

- 2 (a) (i) State the relationship between power, current and voltage.

(1)

- (ii) A lamp with a power of 6.5 W is connected to a 230 V supply.

Calculate the current in the lamp.

(3)

current = ..... A

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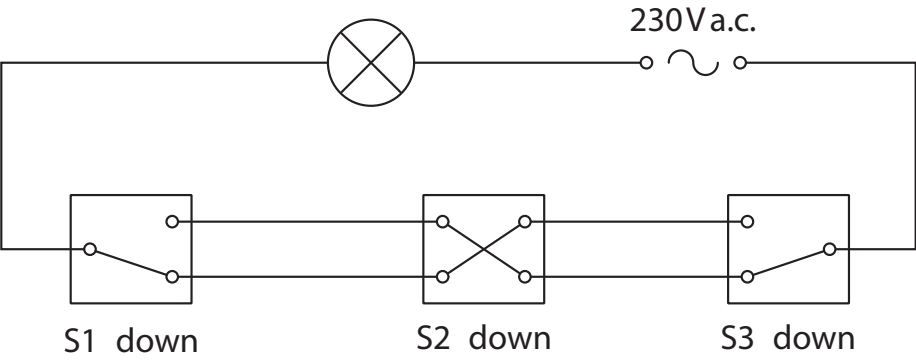
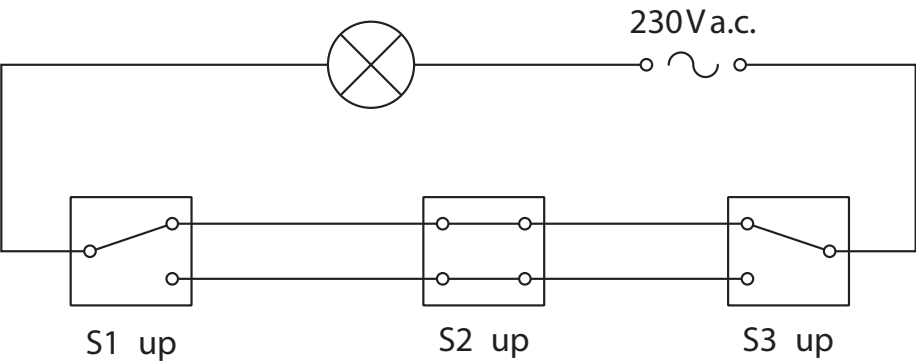
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(b) Three switches, S1, S2 and S3, are used to control a lamp in a large room.  
Each switch can be up or down, and each switch can turn the lamp on or off.



When all three switches are up, the lamp is on.  
When all three switches are down, the lamp is off.  
Complete the table by giving the missing information.

(3)

S1	S2	S3	Lamp
up	up	up	on
down	down	down	off
up	up	down	
down	up		off
up		down	on

(Total for Question 2 = 7 marks)

