ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

SOLUTION-13(CLASS-11)

TOPIC- REDOX EQUILIBRIA

SUBTOPIC- DETERMINATION OF OXIDATION NUMBER

SUBJECT – CHEMISTRY **F.M. - 15**

DURATION – 30 mins **DATE -29.06.20**

1.1 **The equivalent mass of a metal-**

(a) Is same (b) Always change (c) It may remain unchanged but also change (d) Is not always same

Ans. c

1.**2 In which of the following compounds, Phosphorus exhibits the minimum oxidation state-**

(a) PH_3 (b) H_3PO_3 (c) H_3PO_4 (d) H_3PO_2

Ans. a

1.3 **Find the oxidation number of S in H_2SO_5:**

(a) +6 (b) +5 (c) +4 (d) +1

Ans. a

1.4 **Among the oxides of Cr, i.e. CrO, Cr_2O_3 and CrO_2 which one acts as an acidic oxide?**

(a) CrO (b) Both a and d (c) Cr_2O_3 (d) CrO_2

Ans. c

1.5 **Oxygen shows positive oxidation number in which of the following compounds?**

(a) K_2O (b) CO_2 (c) H_2O_2 (d) OF_2

Ans. d

1.6 **The reaction which involves both oxidation and reduction simultaneously-**

(a) Redox (b) None of these (c) Only reduction (d) Only Oxidation

Ans. a

1.7 **Find the oxidation state of Osmium in OsO_4:**

(a) -1 (b) +8 (c) 0 (d) -2

Ans. b

1.8 **Find the n-factor for $KMnO_4$:**

(a) 3 b) 2 c) 6 d) 5

Ans. d

1.9 **Which among the following has the central atom with fractional oxidation number?**

(a) $K_2Cr_2O_7$ b) $Na_2S_2O_3.5H_2O$ c) Fe_3O_4 d) H_2O_2

Ans. c

1.10 **Among the given compounds, in which the oxidation number of the central atom has the minimum value?**

(a) H_2S (b) HNO_3 (c) $SnCl_2$ (d) H_2SO_3

Ans. a

1.11 **Which among the following has the maximum equivalent mass?**

(a) $K_2Cr_2O_7$ b) $Na_2S_2O_3.5H_2O$ c) $FeSO_4.(NH_4)_2SO_4.6H_2O$ d) H_2S

Ans. c

1.12 **$KMnO_4$ exhibits minimum equivalent mass is-**

(a) Acidic medium b) Basic medium c) Neutral medium d) Both acidic and basic medium

Ans. a

1.13 **Oxidation number of transition metals is/are-**

(a) Always remains same b) None of these c) can't be predicted d) Variable

Ans. d

1.14 **The oxidation number(s) of N in $(NH_4)NO_3$ is/are-**

(a) -3, +5 (b) -3, -5 (c) +3, +5 (d) +3, -5

Ans. a

1.15 **In which of the following oxidation number of S is +6-**

(a) H_2SO_4 b) H_2SO_3 c) SO_2 d) H_2S

Ans. a

PREPARED BY: MR. ARNAB PAUL CHOWDHURY