

Practice Question Set For GCSE
Subject : Physics
Paper-2 Topic : 10_Electricity

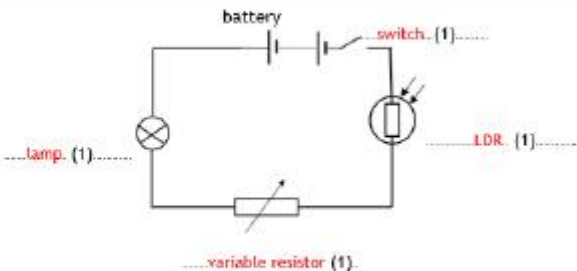
Name of the Student: _____

Max. Marks : 20 Marks

Time : 20 Minutes

Mark Schemes

Q1.

Question	Answer	Additional guidance	Mark
		<p>accept lines drawn from the words in the box to the spaces</p> <p>accept bulb for lamp</p>	<p>(4) AO1.1</p>

Q2.

Question number	Answer	Additional guidance	Mark
i	A an ammeter B, C and D are incorrect because they do not show current		(1)

Question number	Answer	Additional guidance	Mark
ii	substitution (1) $(Q) = 2.5 \times 8 \times 60$ evaluation (1) 1200 (C)	allow 20 (C) for 1 mark award full marks for the correct answer without working	(2)


Q3.

Question number	Answer	Mark
	C 50 Hz A, B and D are all distracting numbers not matching the frequency of the mains	(1) AO1

Question number	Answer	Additional guidance	Mark
(i)	B live and neutral A , C and D are incorrect because the terms positive and negative are not used in the context of wires in a mains cable.		(1) A01

Question number	Answer	Additional guidance	Mark
(ii)	a description that includes any two from melts (1) if there is a fault (1) breaks the circuit (1) stops current (1) safety (1)	blows / breaks if current too large prevents overheating / fire if no other marks scored allow 1 mark for identifying the fuse.	(2) A01

Q5.

Question Number	Answer	Mark
	<div data-bbox="790 235 1021 313"></div> <p data-bbox="316 331 750 365">The only correct answer is D</p> <p data-bbox="316 472 1098 506">A is incorrect because that is the symbol for a diode</p> <p data-bbox="316 521 1251 600">B is incorrect because that is the symbol for a light dependent resistor</p> <p data-bbox="316 616 1070 649">C is incorrect because that is a symbol for a motor</p>	(1)

Q6.

Question number	Answer	Additional guidance	Mark
	B 5 A A, C and D are incorrect repetitions or addition		(1) AO1

Q7.

Question Number:	Answer	Mark
	<p>D diode</p> <p>The only correct answer is D</p> <p>A is not correct as for a thermistor, current would increase with potential difference from the origin B is not correct as current against p.d for a resistor gives a straight line from the origin C is not correct as current against p.d for a resistor gives a straight line from the origin</p>	<p>(1) AO 1 1</p>

Question number	Indicative content	Mark
*	<p>Answers will be credited according to candidate's deployment of knowledge and understanding of the material in relation to the qualities and skills outlines in the generic mark scheme.</p> <p>The indicative content below is not prescriptive and candidates are not required to include all of the material which is indicated as relevant. Additional content included in the response must be scientific and relevant.</p> <p style="text-align: center;">A01 (6 marks)</p> <ul style="list-style-type: none"> • measure the resistance of the thermistor • use ammeter and voltmeter/ use multimeter set on R • in a circuit • measure temperature of thermistor • using thermometer • use water bath • heater or method of heating • use cool water / room temperature water to start • raise temperature • measure new resistance 	(6)

Level	Mark	Descriptor
	0	<ul style="list-style-type: none"> • No rewardable material.
Level 1	1-2	<ul style="list-style-type: none"> • Demonstrates elements of physics understanding, some of which is inaccurate. Understanding of scientific, enquiry, techniques and procedures lacks detail. (AO1) • Presents a description which is not logically ordered and with significant gaps. (AO1)
Level 2	3-4	<ul style="list-style-type: none"> • Demonstrates physics understanding, which is mostly relevant but may include some inaccuracies. Understanding of scientific ideas, enquiry, techniques and procedures is not fully detailed and/or developed. (AO1) • Presents a description of the procedure that has a structure which is mostly clear, coherent and logical with minor steps missing. (AO1)
Level 3	5-6	<ul style="list-style-type: none"> • Demonstrates accurate and relevant physics understanding throughout. Understanding of the scientific ideas, enquiry, techniques and procedures is detailed and fully developed. (AO1) • Presents a description that has a well-developed structure which is clear, coherent and logical. (AO1)