

Date Planned : __ / __ / __	Daily Tutorial Sheet-3	Expected Duration : 90 Min
Actual Date of Attempt : __ / __ / __	JEE Advanced (Archive)	Exact Duration : _____

31. Write balanced equations for the extraction of silver from silver glance by cyanide process. (1988)
32. State with balanced equation what happens when : Silver chloride is treated with aqueous sodium cyanide and the products thus formed is allowed to react with zinc in alkaline medium. (1989)
33. State with balanced equation what happens when : Cobalt (II) solution reacts with KNO_2 in acetic acid medium. (1989)
- *34. The aqueous solutions of the following salts will be coloured in the case of : (1990)
(A) $\text{Zn}(\text{NO}_3)_2$ (B) LiNO_3 (C) $\text{Co}(\text{NO}_3)_2$ (D) CrCl_3
35. Write balanced equations for the extraction of copper from copper pyrites by self-reduction. (1990)
36. State with balanced equation what happen when : Potassium permanganate is added to a hot solution of manganous sulphate. (1990)
37. State with balanced equation what happens when : A mixture of potassium dichromate and sodium chloride is heated with concentrated H_2SO_4 . (1990)
38. State with balanced equation what happens when : Iron reacts with cold dilute nitric acid. (1990)
39. Give Reason : The species $[\text{CuCl}_4]^{2-}$ exists while $[\text{CuI}_4]^{2-}$ does not. (1992)
40. State with balanced equation what happens when : Potassium dichromate and concentrated hydrochloric acid are heated together. (1992)
 $\text{K}_2\text{Cr}_2\text{O}_7 + \text{HCl} \longrightarrow \text{KCl} + \dots + \dots + \text{H}_2\text{O}$
41. State with balanced equation what happens when : Copper reacts with HNO_3 to give NO and NO_2 in molar ratio of 2 : 1. (1992)
 $\text{Cu} + \text{HNO}_3 \longrightarrow \dots + \text{NO} + \text{NO}_2 + \dots$
42. State with balanced equation what happens when : Na_2CO_3 is added to a solution of copper sulphate. (1992)
 $\text{CuSO}_4 + \text{Na}_2\text{CO}_3 + \text{H}_2\text{O} \longrightarrow \dots \text{Na}_2\text{SO}_4 + \dots$
43. Among the following ion which one has the highest paramagnetism? (1993)
(A) $[\text{Cr}(\text{H}_2\text{O})_6]^{3+}$ (B) $[\text{Fe}(\text{H}_2\text{O})_6]^{2+}$ (C) $[\text{Cu}(\text{H}_2\text{O})_6]^{2+}$ (D) $[\text{Zn}(\text{H}_2\text{O})_6]^{2+}$
44. Which of the following alloys contain(s) Cu and Zn ? (1993)
(A) Bronze (B) Brass (C) Gun metal (D) Type metal
45. The acidic, aqueous solution of ferrous ion forms a brown complex in the presence of NO_3^- , by the following two steps. Complete and balance the equations : (1993)
 $[\text{Fe}(\text{H}_2\text{O})_6]^{2+} + \text{NO}_3^- + \text{H}^+ \longrightarrow \dots + [\text{Fe}(\text{H}_2\text{O})_6]^{3+} + \text{H}_2\text{O}$
 $[\text{Fe}(\text{H}_2\text{O})_6]^{2+} + \dots \longrightarrow \dots + \text{H}_2\text{O}$