Electricity and circuit

1. When we switch on a torch, we light up

(a) a tube-light inside it

(b) an electric bulb inside it

(c) a tube-light outside it

(d) an electric bulb outside it

Ans. (b)
Explanation: Torch has a bulb inside it. When we switch on the torch, we light up the bulb inside it.

2. Pumps that lift water from wells or from ground level to the roof top tank, run through

(a) electricity

(b) buckets

(c) water taps

(d) electric bulbs

Ans. (d)
Explanation: In order to operate pumps that lift water from wells or from ground level to the roof top tank, we switch on electric motors. These electric motors use electricity and lift water from wells or ground level to the top of the roof.

3. We can carry a walkman inside our pocket. It is not connected to any electric socket but we can still listen to songs because it has an

(a) electric motor

(b) electric cell

(c) electric generator

(d) electric bulb

Ans. (b)
Explanation: Walkman has electric cell inside it. This cell provides electricity, which enables us to listen songs.

4. Electric cells inside cameras and transistor provide them

(a) Wind energy

(b) Electricity

(c) Solar energy

(d) Light energy

Ans. (b)

Explanation: Electric cells inside cameras and transistor radios provide them electricity. Without electricity, they cannot function at all.

5. Our wristwatches are not connected to any electric sockets. However, their second's, minute's and hour's hands move due to the electricity obtained from an

(a) electric motor

(b) electric generator

(c) electric cell

(d) electric bulb

Ans. (c)

Explanation: The second's, minute's and hour's hands of wristwatches move due to the electricity obtained from electric cells present inside them.

6. To light our homes, roads, offices, markets and factories, etc. even after sunset, we use

(a) electricity

(b) solar energy only

(c) wind energy only

(d) All the above

Ans. (a)

Explanation: Electricity can be obtained from various sources like solar energy, wind energy, power station, etc. This electricity is used to light our homes, roads, offices, markets and factories even after sunset.

7. The metal disc of an electric cell acts as a

(a) protective device

(b) positive terminal

(c) source of electricity

(d) negative terminal

Ans. (d)

Explanation: An electric cell has two terminals. The metal cap on one side acts as a positive terminal while the metal disc on the other side acts as a negative terminal.

8. The filament of a bulb is fixed to two thicker wires, which

(a) provide support to it

(b) take support from the filament

(c) offer as well as take support from the filament

(d) provide breaks in the circuit

Ans. (a)

Explanation: The filament of a bulb is fixed to two thicker wires, which provide support to it. With the help of these wires, the electrical circuit also gets completed.

9. The two terminals of a bulb should

(a) overlap each other

(b) touch each other

(c) not touch each other

(d) be joined directly

Ans. (c)

Explanation: Two terminals of a bulb should not touch each other.

10. The electric cell and electric bulb have

(a) 2 and 3 terminals respectively

(b) 2 terminals each respectively

(c) 2 and 1 terminals respectively

(d) 1 and 1 terminals respectively

Ans. (b)

Explanation: Both the electric cell and electric bulb have two terminals each, namely positive and negative terminals.