**96.** Maximum oxidation state is present in :

(A) $CrO_2Cl_2$ and $MnO_4^-$

(B) $MnO_2$

(C) $\left[Fe(CN)_6\right]^{3-}$ and $\left[Co(CN)_6\right]^{3-}$

(D) $MnO$

**97.** Which of the following will not be oxidised by $O_3$ ?

(A) KI (B) $FeSO_4$ (C) $KMnO_4$ (D) $K_2MnO_4$

**98.** The pair of the compounds in which both the metals are in the same oxidation state is :

(A) $Na_4XeO_6$, $OsO_4$ (B) $CrO_2Cl_2$, $MnO_4^{2-}$

(C) $TiO_3$, $CrO_3$ (D) $Cl_2O_7$, $Mn_2O_7$

**99.** Consider a titration of potassium dichromate solution with acidified ferrous oxalate solution using diphenylamine as indicator. The number of moles of ferrous oxalate required per mole of dichromate is :

(A) 3 (B) 4 (C) 5 (D) 2 ▶

**\*100.** For the reaction $I^- + ClO_3^- + H_2SO_4 \longrightarrow Cl^- + HSO_4^- + I_2$. The correct statement(s) in the balanced reaction is/are :

(A) Stoichiometric coefficient of $HSO_4^-$ is 6 (B) Iodide is oxidized

(C) Sulphur is reduced (D) $H_2O$ is one of the products

**101.** The weight of sodium bromate required to prepare $85.5\,mL$ of $0.672\,N$ solution for cell reaction, $BrO_3^- + 6H^+ + 6e^- \longrightarrow Br^- + 3H_2O$, is : ▶

(A) 1.56 gm (B) 1.45 gm (C) 1.23 gm (D) 1.32 gm

**102.** $NaIO_3$ reacts with $NaHSO_3$ according to equation $IO_3^- + 3HSO_3^- \longrightarrow I^- + 3H^+ + 3SO_4^{2-}$

The weight of $NaHSO_3$ required to react with 100 mL of solution containing 0.58 gm of $NaIO_3$ is :

(A) 5.2 gm (B) 4.57 gm (C) 2.3 gm (D) None of the above

**103.** If 0.5 moles of $BaCl_2$ is mixed with 0.2 moles of $Na_3PO_4$, the maximum amount of $Ba_3(PO_4)_2$ that can be formed is :

(A) 0.7 mol (B) 0.5 mol (C) 0.2 mol (D) 0.1 mol

**104.** 0.52 g of a dibasic acid required 100 mL of 0.1N NaOH for complete neutralization. The equivalent weight of acid is : ▶

(A) 26 (B) 52 (C) 104 (D) 156

**105.** 34 g of hydrogen peroxide is present in 1120 mL of solution: This solution is called : ▶

(A) 10 volume (B) 20 volume (C) 30 volume (D) 32 volume