

Date Planned : __ / __ / __	Daily Tutorial Sheet-8	Expected Duration : 90 Min
Actual Date of Attempt : __ / __ / __	Level-2	Exact Duration : _____

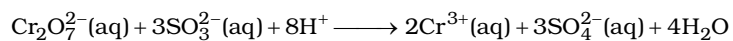
96. CrO_5 when dissolved in cold water and stirred we obtain :
- (A) Blue coloured solution (B) Green coloured solution
(C) Yellow solution (D) Orange solution
97. The formula of azurite is :
- (A) $\text{CuCO}_3 \cdot \text{Cu}(\text{OH})_2$ (B) $2\text{CuCO}_3 \cdot \text{Cu}(\text{OH})_2$
(C) $\text{CuCO}_3 \cdot 2\text{Cu}(\text{OH})_2$ (D) $\text{CuSO}_4 \cdot \text{Cu}(\text{OH})_2$
98. Copper (II) ions gives reddish brown precipitate with potassium ferrocyanide. The formula of the precipitate is : 
- (A) $\text{Cu}_4[\text{Fe}(\text{CN})_6]$ (B) $\text{Cu}_2[\text{Fe}(\text{CN})_6]$ (C) $\text{Cu}_3[\text{Fe}(\text{CN})_6]$ (D) $\text{Cu}_3[\text{Fe}(\text{CN})_6]_2$
99. Sodium chromate, Na_2CrO_4 is made commercially by :
- (A) heating mixture of Cr_2O_3 and Na_2CO_3
(B) heating mixture of chromite ore and sodium carbonate in the presence of oxygen
(C) heating sodium dichromate with sodium carbonate
(D) reacting NaOH with chromic acid
100. $(\text{X}) + \text{K}_2\text{CO}_3 + \text{Air} \xrightarrow{\text{heat}} (\text{Y}) ; (\text{Y}) + \text{Cl}_2 \longrightarrow (\text{Z})$ Purple 
Which of the following is correct ?
- (A) X = black, MnO_2 , Y = Blue, K_2CrO_4 , Z = KMnO_4
(B) X = green, Cr_2O_3 , Y = Yellow, K_2CrO_4 , Z = $\text{K}_2\text{Cr}_2\text{O}_7$
(C) X = black, MnO_2 , Y = green, K_2MnO_4 , Z = KMnO_4
(D) X = black, Bi_2O_3 , Y = colourless KBiO_2 , Z = KBiO_3
101. The oxoanion which contains all equivalent M – O bond is : 
- I. CrO_4^{2-} II. MnO_4^- III. $\text{Cr}_2\text{O}_7^{2-}$
(A) Only III (B) I, II and III (C) I and II (D) Only I
102. $\text{CuSO}_4(\text{aq}) \xrightarrow{\text{H}_2\text{S}\uparrow} \text{M} \downarrow \xrightarrow[\text{of KCN}]{\text{Excess}} \text{N}(\text{aq}) + \text{O}(\text{g})$ 
Then final products N and O are respectively.
- (A) $[\text{Cu}(\text{CN})_4]^{3-}$, $(\text{CN})_2$ (B) CuCN , $(\text{CN})_2$
(C) $[\text{Cu}(\text{CN})_4]^{2-}$, $(\text{CN})_2$ (D) $\text{Cu}(\text{CN})_2$, K_2S
- *103. Pick out the correct statement(s) :
- (A) MnO_2 dissolves in conc. HCl , but does not form Mn^{4+} ions
(B) Decomposition of acidic KMnO_4 is not catalysed by sunlight
(C) MnO_4^{2-} is strongly oxidising and stable only in very strong alkali. In dilute alkali, water or acidic solutions it disproportionates
(D) KMnO_4 does not act as oxidising agent in alkaline medium

*104. To an acidified dichromate solution, a pinch of Na_2O_2 is added and shaken. What is observed ?

- (A) Blue colour (B) Orange colour changing to green
(C) Copious evolution of oxygen (D) Bluish-green precipitate



*105. Choose correct statement(s) regarding the following elements is/are :



- (A) $\text{Cr}_2\text{O}_7^{2-}$ is oxidation agent
(B) SO_3^{2-} is reducing agent
(C) The oxidation number of per 'S' atom in SO_3^{2-} is increase by two
(D) The oxidation number of per 'Cr' atom in $\text{Cr}_2\text{O}_7^{2-}$ is decreased by three