Practice Question Set For GCSE
Subject : Physics
Paper-1 Topic: Electricity (Low Demand)

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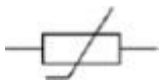
Exam Preparation and Free Resources

Name of the Student:_____
Max. Marks : 25 Marks **Time : 25 Minutes**

Mark Schemes

Q1.

(a)



1

(b) charge

1

(c) place the component / thermistor in the water / beaker

1

record the temperature (of the water) using the thermometer

allow place the thermometer in the water / beaker and record the temperature

1

record / measure the resistance (using the resistance meter)

1

change the temperature of the water (using the kettle) and repeat the measurements (of temperature and resistance)

1

(d) non-linear

1

(e) (resistance changes from) 200 (Ω) to 80 (Ω)

1

change in resistance = 120 (Ω)

1

(f) power = potential difference × current

or

$P = V I$

1

(g) $2900 = 230 \times I$

1

$$I = \frac{2900}{230}$$

1

I = 12.6... (A)

allow 13 (A)

1

[13]

Q2.

(a) battery

1

(b) variable resistor

allow resistor

allow battery / cells

allow correct circuit symbol

1

(c) subtract 0.4 volts from each reading

1

(d) mean = $\frac{0.54+0.58+0.53}{3}$

1

allow mean = $\frac{1.65}{3}$

mean = 0.55 (A)

1

(e) $P = 4.8 \times 0.75$

1

P = 3.6 (W)

1

(f) $R = \frac{4.8}{0.75}$

1

R = 6.4 (Ω)

1

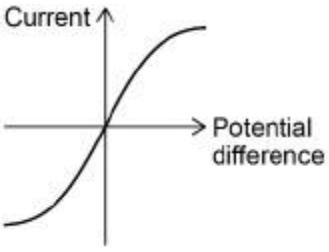
(g) increase

1

increase

1

(h)



1

[12]