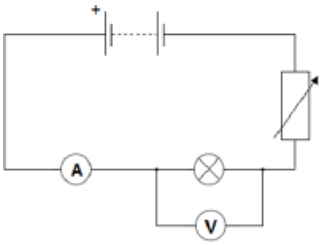
Qu No.		Extra Information	Marks
5.1		battery in series with bulb and ammeter voltmeter in parallel with the bulb variable resistor or variable power supply	1 1 1
5.2	correct pair of current readings at the same pd therefore current in lamp A is twice the current in lamp B so lamp A is twice as powerful and lamp B (hence is twice as bright)	eg at 10 V, I_A = 0.74A and I_B = 0.37A must refer to power/rate of energy transfer	1 1 1
5.3	R = V / I <u>Lowest</u> R = 0.6 / 0.1 R = 6 Ω <u>Highest</u> R = 10 / 0.74 R = 13.5 Ω Difference = 13.5 – 6 = 7.5 Ω	 allow R = 1.0 / 0.16 R = 6.25 Ω (other values may be acceptable but the values from the graph must be when V ≤ 1V and the lamp can reasonably be assumed to be ohmic) allow 7.25 Ω if consistent	 1 1 1