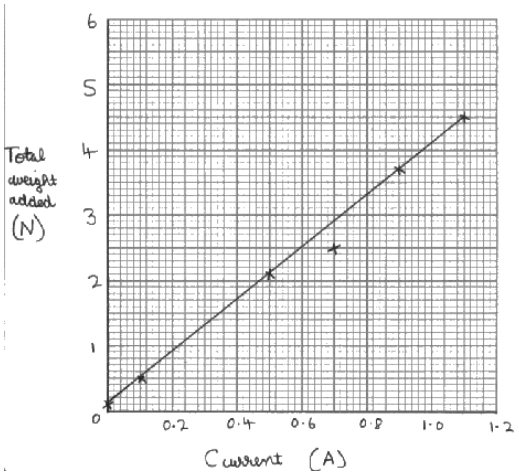
Question number	Answer	Notes	Marks
6 (a)	either correct moment seen; use of principle of moments; correct evaluation of weight; e.g. W x 8 OR 0.1 x 12 W x 8 = 0.1 x 12 (W =) 0.15 (N)	 seen mathematically or in writing e.g. 'clockwise moment = anticlockwise moment' answer of 0.25 (N) gets 2 marks allow 0.2 (N) if supported by correct working	3
(b)	coil becomes an electromagnet / coil produces a magnetic field; coil {attracts / exerts a force on} magnet; increasing anti-clockwise moment;	allow current for coil reject if repulsion mentioned allow creating (additional) anti-clockwise moment	3
(c) (i)	sensible linear scales on both axes that occupy >50% of the grid; both axes labelled correctly with quantity and unit; correct orientation; all 6 points correctly plotted;  	 allow symbols I for current and W for weight current on x-axis reject plotting mark if non-linear scale used in region of plots **Current in A** / **Total weight added in N** 0.0 / 0.1 0.1 / 0.5 0.5 / 2.1 0.7 / 2.5 0.9 / 3.7 1.1 / 4.5	4
(ii)	straight line of best fit avoiding anomalous reading;		1
(iii)	(repeat to) check accuracy / validity of reading; (because) reading appears to be anomalous;	allow idea of checking to see if same reading obtained again allow reading does not follow the trend / does not lie near the line of best fit	2