

Multiple Choice Answers

Q32: A

Multiple Choice Answers

Q25: C

8(a)(i)	three concentric circles centred on X
	second and third circles further apart than first and second circles
	direction of arrows clockwise
8(a)(ii)	strength of magnetic field increases
	its direction reverses
8(b)	any three from: • $P = I^2R$ OR power (loss) = I^2R • (high voltage allows) low current (so at same power output, less power / energy lost) • thin wires have high resistance (so more power / energy lost) • (low) current has a greater effect (on efficiency) than (high) resistance (of the thin wires)

Multiple Choice Answers

Q30: B

8(a)	downwards / into the page / anti-clockwise
8(b)	current, (magnetic) field, motion at right angles to each other
	magnetic field from left to right / N to S AND current is from A to B / positive to negative
8(c)	(at vertical) the coil stops OR (at vertical) the coil overshoots and comes back OR the coil vibrates (about the vertical)
	<i>any one from:</i> • (as the coil approaches vertical) the turning effect decreases • (at vertical) the turning effect is zero • (past vertical) the turning effect reverses / changes direction
8(d)	reverses the current
	<i>any two from:</i> • (brushes) ensure current is maintained / owtte • coil rotates continuously / continues to move in the same direction • (allows current to change direction) without wires getting tangled • (reverses the current) every half turn / 180 degrees / OR (reverses the current) when the coil is vertical / at right angles to the magnetic field