Question number	Answer	Notes	Marks
2 (a)	(sum of) clockwise moments equals (sum of) anti-clockwise moments; (for a system) to be balanced / in equilibrium;		2
(b) (i)	measure <u>mass</u> of plastic strip (in kg); multiply mass by g;	allow multiply by 10 / 9.8 / 9.81 allow idea of setting balance to zero for 1 mark if no other mark scored	2
(ii)	any 1 of: use a ruler with smaller divisions; use a mm ruler; use a balance that measures to more decimal places;		1
(iii)	moment = force x (perpendicular) distance (from the pivot);	allow correct symbols e.g. moment = F x d condone use of M or m for moment	1
(iv)	calculates one moment correctly; correct use of principle of moments; evaluation; e.g. 0.2 x 0.3 = 0.06 0.06 = 0.1 x F (force =) 0.6 (N)	allow distances in cm throughout 0.4 (N) gets 1 mark max.	3
(v)	any 1 of: idea that calculated force includes weight of beaker / weight of beaker should be subtracted; mass of paperclip / string not considered; centre of mass of ruler may not be at 50 cm;	ignore references to mass/weight of rule allow mass/weight of beaker not considered	1

Total for question = 10 marks