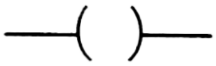
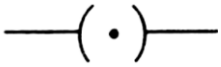
1. The symbol used for a switch in 'ON' condition is

(a) 

(b) 

(c) 

(d) 

2. An electric bulb does not glow in a circuit if

(a) there is a broken circuit.
(b) there is no source of electric current.
(c) there is no conducting material.
(d) all of these

3. The coil of wire contained in heater is known as

(a) component (b) circuit (c) spring (d) element.

4. Mona makes a simple circuit with one bulb and 3 cells. The bulb lights up for an instant and then goes out. It happened because

(a) the wires melted in the heat.
(b) electricity could not flow through the circuit, subsequently.
(c) too much electricity passed through the filament.
(d) all of these

5. A short circuit occurs when

(a) a small current flows through the circuit
(b) too much current flows through the circuit
(c) the fuse blows in a circuit
(d) current does not flow in the circuit.

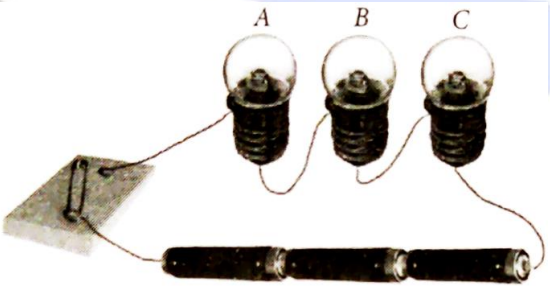
6. Which of the following is a temporary magnet?

(a) Electromagnet
(b) Ring-shaped magnet
(c) Bar magnet
(d) Magnetite

7. 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.

8. Three bulbs A, B, Care 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.

9. 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
10. Resistance of a wire depends on the
   (a) thickness of the wire
   (b) material of the wire
   (c) length of the wire
   (d) all of these
11. The strength of a magnetic field due to solenoid can be increased by
   (a) winding the solenoid around a magnetic material.
   (b) increasing the current in the solenoid.
   (c) increasing the number of turns in the solenoid.
   (d) all of these

Assertion-Reason Codes:

(a) If both Assertion and Reason are true and Reason is the correct explanation of Assertion.
(b) If both Assertion and Reason are true and Reason is not the correct explanation of Assertion.
(c) If Assertion is true but Reason is false.
(d) If both Assertion and Reason are false.

12. Assertion: Tungsten metal is used for making filaments of incandescent lamps.
   Reason: The melting point of tungsten is very low.
13. Assertion: A cell is a device which converts chemical energy into electrical energy.
   Reason: Cell maintains a constant potential difference between its terminals for a long time.
14. Assertion: A current carrying wire should be charged.
   Reason: The current in a wire is due to flow of bound electrons in a random direction.
15. Assertion: Fuse wire must have high resistance and low melting point.
   Reason: Fuse is used for small current flow only.
16. Assertion: An electric cell is a device which converts chemical energy into electrical energy.
   Reason: More be the cells connected in a regular manner more be the current in the circuit.