

GENERATOR EFFECT 2 MARK

SCHEMES

Question 1

question	answers	extra information	mark
(a)(i)	generator (effect)	accept 'induction'	1
(a)(ii)	(metal) cable is (an electrical) conductor (which) cuts / moves through the (magnetic) field (lines) / lines of force	mention of heat conduction negates this mark	1 1
(a)(iii)	conductor / cable is part of a (complete) circuit	'it' refers to conductor	1
(b)	any two from: <ul style="list-style-type: none"> • shorter cable • reduced speed • different planet (in the Solar System) • increased distance (from planet) • weaker magnetic field 	accept smaller cable accept smaller planet do not accept bigger planet do not accept smaller magnetic field Jupiter has the strongest magnetic field is insufficient	2
Total			6
Question 2			

(a)	<p>any two from:</p> <ul style="list-style-type: none"> • to (electrically) connect • stationary and moving parts • without tangling the wires 	<p>accept to complete the circuit accept to allow a current / charge to flow</p>	2
(b)	<p>current (induced) is reversed / changes in direction / alternates every half turn</p>	<p>accept (induced) p.d. <u>across</u> the coil</p>	1
		<p>do not accept p.d. <u>in</u> the coil</p>	1
(c)	<p>by rotating / moving a magnetic field / magnet relative to a coil</p>	<p>accept by doing the converse / opposite</p>	1
Total			5