Practice Question Set For GCSE
Subject : Physics
Paper-1 Topic: Electricity (Standard demand)

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Name of the Student:_____
Max. Marks : 19 Marks **Time : 19 Minutes**

Mark Schemes

Q1.

(a) (i) p.d. is (directly) proportional to current
or
gradient / slope is constant
or
the lines show constant resistance
accept lines are straight / diagonal
1

(ii) C
reason only scores if C is chosen
1

for the same p.d. the current is the smallest
*accept lowest gradient **and** the gradient = 1 / R*
1

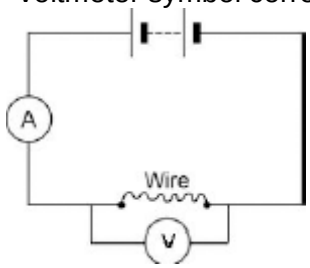
(b) (i) ohm
accept correct symbol Ω
accept an answer written in the table if not given in answer space
1

(ii) K and L
reason only scores if both K and L are chosen
1

only length varies
accept type of metal and the diameter are the same
1

(iii) measure the resistance of more wires made from different metals
accept test more (types of) metals
measure the resistance of more wires is insufficient
they only use two metals is insufficient
1

(c) (i) voltmeter symbol correct and drawn in parallel with the wire

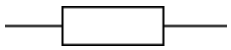


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accept voltmeter symbol correct and drawn in parallel with the battery

1

(ii) correct symbol drawn



symbol must be rectangular

1

[9]

Q2.

(a) (i) 150

1

(ii) transferred to the surroundings by heating

reference to sound negates mark

1

(iii) 0.75

*450 / 600 gains **1** mark*
*accept 75% for **2** marks*
*maximum of **1** mark awarded if a unit is given*

2

(iv) 20 (s)

*correct answer with or without working gains **2** marks*
*correct substitution of 600 / 30 gains **1** mark*

2

(b) (i) to avoid bias

1

(ii) use less power and last longer

1

1 LED costs £16, 40 filament bulbs cost £80

or

filament costs (5 times) more in energy consumption

1

(iii) any **one** from:

- availability of bulbs
- colour output
- temperature of bulb surface

1

[10]

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