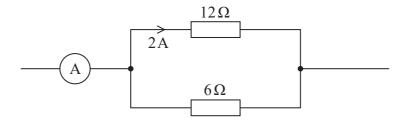
## Answer ALL questions.

All multiple choice questions must be answered with a cross  $\boxtimes$  in the box for the correct answer from A to D. If you change your mind about an answer, put a line through the box  $\boxtimes$  and then mark your new answer with a cross  $\boxtimes$ .

1 Part of an electric circuit is shown.



What is the current shown by the ammeter?

- B 4A
- $\square$  C 5A
- □ D 6A

(Total for Question 1 = 1 mark)

2 A cell is connected across a resistor. After a while the internal resistance of the cell increases.

Which row of the table correctly shows the change in the current in the circuit and the change in the terminal potential difference across the cell?

		Current	Terminal potential difference
X	A	decreases	decreases
X	В	decreases	increases
X	C	increases	decreases
X	D	increases	increases

(Total for Question 2 = 1 mark)

An object is falling at terminal velocity.

Which of the following is **not** a valid conclusion from this statement?

- A The acceleration of the object is zero.
- **B** There is a resistive force acting on the object.
- ☐ C There is a resultant force acting on the object.
- **D** The object has weight.

(Total for Question 3 = 1 mark)

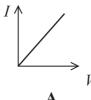
A light dependent resistor is connected across a cell of negligible internal resistance. The light intensity is increased.

Which of the following statements about the current is correct?

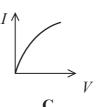
- A It decreases because there is an increase in the number of conduction electrons.
- **B** It increases because there is an increase in the number of conduction electrons.
- C It decreases because the amplitude of lattice vibrations decreases.
- **D** It increases because the amplitude of lattice vibrations increases.

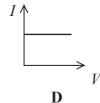
(Total for Question 4 = 1 mark)

Which of the following graphs shows how the current varies with potential difference for a filament lamp?









- $\times$  A
- $\times$  B
- $\mathbf{K}$  C
- $\times$  D

(Total for Question 5 = 1 mark)