sns academy

an International CBSE Finger Print School
Coimbatore

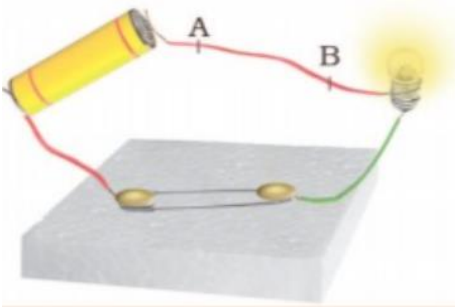
Name : **Date :**

Grade : **Worksheet** **Submission Date :**

Subject : Physics **Parent's sign :**

Electric Current and Its Effects

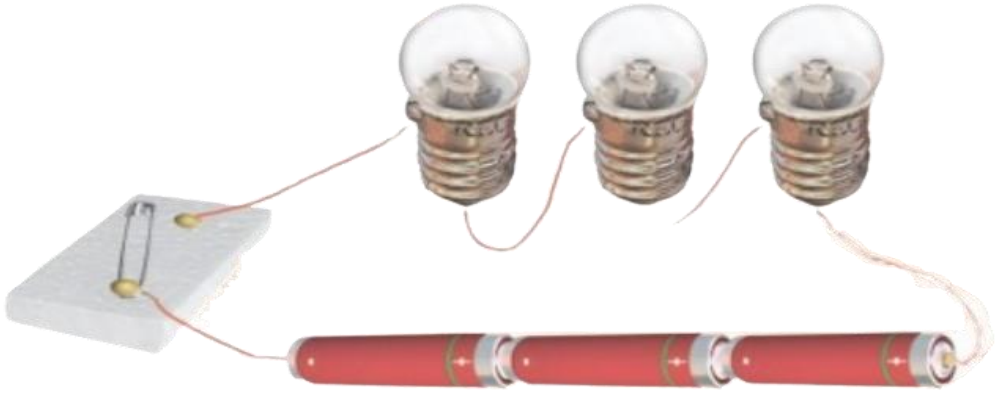
1. When an electric current flows through a copper wire AB as shown in Figure14.1, the wire



(a) deflects a magnetic needle placed near it
(b) becomes red hot
(c) gives electric shock
(d) behaves like a fuse

2. Choose the statement which is **not correct** in the case of an electric fuse.
(a) Fuses are inserted in electric circuits of all buildings.
(b) There is a maximum limit on the current which can safely flow through the electric circuits.
(c) There is a minimum limit on the current which can safely flow in the electric circuits.
(d) If a proper fuse is inserted in a circuit it will blow off if current exceeds the safe limit.

3. Three bulbs A, B, C are connected in a circuit as shown in Figure



When the switch is 'ON'

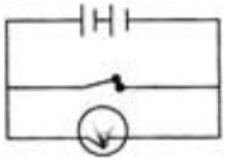
(a) bulb C will glow first.
(b) bulb B and C will glow simultaneously and bulb A will glow after some time.
(c) all the bulbs A, B and C will glow at the same time.
(d) the bulbs will glow in the order A, B and C.

4. When a switch is in OFF position,
(i) circuit starting from the positive terminal of the cell stops at the switch.
(ii) circuit is open.
(iii) no current flows through it.
(iv) current flows after some time.

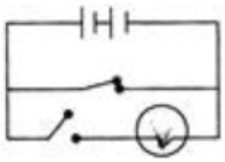
Choose the combination of correct answer from the following.
(a) all are correct
(b) (ii) and (iii) are correct
(c) only (iv) is correct
(d) only (i) and (ii) are correct

5. In which of the circuits bulb will glow?

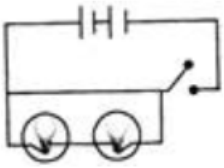
(a)



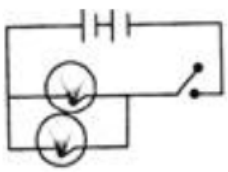
(b)



(c)



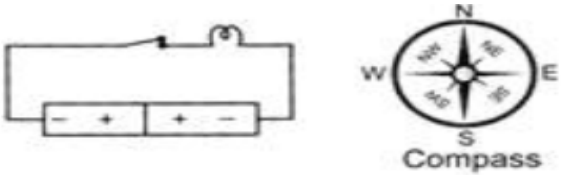
(d)



6. Marking on a bulb is 60 W, 220 V. What does it signify?

(a) The bulb is connected across the 220 volts, 60 joules of energy is consumed for every second.
(b) The bulb is connected across 220 volts, 60 joules of energy is released.
(C) 60 unit of current will flow in the bulb.
(d) 220 unit of current will flow in the bulb.

7. Which of the following statements is correct for the given circuit?

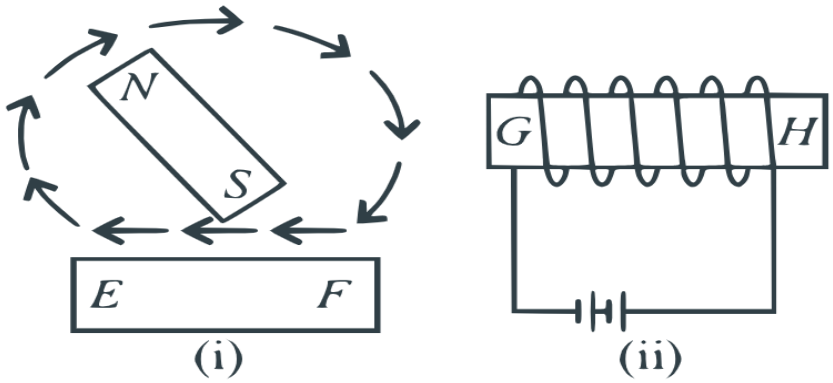


(a) The wire has no magnetic effect.
(b) When compass is kept near to the circuit, it will not show any deflection.
(c) The given circuit is incomplete because there is no source of electric energy.
(d) Due to battery in this circuit, electric wire behaves as a magnet.

8. Copper wires are used as connecting wires because

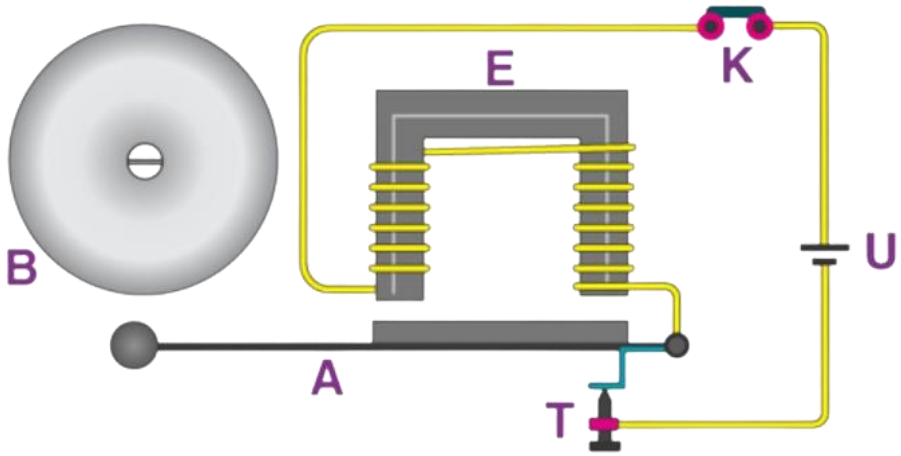
(a) Copper has very high melting point
(b) Copper wires are very thick wires
(c) Copper wire offers a lower resistance
(d) None of these

9. Observe the given figures carefully. Figure (i) shows an iron bar stroked by a bar magnet and figure (ii) shows an iron bar which is inserted into a solenoid.



State the polarities of E, F, G and H.
(a)E – North, F - South, G – South, H – North
(b)E – South, F – North, G -North, H -South
(c)E – South, f – North, G – South, H – North
(d)E – North, F – South, G – North, H - South

10. When the switch of an electric bell is pushed



(a) flow of the current stops through the electromagnet in the bell
(b) current starts to flow through the electromagnet
(c) voltage decreases in the circuit
(d) none of the above

11. Which of these appliances does not use an electromagnet?
(a) washing machine (b) refrigerator
(c) room heater (d) electric bell

12. If the number of turns in the coil of an electromagnet is more, the strength of the electromagnet will be
(a) lesser (b) greater
(c) double (d) same

13. The coil of wire contained in heater is known as
(a) circuit (b) component
(c) spring (d) element