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

Merit Minds
www.merit-minds.com
Exam Preparation and Free Resources

Name of the Student:_____
Max. Marks : 10 Marks **Time : 10 Minutes**

Q1.

(a) The picture shows a new washing machine.

Complete the following sentence using **one** of the words in the box.

kinetic	**light**	**sound**

A washing machine is designed to transform electrical energy into heat and

_____ energy

(1)

(b) The instruction booklet for the washing machine contains the following information.

Wash cycle	Average power during cycle	Time taken to run cycle
HOT	1.5 kW	2 hours
COOL	1.1 kW	1½ hours
FAST	1.0 kW	¾ hour

(i) Use the following equation to calculate the energy transferred, in kilowatt-hours, to the washing machine during the HOT wash cycle. Show how you work out your answer.

energy transferred = power × time

Downloaded from www.merit-minds.com

_____

_____

Energy transferred = _____ kWh

(2)

(ii) Why does it cost more to use the washing machine on the HOT cycle than on the COOL or FAST cycle?

_____

_____

(1)

(iii) Before buying a washing machine, a householder researched several makes to find out which washing machine was the most energy efficient.

Write down **one** way that he could have done this research.

_____

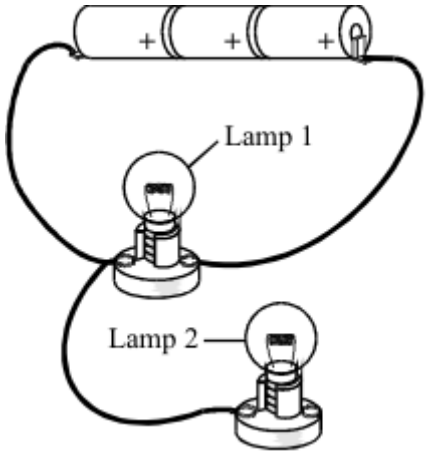
_____

(1)

(Total 5 marks)

Q2.

The drawing shows three identical cells and two identical lamps joined in a circuit.



(a) Use the correct symbols to draw a circuit diagram for this circuit.

(3)

Downloaded from www.merit-minds.com

(b) Each of the cells provides a potential difference (voltage) of 1.5 volts. What is the total potential difference (voltage) provided by all three cells?

_____ volts

(1)

(c) Complete this sentence by crossing out the **two** lines in the box that are wrong.

The current through lamp 2 will be

smaller than
the same as
bigger than

the current through lamp 1.

(1)

(Total 5 marks)

Downloaded from www.merit-minds.com