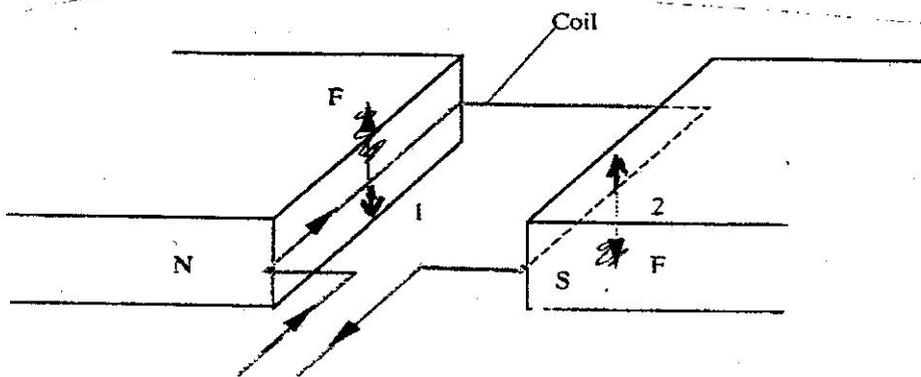


Expected Response



Question 15 and 16

Figure 10 shows two circuits in which identical dry cells and identical bulbs are used. Use the information in the figure to answer questions 15 and 16.

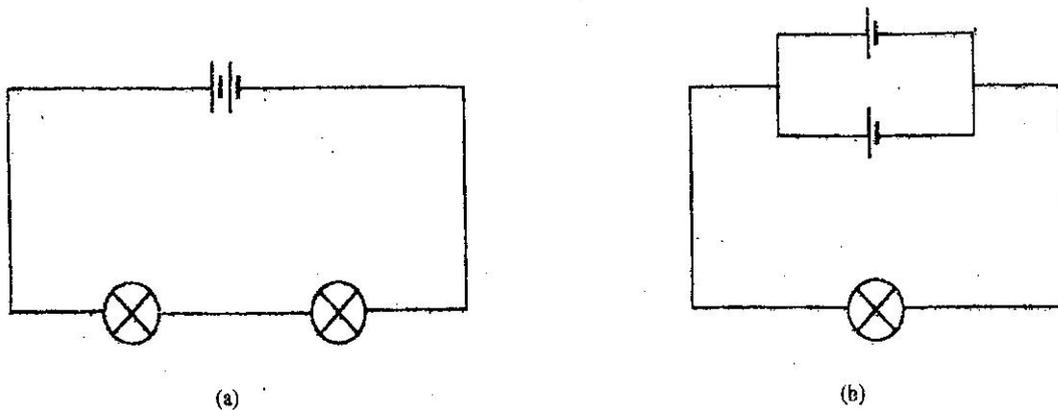


Figure 10

- 15 Explain why the bulb in Figure 10 (b) will be brighter than each of the bulbs in Figure 10 (a). (2 marks)
- 16 Give the reason why the cells in Figure 10 (b) can be used for a longer period than the cells in Figure 10 (a). (1 mark)

Weaknesses

Candidates were being tested on their knowledge of series and parallel connection for resistors (conductors). They had to realize that brightness of the bulbs is directly proportional to the amount of current flowing which in turn is inversely proportional to the circuit resistance. They also needed to know that cells have inherent resistance (internal resistance) which contribute to the circuit resistance.