Practice Question Set For GCSE
Subject : Physics
Paper-1 Topic: GCSE Triple Science_Electricity (Standard Demand Questions)

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

Mark Schemes

Q1.

(a) (i) 7

1

(ii) (electrical) power = voltage x current

accept P = V × I (correct standard symbol)
accept watts = volts x amps
accept a correct rearrangement

accept  *if subsequent use of*  *is correct*

1

(iii) 1610
or their (a)(i) × 230

*1.61 kW = **2** marks*
*do **not** accept 7 × 240*

2

watts

accept watt
accept W
accept .J/s

(iv) melts

accept burns out
accept blows
accept breaks
*do **not** accept stops working*
*do **not** accept burns*

2

current greater than 13(A)
or current exceeds fuse rating **or** current 15(A)

*do **not** accept too much current*
unless qualified

(b) (i) if live wire touches case

accept if case becomes live
accept metal for case

2

current flows to earth **or** ground
or fuse melts **or** stops iron becoming live

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accept electricity flows to earth
*do **not** accept - you will get a shock*
*accept with <u>no earth</u> (wire) you would or could get a shock for **1**mark*

(ii) (outer) case is made of insulator
accept outside is plastic
*accept outside is not made of metal **or** conductor*

cable is (also) insulated
accept wires for cable
*do **not** accept it has two layers of insulation without explanation*
*do **not** credit answers in terms of heat*

2

[10]

Q2.

(a) Mains socket – once only
Shower cable can get wet
Trailing cable to fire (not heater unless fire clearly identified)
Use of fire
Free running cable from ceiling
Appliance on side of bath
Use of ordinary light switch
Free cable to sink light
any 3 each for1 mark

3

(b) (i) 7, 4, 1, 80.5
Four right – 2
Three right – 1
All right in W – 1

2

(ii) Toaster

1

(iii) 32p
gets 3 marks

Else 8 × 4
gets 2 marks

Else unit cost = 8p
gets 1 mark

3

[9]

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