

Multiple Choice Answers

Q24: D

Multiple Choice Answers

Q24: A

Q29: A

8(a)	region in which a (magnetic) pole experiences a force
8(b)(i)	friction between trolley and track OR the (induced) current produces a magnetic field which opposes the (magnetic) field that causes the (induced) current
8(b)(ii)	any three from: - direction will (still) be left OR there is no change of direction <u>induced</u> current / emf / voltage does not change direction - smaller deflection - smaller (rate of) change of magnetic field - smaller current / emf / voltage <u>induced</u> (in coil)

Multiple Choice Answers

Q24: A

4(a)(i)	convection
4(a)(ii)	warm air rises OR less dense air rises
	warm air is less dense (than cool air) ORA
	any one from: - cold air replaces warm air - cold air falls and the process repeats owtte - there is a convection current owtte
4(b)(i)	$P = IV$ OR ($I =$) $P \div V$
	2.0 kW = 2000 W OR $2000 \div 230$
4(b)(ii)	10 (A) AND any one from: - smaller fuse melts in normal use (of the heater) owtte - smaller fuse stops the heater working (at all) - larger fuse allows too much current (without melting) - larger fuse may not melt before the circuit is damaged - fuse (rating) must be higher than the (normal) current - the fuse will melt if current goes too high owtte
	any one from: 10 (A) 13 (A) AND fuse (rating) must be higher than (normal) current 13 (A) AND 3 A / 5 A fuse melts in normal use owtte

6(a)	any one from: • magnetic materials are attracted to magnets • non-magnetic materials are not attracted to magnets • magnetic materials experience a force in magnetic fields • non-magnetic materials don't experience a force in magnetic fields
6(b)	any one from: • steel as it stays magnetised • steel makes a permanent magnet
6(c)	N and S poles correctly labelled braille: north to south owtte
6(d)	field lines close(r) indicates strong(er) (magnetic) field owtte ORA

Multiple Choice Answers

Q24: B