CLASS7

SCIENCE

CHAPTER –ELECTRICITY AND CIRCUITS

Q1: Differentiate between electric current and electric circuit.

Q2: Explain the formation and uses of battery.

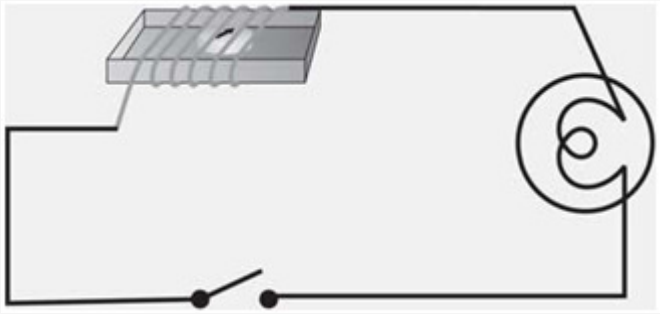
Q3: Explain the function of cell in a circuit.

Q4: An electrician is carrying out some repairs in a building. He wants to replace a fuse by a piece of wire. Would you agree with the electrician? Give reasons for your response.

Q5: How fuses are useful?

Q6: Can we use an electromagnet separating plastic bags from a garbage heap? Explain.

Q7: Look at the figure given below and answer whether the compass needle will show deflection or not when the switch in the circuit shown is closed?



Q8: When the current is switched on through a wire, a compass needle kept nearby gets deflected from its north-south position. Explain.

Q9: Write short notes on heating effects of electric current.

Q10: Write short notes on magnetic effects of electric current

Q11: What are filaments of a bulb and a heater made up of?

Q12: State the factors on which amount of heat produced depends?

Q13: Why does electric current show magnetic effect?

Q14: Why are fuse wire not used in circuit containing electric cell?

Q15: Why does electric current show heating effect?

Q16: What is magnetic field?

Q17: Write short notes on Short Circuiting.

Q18: Write short notes on Overloading.

Q19: Mention the differences between an electromagnet and a permanent magnet.

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Fill in the blanks:

1. An electric circuit is a closed path in which ..... flows.
2. A solenoid carrying current behaves like a ..... .
3. The space around a magnet where its influence can be experienced is called the ..... .
4. The combination of two or more cells is called a ..... .
5. When current is switched 'on' in a room heater, it gets ..... .
6. The safely device based on the heating effect of electric current is called a ..... .

Write True (T) or False (F) against the following statements in the given brackets:

1. Current flows through a circuit when it is open. ( )
2. Electric bell is based on the heating effect of current. ( )
3. An electric bell has an electromagnet. ( )
4. To make a battery of two cells, the negative terminal of one cell is connected to the negative terminal of the other cell. ( )
5. When the electric current through the fuse exceeds a certain limit, the fuse wire melts and breaks. ( )
6. The magnetic strength in a conductor decreases with the increase in current. ( )

Question Answer

7.Air is not filled in electric bulbs. Why? Justify your answer.

8.Rahul was carrying out repairs in his house. He wishes to replace a fuse by a piece of wire. Would you agree? Give reason for your response.

9.In the devices like electric heater, electric geyser, electric bulb-the heating effect of current can be put to good use. Can you think of the situations where this effect results in wastage of energy?