

Name: \_\_\_\_\_ Date: \_\_\_\_\_

### Chemical Effects of Electric Current

Q1. Why is it dangerous to touch a working electrical appliance with wet hands?

Ans. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Q2. Write two common application of the chemical effect of electric current.

Ans. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Q3. For electroplating copper on an iron object, which terminal of the battery (positive or negative) is connected to the iron object?

Ans. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Q4. In case of a fire, before the firemen use the water hoses, they shut off the main electrical supply for the area. Explain why they do this.

Ans. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Q5. Why the bulb glows when the electric current passes through it?

Ans. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Chemical Effects of Electric Current

Q1. Why is it dangerous to touch a working electrical appliance with wet hands?

Ans. It is dangerous to touch a working electrical appliance with wet hands because the tap water is a good conductor of electricity due to which it may conduct electric current and gives us an electric shock.

Q2. Write two common application of the chemical effect of electric current.

Ans. Two common application of the chemical effect of electric current are:

i. Electroplating of metals

ii. Purification of metals

Q3. For electroplating copper on an iron object, which terminal of the battery (positive or negative) is connected to the iron object?

Ans. In the process of electroplating, the metal to be electroplated is taken as cathode (negative) and the one used for coating is chosen as the anode (positive). Thus, negative terminal will be connected to the iron object.

Q4. In case of a fire, before the firemen use the water hoses, they shut off the main electrical supply for the area. Explain why they do this.

Ans. Water is a conductor of electricity, so if the electricity supply is not cut off and firemen come in contact with wet electric switches, electric wires and other electrical appliances, they may get electrocuted.

Q5. Why the bulb glows when the electric current passes through it?

Ans. Due to the heating effect of current, the filament of the bulb gets heated to a high temperature and it starts glowing. However, if the current through a circuit is too weak, the filament does not get heated sufficiently and it does not glow.