## Exercise - II

## **OLYMPIAD PROBLEMS**

- A positively charged ion is called Q.1
  - (A) atom
- (B) anion
- (C) cation
- (D) neutral ion
- Q.2 The instrument needed to measure the current flowing through a circuit is ?
  - (A) voltmeter
- (B) voltameter
- (C) galvanometer
- (D) ammeter
- Q.3 The process in which any electrolyte gets decomposed when electricity is passed through it, is called
  - (A) electrolysis
- (B) decomposition
- (C) dissociation
- (D) splitting
- The process of depositing a thin layer of Q.4 any superior metal over an object of a cheaper metal with the help of electricity is called
  - (A) electrorefining
- (B) electrometallurgy
- (C) electroplating
- (D) electrowinning
- Q.5 Which of the following is the most essential for an electric circuit to work?
  - (A) A switch
  - (B) An electric current
  - (C) A switch board
  - (D) none of these
- The connecting wires used in an electric Q.6 circuit are usually made of
  - (A) gold
- (B) silver
- (C) copper
- (D) plastic
- Pure or distilled water is a/an 0.7
  - (A) conductor
- (B) insulator
- (C) partial conductor (D) none of these
- Water supplied in households and normal 0.8 water is a/an
  - (A) conductor
- (B) insulator
- (C) partial conductor (D) none of these
- 0.9 Which of the following liquids is a conductor of electricity ?
  - (A) Kersene
- (B) Cooking oil
- (C) Alcohol
- (D) Vinegar

- Q.10 In an electrolyic cell, the electrode which is connected to the positive terminal of a battery is called
  - (A) Anode
- (B) Cathode
- (C) Antinode
- (D) None of these
- Electrostatics deals with the study of the Q.11
  - (A) Charges at rest
  - (B) Charges in motion
  - (C) Charges both at rest and in motion
  - (D) Charges neither at rest nor in motion
- Q.12 The surest test for a body to be a charged body or not is
  - (A) Attraction
  - (B) Repulsion
  - (C) Both attraction and repulsion
  - (D) Neither attraction nor repulsion
- Q.13 A body possessing an equal number of positive and negative charges is
  - (A) Neutral
  - (B) Negatively charged
  - (C) Positively charged
  - (D) None of these
- Q.14 In induction, the charge possessed by the charging body and charged body are
  - (A) Different
  - (B) Same
  - (C) Can be same or different
  - (D) Both the bodies become neutral
- Q.15 In induction, the transfer of charges takes place by
  - (A) Touching
  - (B) Rubbing
  - (C) From a distance
  - (D) Either by rubbing or touching
- Q.16 The S.I. unit of current is -
  - (A) Ampere
- (B) Volt
- (C) Ohm
- (D) Mho
- Q.17 Which of the following is a conductor?
  - (A) Salt solution
- (B) Sugar solution
- (C) Mica
- (D) Plastic, PVC

Q.25 An electrolyte is Q.18 The charge carried by cation is (A) positive (A) a light electric cell (B) a liquid that conducts electricity (B) negative (C) a metal (C) positive or negative (D) None of these (D) none of these Q.19 During purification of metals, the refined Q.26 When electric current is passed through acidulated water, the gases produced are metal is obtained at the (A) hydrogen and oxygen (A) cathode (B) hydrogen and ozone (B) anode (C) oxygen and hydrogen perioxide (C) surface of electrolyte (D) None of these (D) None of these Q.20 During electroplating, the pure metal is Q.27 The object to be electroplated is made deposited at the (A) cathode (B) anode (A) Cathode (B) Anode (C) cathode or anode (D) None of these (C) Both cathode and anode (D) At bottom of the electrolytic cell Q.28 The method of purifying metals by passing In an electrolytic cell, the electrode that is electricity is called Q.21 (A) electrolysis connected to the positive terminal of the (B) electroplating battery is called (C) electrorefining (A) Cation (B) Cathode (C) Anion (D) Anode (D) None of these The process by which a chemical change ANSWER KEY takes place in a substance when electric currnent is passed through it is called (A) Electrolysis 1 С 2 D 3 Α 4 С (B) Electroplating (C) Electrodes 7 5 В 6 С В 8 Α (D) Thermionic conduction D 10 Α 11 Α 12 В Q.23 Adding a soluble metallic salt to water (A) Increases its electrical conductivity (B) decreases its electrical conductivity 13 14 Α 15 С Α Α 16 (C) never produces any change in the conductivity 17 19 Α Α Α 18 Α 20 (D) none of these 21 22 Α 23 Α D D 24 Q.24 Electroplating is a method of (A) making plates using electricity (B) plating a metal with another metal С 25 В 26 Α 27 Α 28 (C) coating any object with an electricall conducting plate (D) coating a metal with another metal by passing an electric current