6(a)	a region where a force acts on
	a current-carrying conductor **or** a moving charge **or** a magnetic material / magnetic pole
6(b)	concentric circles around the wire
	spacing between circles increases with distance from wire
	arrows showing direction of field is clockwise
6(c)(i)	$F = BIL$
	force per unit length $= BI$ $= 2.6 \times 10^{-3} \times 5.0$ $= 0.013\ \text{N m}^{-1}$
6(c)(ii)	to the right
6(c)(iii)	force (per unit length) has the same magnitude due to Newton's 3rd law
	$0.013 = 1.5 \times 10^{-3} \times I$ current = 8.7 A

6(a)(i)	$F = BIL$
	force on QR $= 5.2 \times 10^{-3} \times 1.2 \times 0.054 \times 190$
	$= 0.064$ N
6(a)(ii)	torque = force × perpendicular distance between forces
	$= 0.064 \times 0.025 \cos\theta = (1.6 \times 10^{-3}) \cos\theta$ N m
6(a)(iii)	one complete cycle of a sinusoidal curve between 0 and 360°
	τ axis labelled to show maximum and minimum torques at $\pm 1.6 \times 10^{-3}$ N m
	maximum at 0 and 360° and minimum at 180° (or vice versa), with torque shown as zero at 90° and 270°
6(b)	(ferrous core) increases magnetic flux density
	amplitude of torque increases