

- 7 (a) State what is meant by the term **electric current**.

(1)

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- (b) Diagram 1 shows an electric circuit used to test a fuse.

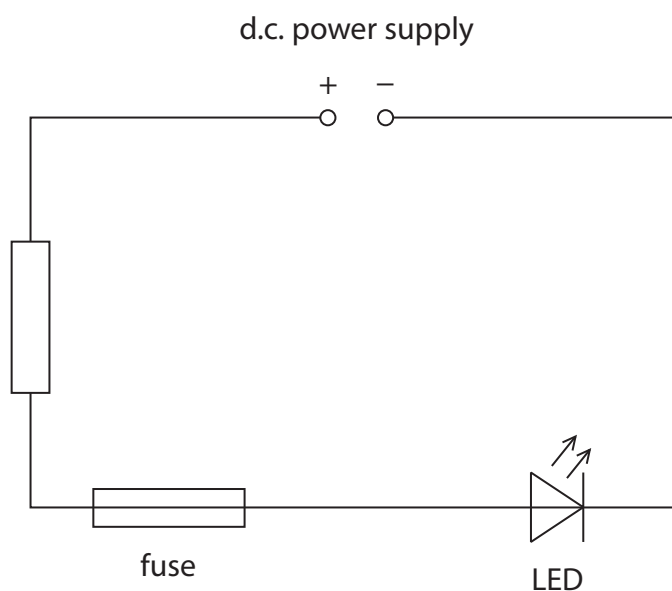


Diagram 1

- (i) Give a reason why an LED is included in the circuit.

(1)

- (ii) Add another component to the circuit in diagram 1 to measure the current in the fuse.

(1)



(c) Diagram 2 shows a different electric circuit containing three different lamps.

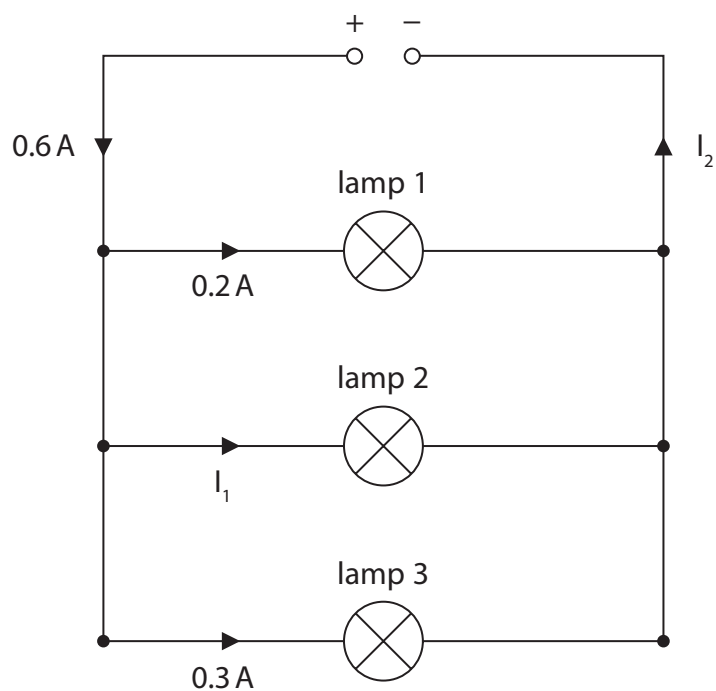


Diagram 2

(i) Calculate the current I_1 .

(1)

$$I_1 = \dots\dots\dots \text{ A}$$

(ii) State the current I_2 .

(1)

$$I_2 = \dots\dots\dots \text{ A}$$

(iii) Explain which lamp is the brightest.

(3)

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(Total for Question 7 = 8 marks)

