



# ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

## WORKSHEET-05(CLASS-11)



### TOPIC- SOME BASIC CONCEPTS IN CHEMISTRY

#### SUBTOPIC-EQUIVALENT MASS

**SUBJECT – CHEMISTRY**

**DURATION – 30 mins**

**F.M. - 15**

**DATE -19.06.20**

**1.1 Equivalent mass of  $\text{KMnO}_4$  in neutral medium is-**

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

**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

**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

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

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

**1.5 The basicity of  $\text{H}_3\text{PO}_2$  and  $\text{H}_3\text{PO}_3$  are-**

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

**1.6 The equivalent mass of a metal is 32.7. What volume of  $\text{H}_2$  will be liberated at STP when 0.1g of the metal reacts with excess of dilute  $\text{H}_2\text{SO}_4$  -**

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

**1.7 Equivalent mass for an element is-**

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

**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

**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

**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

**1.11 8.08g of a metallic oxide on being reduced by  $H_2$ , produces 1.8g of  $H_2O$ . Find the quantity of  $O_2$  in the above and the equivalent mass of the metal-**

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

**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

**1.13 Equivalent mass of oxalic acid is-**

a) 31.5 b) 18 c) 36 d) 63

**1.14 Equivalent mass of  $KMnO_4$  is the maximum in-**

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

**1.15 Equivalent mass of  $Ca_3(PO_4)_2$  and  $CaO$  are-**

a) 52.67 and 28 b) 52.67 and 31 c) 51.07 and 28 d) 25.67 and 29

**PREPARED BY: MR. ARNAB PAUL CHOWDHURY**