

1. Match the following items given in Column A with that in Column B:

| <b>Column A</b> | <b>Column B</b>                           |
|-----------------|---|
| (a) Cell        | (i) Allows electricity to pass through it |
| (b) Battery     | (ii) Either breaks or completes a circuit |
| (c) Conductor   | (iii) Converts electricity into light     |
| (d) Insulator   | (iv) Glows when electricity passes in it  |
| (e) Switch      | (v) A device which produces electricity   |
| (f) Bulb        | (vi) Is a path of electricity             |
| (g) Filament    | (vii) Does not allow electricity to pass  |
| (h) Circuit     | (viii) A combination of cells             |

2. Fill in the blanks with appropriate words:

- (i) An electrical cell has two terminals, a positive and a .....
- (ii) Materials through which current can pass are called .....
- (iii) Materials through which current cannot pass are called .....
- (iv) Our body is a ..... conductor of electricity.
- (v) When a switch is off, the circuit becomes .....
- (vi) We use ..... to test the conductivity of a material.
- (vii) A switch either breaks or ..... a circuit.
- (viii) Electricity we use in our homes is supplied from a .....

3. State whether the statements given below are True or False:

- (i) A bulb has two terminals.
- (ii) An electric cell converts chemical energy into electrical energy.
- (iii) Rubber and wood are good conductors of electricity.
- (iv) A switch is made of an insulator.
- (v) Current flows from positive terminal of cell to its negative terminal.
- (vi) Current flows only through a complete path.
- (vii) Handless of electrical appliances are made up of insulators.
- (viii) In a torch, cells are joined in parallel arrangement.
- (ix) Air is a good conductor of electricity.
- (x) We should turn off main switch when there is a short circuit in our home.
- (xi) We should never join the wires connected to two terminals of a cell.

4. Choose the correct option in the following questions:

- (i) Cell is a device which
  - (a) Converts chemical energy into electrical energy
  - (b) Electrical energy into light energy
  - (c) Electrical energy into magnetic energy
  - (d) None of these

(ii) A bulb has

(a) Two terminals and a filament (b) Two terminals and two filaments.  
(c) Multiple terminals and single filament (d) Single terminal and a filament

(iii) Filament of a bulb is made up of

(a) Aluminium (b) Chromium (c) Platinum (d) Tungsten

(iv) Bulb glows only in

(a) Closed circuit (b) Open circuit  
(c) In both circuits (d) Open circuit if bulb is not fused

(v) A battery is

(a) A single cell (b) A combination of cells in which cells are joined (+) to (-)  
(c) A combination of cells in which cells are joined (-) to (+)  
(d) None of the above

(vi) A substance which allows electricity to pass through it is called

(a) A conductor (b) An insulator (c) Semiconductor (d) Superconductor

(vii) Which is an example of an insulator

(a) Bakelite (b) Aluminium (c) Tap water (d) All of these

(viii) An example of a conductor is

(a) Tap water (b) Salt solution (c) Metal wire (d) All of these

(ix) How many terminals are there in a dry cell?

(a) One (b) Two (c) Three (d) Four

(x) To prevent electric shocks, the metallic electrical wires are covered with

(a) Paper (b) Cotton (c) Aluminium (d) Plastic