

NEET CHEMISTRY

Topic :- coordination compounds

- Q.1** The number of water molecule in Mohr's salt -
 (1) 7 (2) 5
 (3) 6 (4) 8
- Q.2** Which metal is present in brass, bronze and german silver -
 (1) Mg (2) Al
 (3) Cu (4) Zn
- Q.3** Which of the following metal react readily with water -
 (1) Copper (2) Nickel
 (3) Sodium (4) Silver
- Q.4** Amongst TiF_6^{2-} , CoF_6^{-3} , Cu_2Cl_2 and NiCl_4^{-2} colourless compound is -
 (1) Cu_2Cl_2 & NiCl_4^{-2} (2) TiF_6^{-3} and CoF_6^{-3}
 (3) CoF_6^{-3} and NiCl_4^{-2} (4) TiF_6^{-2} and Cu_2Cl_2
- Q.5** General formula of metal carbonyl is $\text{M}(\text{CO})_x$ (M = metal, x = 4). Metal is bonded with -
 (1) Oxygen (2) Carbon
 (3) both (4) Triple bond of CO
- Q.6** Geometrical isomer of $[\text{Pt}(\text{NH}_3)_2\text{Cl}_2]$ are -
 (1) 2 (2) 1
 (3) 4 (4) 3
- Q.7** Mercury alone is liquid metal at 0°C due to -
 (1) Weak metallic attraction
 (2) High IP
 (3) High vapour pressure
 (4) 1 & 2 both
- Q.8** Nessler's reagent is used in the test of -
 (1) NH_4Cl (2) NH_3
 (3) NH_4^+ (4) All of these
- Q.9** Which of the following molecule or ions is a bidentate ligand ?
 (1) $\text{C}_2\text{O}_4^{2-}$ (2) Br_2^+
 (3) CH_3NH_2 (4) $\text{CH}_3 - \text{C} \equiv \text{N}$
- Q.10** Which of the following complex has square planar structure ?
 (1) $[\text{Ni}(\text{CN})_4]^{2-}$ (2) $[\text{Ni}(\text{CO})_4]$
 (3) $[\text{Zn}(\text{NH}_3)_4]^{+2}$ (4) $[\text{NiCl}_4]^{2-}$
- Q.11** General electronic configuraton of transition element is -
 (1) $ns^2(n-1)d^{1-10}$ (2) $ns^2((n-1)d^{10})$
 (3) ns^1 (4) ns^2np^5
- Q.12** Electronic configuration of transition element x in +3 oxidation state is $[\text{Ar}]3d^4$ than atomic no. will be -
 (1) 25 (2) 26
 (3) 22 (4) 19
- Q.13** Which of the following following compounds is known as white vitriol?
 (1) $\text{ZnSO}_4 \cdot 7\text{H}_2\text{O}$ (2) $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$
 (3) $\text{Na}_2\text{SO}_4 \cdot 7\text{H}_2\text{O}$ (4) $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$
- Q.14** $\text{K}_2\text{Cr}_2\text{O}_7$ on heating with aqueous NaOH -
 (1) CrO_4^{-2} (2) $\text{Cr}(\text{OH})_3$
 (3) $\text{Cr}_2\text{O}_7^{-2}$ (4) $\text{Cr}(\text{OH})_2$
- Q.15** A complex compound of cobalt has molecular formula containing five NH_3 molecules, one nitro group and two chlorine atom for one cobalt atom. One mole of this compound produces three moles of ion in aqueous solution. On reaction with excess of AgNO_3 solution two moles of AgCl get precipitated. The ionic formula of the compound -
 (1) $[\text{Co}(\text{NH}_3)_4\text{NO}_2\text{Cl}]\text{NH}_3\text{Cl}$
 (2) $[\text{Co}(\text{NH}_3)_5\text{Cl}]\text{ClNO}_2$
 (3) $[\text{Co}(\text{NH}_3)_5\text{NO}_2]\text{Cl}_2$
 (4) $[\text{Co}(\text{NH}_3)_5(\text{NO}_2)\text{Cl}]\text{Cl}$
- Q.16** In the compound Lithium tetra-hydridoaluminate, the ligand is -
 (1) H (2) H^+
 (3) H^- (4) F^-
- Q.17** Which of the following compound, on reaction with NaOH and Na_2O_2 , gives yellow colour?
 (1) $\text{Zn}(\text{OH})_2$ (2) $\text{Al}(\text{OH})_3$
 (3) $\text{Cr}(\text{OH})_3$ (4) CaCO_3
- Q.18** Which of the following compound is not coloured ?
 (1) $\text{Na}_2[\text{CuCl}_4]$ (2) $\text{Na}_2[\text{CdCl}_4]$
 (3) $\text{Fe}_4[\text{Fe}(\text{CN})_6]_3$ (4) $\text{K}_3[\text{Fe}(\text{CN})_6]$

- Q.19** Which of the following is react with AgCl?
- (1) KCN (2) NH₄OH
(3) Na₂S₂O₃ (4) All
- Q.20** The concentration of ZnCl₂ solution will change when it placed in a container which is made of -
- (1) Al (2) Cu
(3) Ag (4) None
- Q.21** Number of isomers of [Pt(NH₃)₄][CuCl₄] complex are -
- (1) 2 (2) 3
(3) 4 (4) 5
- Q.22** Which of the following gives colour with water -
- (1) Cu⁺ (2) Cr³⁺
(3) Na⁺ (4) None
- Q.23** Maximum oxidation state will be of -
- (1) La (2) Gd
(3) Eu (4) Am
- Q.24** The IUPAC name of [Co(NH₃)₃ClBrNO₂] will be -
- (1) Triamminebromochloronitrocobaltate (III)
(2) Triamminebromochloronitrocobalt (III)
(3) Triamminebromonitrochlorocobalt (III)
(4) Triamminenitrochlorocobalt (III)
- Q.25** Which one of the following shows maximum paramagnetic character?
- (1) [Fe(CN)₆]³⁻
(2) [Fe(CN)₆]⁴⁻
(3) [Cr(H₂O)₆]³⁺
(4) [Cu(H₂O)₆]²⁺
- Q.26** Cr in [Cr(NH₃)₆]Br₃ has number of unpaired electron -
- (1) 4 (2) 3
(3) 1 (4) 2
- Q.27** Which of the following compound is coloured and has unpaired electron -
- (1) CuF₂ (2) K₂Cr₂O₇
(3) KMnO₄ (4) K₄[Fe(CN)₆]
- Q.28** FeCr₂O₇ reacts with Na₂CO₃ gives the product -
- (1) Na₂CrO₄ (2) Na₂Cr₂O₇
(3) Fe₃O₄ (4) FeO
- Q.29** Oxidation state of osmium (Os) OsO₄ is -
- (1) +4 (2) +6
(3) +7 (4) +8
- Q.30** In quantitative analysis of second group in lab., H₂S gas is passed in acidic medium for ppt. When Cu⁺² and Cd⁺² react with KCN, than in which of the following condition, ppt will not be formed due to relative stability -
- (1) K₂[Cu(CN)₄] - More stable
K₂[Cd(CN)₄] - Less stable
(2) K₂[Cu(CN)₄] - Less stable
K₂[Cd(CN)₄] - More stable
(3) K₃[Cu(CN)₄] - More stable
K₂[Cd(CN)₄] - Less stable
(4) K₃[Cu(CN)₄] - Less stable
K₃[Cd(CN)₄] - More stable

ANSWER KEY

Que.	1	2	3	4	5	6	7	8	9	10
Ans.	3	3	3	4	2	1	4	4	1	1
Que.	11	12	13	14	15	16	17	18	19	20
Ans.	1	1	1	1	3	3	3	2	4	1
Que.	21	22	23	24	25	26	27	28	29	30
Ans.	3	2	4	2	3	2	1	1	4	3

