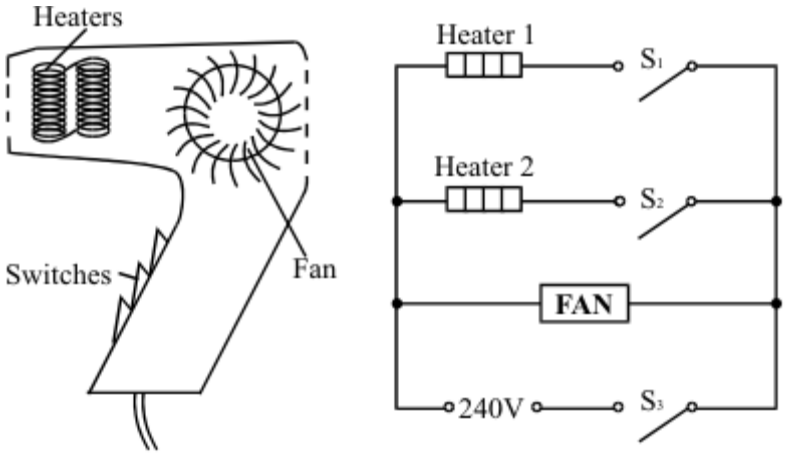
Practice Question Set For GCSE
Subject : Physics
Paper-1 Topic: GCSE Triple Science_Electricity (Standard Demand Questions)

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

Name of the Student:_____
Max. Marks : 16 Marks **Time : 16 Minutes**

Q1.

The diagrams show a hair-dryer and the circuit inside the hair-dryer.



(a) Switches S_1, S_2 and S_3 are all shown in the **OFF** position.

Which switch or switches have to be **ON** to make:

(i) only the fan work? _____

(ii) both heaters work? _____

(2)

(b) (i) What happens to the current in the circuit when the heaters are switched on?

_____

(ii) Suggest why it is important to have the fan working when the heaters are switched on.

_____

_____

_____

(3)

(c) This hair-dryer has a plastic case. It is connected to a mains socket by a 3-pin plug. The cable connecting the hair-dryer to the plug contains only two wires.

(i) Write down the colour of the insulation on the wires.

Wire 1 _____

Downloaded from www.merit-minds.com

Wire 2 _____

(ii) Which of the usual three wires is **not** needed?

_____

(iii) This hair-dryer is safe to use without the third wire. Explain why.

_____

_____

_____

(5)

(d) The following information is stamped on the hair-dryer.



(i) Which number tells us how fast the hair-dryer uses energy?

_____

(ii) On what else does the energy used by the hair-dryer depend?

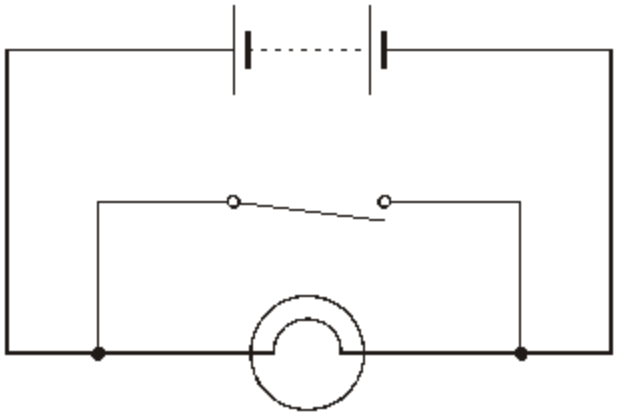
_____

(2)

(Total 12 marks)

Q2.

The circuit diagram below shows a battery connected to a lamp and a switch.



(a) State what happens to the lamp when:

(i) the switch is open (OFF);

_____

(ii) the switch is closed (ON).

_____

Downloaded from www.merit-minds.com

(2)

(b) When the switch is closed what problem is caused in the circuit?

_____

_____

_____

(1)

(c) In the space below draw a circuit diagram to show how the switch should be correctly connected to the lamp and battery.

(1)
(Total 4 marks)

Downloaded from www.merit-minds.com