

ST. LAWRENCE HIGH SCHOOL A JESUIT CHRISTIAN MINORITY INSTITUTION <u>SOLUTION-05(CLASS-11)</u> <u>TOPIC</u>- SOME BASIC CONCEPTS IN CHEMISTRY <u>SUBTOPIC</u>-EQUIVALENT MASS



SUBJECT – CHEMISTRY DURATION – 30 mins

F.M. - 15 DATE -19.06.20

1.1 Equivalent mass of KMnO4 in neutral medium is-

a) 52.7 b) 31.6 c) 158 d) 57.2

Ans. a

1.2 5g of metal on ignition in air forms 9.44g of its oxide. Calculate the equivalent mass of the metal-

a) 0.9 b) 0.8 c) 0.7 d) 0.6

Ans. a

1.3 Equivalent mass of a mass is 20. How much of the metal will react with chlorine to give 5.9g of metallic chloride?

a) 1.8010g b) 1.0180g c) 1.1010g d) 1.0010g

Ans. a

1.4 **1.224**g of a metallic oxide can be obtained from **1.872**g of the corresponding metallic hydroxide. Find the equivalent mass of the metal-

a) 18 b) 24 c) 9 d) 27

Ans. c

1.5 The basicity of H₃PO₂ and H₃PO₃ are-

a) 1 and 2 b) 3 and 2 c) 3 for both acids d) 2 and 1

Ans. a

1.6 The equivalent mass of a metal is 32.7. What volume of H2 will be liberated at STP when 0.1g of the metal reacts with excess of dilute H_2SO_4 -

a) 35.42 ml b) 31.62 ml b) 33.52 ml d) 34.52 ml

Ans. d

1.7 Equivalent mass for an element is-

a) Always constant b) May vary c) Can't be predicted d) None of these Ans. b

1.8 The value of "n"-factor for an acid-

a) Basicity b) Total amount of positive charge c) Acidity d) Total amount of positive charge

Ans. a

1.9 The value of "n"-factor for a salt-

a) Basicity b) Total amount of positive charge c) Both b and d d) Total amount of positive charge

Ans. c

1.10 A metallic oxide contains 53% metal. The vapour density of the chloride of the metal is 66. Find the atomic mass of the metal-

a) 27.07 b) 19.07 c) 17.09 d) 38.06

Ans. a

1.11 8.08g of a metallic oxide on being reduced by H₂, produces 1.8g of H₂O. Find the quantity of O₂ in the above and the equivalent mass of the metal-

a) 27.7 b) 32.4 c) 21.3 d) 23.2

Ans. b

1.12 20g of a metal reacts dilute H_2SO_4 to liberate 0.504g of H_2 gas. Calculate the amount of metal oxide formed from 2g of the metal-

a) 3.0g b) 3.9g c) 2.4g d) 1.6g

Ans. c

1.13 Equivalent mass of oxalic acid is-

a) 31.5 b) 18 c) 36 d) 63 **Ans. d**

1.14 Equivalent mass of KMnO4 is the maximum in-

a) Acidic medium b) neutral medium c) alkaline medium d) both a and c Ans. c

1.15 Equivalent mass of Ca₃ (PO₄)₂ and CaO area) 52.67 and 28 b) 52.67 and 31 c) 51.07 and 28 d) 25.67 and 29 Ans. a

PREPARED BY: MR. ARNAB PAUL CHOWDHURY