiometer may not be exactly 100cm

-The resistance of the potentiometer may change

-The cells may be old giving fault values

-The voltmeter pointer may not be steady **(4 marks)**

END