



CLASS :X

Subject:CHEMISTRY

Topic: Answers to the worksheet[ELECTROLYSIS]

Dated:05.05.2020

Answers to Worksheet No.:1

Date:05.05.2020

- 1) Ionisation
- 2) Molecules
- 3) Copper is a good conductor of electricity, but acts as a non-electrolyte because copper metal is a solid element and does not have mobile ions to conduct electricity i.e it does not undergo chemical decomposition due to the flow of electric current through it.
- 4) d) Aqueous acetic acid is a weak electrolyte.
- 5) Aqueous solution of sodium chloride contains mobile ions like Na^+ , Cl^- , H^+ , OH^- , H_3O^+ ions which are responsible for conduction of electricity.
- 6) Carbon tetrachloride, being a non-polar covalent compound, does not have ions, so does not conduct electricity, hence called a non-electrolyte.
- 7) a) Based on the tendency to lose electrons and get discharge at the anode, the anions have been arranged in increasing order in electrochemical series. For given ions order is as follow



b)Based on the case ,with which atoms of metals lose electrons to form positively charged ions, the metals are arranged in increasing order in electrochemical series for given ions order is as follow:



8)STRONG ELECTROLYTE

a)Electrolytes which allow a large amount of electric current to flow through them.

b)These are dissociated completely in fused or aqueous solution.

WEAK ELECTROLYTE

a)Electrolytes which allow a small amount of electric current to flow through them.

b) These are dissociated partially in fused or aqueous solution.

9)Anode is oxidising electrode since during electrolysis anode acquires a positive charge and hence ions in a solution which are negatively charged ,anions migrate to anode which are negatively charged.

10)Electrolysis of acidulated water considered to be an example of catalysis because both oxidation reduction takes place simultaneously and dil.sulphuric acid is added to catalyse the reaction.

11)a)Carbon tetrachloride
b)Lead bromide

12)a)Only ions
b)Ions and molecules
c)Only molecules

13)a)Y is getting reduced.
b)Y will have negative charge.
c)Y will migrate to anode,during the process of electrolysis.

14)a)Compounds which conduct electricity when dissolved in water or in the molten state are called electrolytes.

b)Acetic acid- Weak electrolyte

Ammonium chloride- Weak electrolyte

Ammonium hydroxide -Weak electrolyte

Carbon tetra chloride- Non -electrolytes

Dil.hydrochloric acid -Strong electrolytes

Sodium acetate -Weak electrolyte

Dil. sulphuric acid -Strong electrolytes

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