Education with Fun

Name: _____ Date: _____

Chemical Effects of Electric Current

Q1. Is it safe for the electrician to carry out electrical repairs outdoors during heavy downpour? Explain.

Ans. _____

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Q2. A child staying in a coastal region tests the drinking water and also the seawater with his tester. He finds that the compass needle deflects more in the case of seawater. Can you explain the reason?

Ans. _____

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Q3. What are the chemical effects of electric current?

Ans. _____

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Q4. A tester is used to check the conduction of electricity through two liquids, labeled A and B. It is found that the bulb of the tester glows brightly for liquid A while it glows very dimly for liquid B. You would conclude that

(i) liquid A is a better conductor than liquid B.

(ii) liquid B is a better conductor than liquid A.

(iii) both liquids are equally conducting.

(iv) conducting properties of liquid cannot be compared in this manner.

Ans. _____

Chemical Effects of Electric Current

Q1. Is it safe for the electrician to carry out electrical repairs outdoors during heavy downpour? Explain.

Ans. It is not safe for the electrician to carry out electrical repairs outdoors during heavy downpour because rainwater being a conductor of electricity may cause electrocution of the electrician.

Q2. A child staying in a coastal region tests the drinking water and also the seawater with his tester. He finds that the compass needle deflects more in the case of seawater. Can you explain the reason?

Ans. The compass needle deflects more in the case of seawater because due to the presence of a large amount of dissolved salts in it, sea water is a much better conductor of electricity than drinking water.

Q3. What are the chemical effects of electric current?

Ans. When an electric current flows through a conducting solution, it causes following chemical change:

i. Bubbles of gas or gases may be formed on the electrodes.

ii. Deposits of metals may form on electrodes.

iii. Changes in colour of solutions may occur.

Q4. A tester is used to check the conduction of electricity through two liquids, labeled A and B. It is found that the bulb of the tester glows brightly for liquid A while it glows very dimly for liquid B. You would conclude that
(i) liquid A is a better conductor than liquid B.
(ii) liquid B is a better conductor than liquid A.
(iii) both liquids are equally conducting.
(iv) conducting properties of liquid cannot be compared in this manner.

Ans. (i) liquid A is a better conductor than liquid B.