Date Planned : __ / __ / __	Daily Tutorial Sheet-7	Expected Duration : 90 Min
Actual Date of Attempt : __ / __ / __	Level-2	Exact Duration :_____

86. Of all the three common mineral acids, only sulphuric acid is found to be suitable for making the solution acidic because :

(A) It does not react with $KMnO_4$ or the reducing agent

(B) Hydrochloric acid reacts with $KMnO_4$

(C) Nitric acid is an oxidising agent which reacts with reducing agent

(D) All of the above are correct

87. The compound $YBa_2Cu_nO_7$ has copper in oxidation state +1. Assume that the rare earth element Yttrium is in its usual +3 oxidation state. The value of n is:

(A) 3/7 **(B)** 7/3 **(C)** 3 **(D)** 7

For Question No. 88 - 89

(A) Statement-1 is True, Statement-2 is True and Statement-2 is a correct explanation for Statement-1.

(B) Statement-1 is True, Statement-2 is True and Statement-2 is NOT a correct explanation for Statement-1.

(C) Statement-1 is True, Statement-2 is False.

(D) Statement-1 is False, Statement-2 is True.

88. **Statement 1 :** Stannous chloride is a powerful oxidising agent which oxidises mercuric chloride to mercury.

Statement 2 : Stannous chloride gives grey precipitate with mercuric chloride, but stannic chloride does not do so.

89. **Statement 1 :** H_2SO_4 cannot act as reducing agent.

Statement 2 : Sulphur cannot increase its oxidation number beyond + 6.

***90.** Among the following, identify the species with an atom in +6 oxidation state.

(A) Ba_2XeO_6 **(B)** XeO_3 **(C)** CrO_5 **(D)** SO_2Cl_2

91. In the estimation of $Na_2S_2O_3$ using Br_2 the equivalent weight of $Na_2S_2O_3$ is :

(A) M/2 **(B)** M/8 **(C)** M/3 **(D)** M

92. In the reaction $3ClO^-(aq) \longrightarrow ClO_3^-(aq) + 2Cl^-(aq)$ the equivalent mass of ClO^- is :

(A) M/4 **(B)** M/3 **(C)** 3M **(D)** 3M/4

93. A 0.1097 gm sample of As_2O_3 required 26.10 mL of $KMnO_4$ solution for its titration. The molarity of $KMnO_4$ solution is :

(A) 0.02 **(B)** 0.04 **(C)** 0.018 **(D)** 0.3

94. In basic medium, CrO_4^{2-} oxidizes $S_2O_3^{2-}$ to form SO_4^{2-} and itself changes to $Cr(OH)_4^-$. How many mL of 0.154 M CrO_4^{2-} are required to react with 40 mL of 0.246 M $S_2O_3^{2-}$?

(A) 200 mL **(B)** 156.4 mL **(C)** 170.4 mL **(D)** 190.4 mL

95. 20 mL of 0.2 M $Al_2(SO_4)_3$ is mixed with 20 mL of 0.6 M $BaCl_2$. Concentration of Al^{3+} ion in the solution will be :

(A) 0.2 M **(B)** 10.3 M **(C)** 0.1 M **(D)** 0.25 M