7(a)	• force per unit length • force per unit current • length / current perpendicular to field *1 mark for any two points, 2 marks for all three points.*
7(b)(i)	$F = BQv$
7(b)(ii)	arrow at Y pointing vertically upwards
7(b)(iii)	upwards deflection showing circular path
7(c)(i)	electric field applied vertically downwards (may be shown on a labelled diagram)
	electric force on particle in opposite direction to magnetic force (may be shown on a labelled diagram)
	particle undeflected when magnitudes of electric and magnetic forces are equal
7(c)(ii)	$EQ = BQv$
	$v = E / B$

6(a)	$F_B = F_E$
	either: $Bqu = qE$ and $E = V / d$ leading to $u = V / Bd$ *or*: $Bqu = qV / d$ leading to $u = V / Bd$
6(b)	$E_K = \frac{1}{2}mu^2$
	$u = \sqrt{[(2 \times 4.1 \times 10^{-17}) / (3.2 \times 10^{-27})]}$ $= 1.6 \times 10^5 \text{ms}^{-1}$
	$B = 980 / (3.6 \times 10^{-2} \times 1.6 \times 10^5)$ $= 0.17\,\text{T}$
6(c)	expression is independent of mass and charge
6(d)	*either*: electric force is downwards so magnetic force is upwards *or*: no resultant force so magnetic force is upwards
	(positive ions so) current is from left to right
	from (Fleming's) left-hand rule, magnetic field is into the page
6(e)	curved path inside plates with consistent direction of curvature and with no discontinuity at entry or in curvature
	direction of deflection is upwards