



# CHEMISTRY

## BOOKS - V PUBLICATION

### COORDINATION COMPOUNDS

#### Question Bank

1. Write the formulas for the following coordination compounds: i)

Tetraamminediaquacobalt(III) chloride ii)

Potassium tetracyanonickelate(II) iii)

Tris(ethane-1,2-diamine)' chromium(III) chloride

s iv) Ámminebromidochloridonitrito-N-

platinațe(II) v) Dichloridóbis(ethane-1,2-

diamine) platinum (iv) nitrate vi) Iron(III)

hexacyanoferrate (II)



[Watch Video Solution](#)

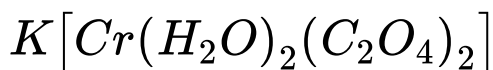
2. Write the IUPAC names of the following

compounds  $[CO(NH_3)_6]Cl_3$



[Watch Video Solution](#)

3. Indicate the type of isomerism exhibited by the following complexes and draw the structures for these isomers.



Watch Video Solution

4. Give evidence that  $[Co(NH_3)_5Cl]SO_4$  and  $[Co(NH_3)_5SO_4]Cl$  are ionisation isomers.



Watch Video Solution

5. Explain on the basis of V.B, theory that  $[Ni(CN)_4]^{2-}$  ion with square planar structure is diamagnetic and the  $[NiCl_4]^{2-}$  ion with tetrahedral geometry is paramagnetic.



[Watch Video Solution](#)

6.  $[NiCl_4]^{2-}$  is paramagnetic while  $Ni(CO)_4$  is diamagnetic though both are tetrahedral. Why?



[Watch Video Solution](#)

Watch Video Solution

7.  $[Fe(H_2O)_6]^{3+}$  is strongly paramagnetic whereas  $[Fe(CN)_6]^{3-}$  is weakly paramagnetic Explain?



Watch Video Solution

8.  $[Co(NH_3)_6]^{3+}$  is an inner orbital complex whereas  $[Ni(NH_3)_6]^{2+}$  is an outer orbital complex.Explain.



Watch Video Solution

9. Predict the number of unpaired electrons in the square planar  $[Pt(CN)_4]^{2-}$  ion.



[Watch Video Solution](#)

10. The hexa-aqua manganese(II) ion contains five unpaired electrons, while the hexacyano ion contains only one unpaired electron. Explain using crystal field theory.



[Watch Video Solution](#)

11. Calculate the overall complex dissociation equilibrium constant for the  $[Cu(NH_3)_4]^{+2}$  ion, given that  $(\beta_4)$  for this complex is  $2.1 \times 10^{13}$ .



[Watch Video Solution](#)

12. Explain the bonding in coordination compounds in terms of Werner's postulates?



[Watch Video Solution](#)

**13.**  $\text{FeSO}_4$  solution mixed with  $(\text{NH}_4)_2 \text{SO}_4$  solution in 1 : 1 molar ratio gives the test of  $\text{Fe}^{2+}$  ion but  $\text{CuSO}_4$  solution mixed with aqueous ammonia in 1 : 4 molar ratio does not give the test of  $\text{Cu}^{2+}$  ion. Explain why?



**Watch Video Solution**

**14.** Explain with two examples each of the following coordination entity, ligand, coordination number, coordination polyhedron, homoleptic and heteroleptic?





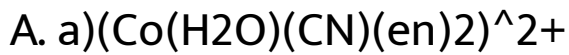
[Watch Video Solution](#)

**15.** What is meant by unidentate, didentate and ambidentate ligands? Give two examples for each?

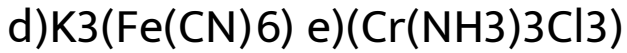
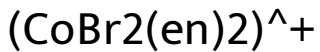


[Watch Video Solution](#)

**16.** Specify the oxidation numbers of the metals in the following coordination entities.



b)



B.

C.

D.

**Answer:**



**Watch Video Solution**

17. Using IUPAC norms write the formulae for the following : i) Tetrahydroxozincate (II)



[Watch Video Solution](#)

18. Using IUPAC norms write the systematic names of the following : viii)  $[\text{NiCl}_4]^{2-}$



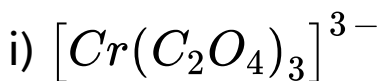
[Watch Video Solution](#)

**19.** List various types of isomerism possible for coordination compounds, giving an example of each.



[Watch Video Solution](#)

**20.** How many geometrical isomers are possible in the following coordination entities.



[Watch Video Solution](#)

21. Draw the structure of optical isomers of? i)



Watch Video Solution

22. Draw all the isomers (geometrical and

optical) of: i)  $[\text{CoCl}_2(\text{en})_2]^+$  ii)

$[\text{Co}(\text{NH}_3)\text{Cl}(\text{en})_2]^{2+}$  ii)

$[\text{Co}(\text{NH}_3)_2\text{Cl}_2(\text{en})]^+$



Watch Video Solution

23. Write all the geometrical isomers of  $[Pt(NH_3)(Br)(Cl)(Py)]$  and how many of these will exhibit optical isomers?



Watch Video Solution

24. 1. Aqueous copper sulphate solution (blue in colour) gives i) a green precipitate with aqueous potassium fluoride and ii) a bright green solution with aqueous potassium chloride. Explain these experimental results.



Watch Video Solution



Watch Video Solution

25. What is the coordination entity formed when excess of aqueous  $KCN$ , is added to an aqueous solution of copper sulphate? Why is it that no precipitate of copper sulphide is obtained when  $H_2S(g)$  is passed through this solution?



Watch Video Solution

26. Discuss the nature of bonding in the following coordination entities on the basis of

Valence bond theory: i)  $[Fe(CN)_6]^+$  ii)

$[FeF_6]^{3-}$  iii)  $[Co(C_2O_4)_3]^{3-}$  iv)  $[CoF_6]^{3-}$



[Watch Video Solution](#)

27. Draw the figure to show the splitting of d-orbitals in an octahedral crystal field.



[Watch Video Solution](#)



**28.** What is spectro chemical series ? Explain the difference between a weak field ligand and a strong field ligand.



**Watch Video Solution**

**29.** What is crystal field 'splitting energy'? How does the magnitude of 'Delta', decide the actual configuration of d orbitals in a coordination entity?



**Watch Video Solution**

30.  $[\text{Cr}(\text{NH}_3)_6]^{3+}$  is paramagnetic while  $[\text{Ni}(\text{CN})_4]^{2-}$  is diamagnetic. Explain why?



Watch Video Solution

31. A solution of  $[\text{Ni}(\text{H}_2\text{O})_6]^{2+}$  is green but a solution of  $[\text{Ni}(\text{CN})_4]^{2-}$  is colourless. Explain.



Watch Video Solution

**32.**  $[\text{Fe}(\text{CN})_6]^{4-}$  and  $[\text{Fe}(\text{H}_2\text{O})_6]^{2+}$  are of different colours. in dilute solutions. Why?



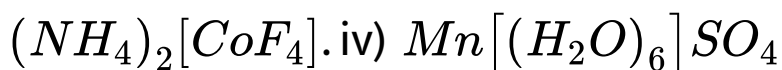
**Watch Video Solution**

**33.** Discuss the nature of bonding in metal carbonyls.



**Watch Video Solution**

**34.** Give the oxidation state, d-orbital occupation and coordination number of the central metal ion in the following complexes: i)



**Watch Video Solution**

**35.** Write down the IUPAC name for each of the following complexes and indicate the oxidation state, electronic configuration and coordination number. Also give

stereochemistry and magnetic moment of the complex.. i)  $K[Cr(H_2O)_2(C_2O_4)_2] \cdot 3H_2O$  ii)  $[CrCl_3(Py)]_3$  iii)  $K_4[Mn(CN)_6]$  iv)  $[Co(NH_3)_5Cl]Cl_2$ . v)  $Cs[FeCl_4]$



[Watch Video Solution](#)

**36.** What is meant by stability of a coordination compound in solution? State the factors which govern stability of complexes.



[Watch Video Solution](#)

**37.** What is meant by chelate effect? Give an example.



**Watch Video Solution**

**38.** Discuss briefly giving an example in each case the role of coordination compounds in: i) biological systems ii) analytical chemistry iii) medicinal chemistry iv) extraction metallurgy of metals



**Watch Video Solution**

**39.** How many ions are produced from the complex  $[\text{Co}(\text{NH}_3)_6]\text{Cl}_3$  in solution? i) 6 ii) 4 iii) 3 iv) 2



[Watch Video Solution](#)

**40.** Amongst the following ions which one has the highest magnetic moment value? (i)  $[\text{Cr}(\text{H}_2\text{O})_6]^{3+}$  (ii)  $[\text{Fe}(\text{H}_2\text{O})_6]^{2+}$  (iii)  $[\text{Zn}(\text{H}_2\text{O})_6]^{2+}$



[Watch Video Solution](#)

41. The oxidation number of cobalt in  $\text{K}(\text{Co}(\text{CO})_4)$  is i) '+1' ii) '+3' iii) '-1' iv) '-3'



Watch Video Solution

42. Amongst the following the most stable complex is: i)  $[\text{Fe}(\text{H}_2\text{O})_6]^{3+}$  ii)  $[\text{Fe}(\text{NH}_3)_6]^{3+}$  iii)  $[\text{Fe}(\text{C}_2\text{O}_4)_3]^{3-}$  iv)  $[\text{FeCl}_6]^{3-}$



Watch Video Solution



**43.** What will be the correct order for the wavelengths of absorption in the visible region for the following:  $[\text{Ni}(\text{NO}_2)_6]^{4-}$ ,  $[\text{Ni}(\text{NH}_3)_6]^{2+}$ ,  $[\text{Ni}(\text{H}_2\text{O})]^{2+}$



**Watch Video Solution**

**44.** Based on the number of donor atoms in ligands they can be classified as monodentate, didentate and polydentate. Classify the following ligand: into monodentate, didentate and polydentate EDTA.



Watch Video Solution

45. A coordination entity is given below:

$[\text{CrCl}_2(\text{Ox})_2]^{3-}$  Now, identify the following:

i. Central metal atom and its oxidation number.

number.



Watch Video Solution

46. Two complexes  $[\text{Fe}(\text{CN})_6]^{3-}$  and

$[\text{Fe}(\text{CN})_6]^{4-}$  are given. Compare the

stability of the complex ions. Justify your answer.



[Watch Video Solution](#)

47. "Strength of the ligand can affect the magnetic property of the coordination complex". a) Can you agree with this statement? b) illustrate the statement by taking two complexes.



[Watch Video Solution](#)

**48.** The magnetic behaviour of a complex can be explained on the basis of VB theory  $[CO(NH_3)_6]^{3+}$  is a diamagnetic complex and  $[CoF_6]^{3-}$  is a paramagnetic complex. Substantiate the above statement using VB theory.



**Watch Video Solution**

**49.** A list of coordination compounds are given below. 'PtCl<sub>2</sub>(NH<sub>3</sub>)<sub>2</sub>', Which type of isomerism, do these compounds exhibit?



[Watch Video Solution](#)

50. What are homoleptic carbonyls? Give some examples:



[Watch Video Solution](#)

51. How does the metal carbonyls gains stability although CO. is a weak donor?



[Watch Video Solution](#)

52. The following are two coordination compound: I.  $[Co(NH_3)_6]Cl_3$  II.

$Na_3[Cr(CN)_6]$  Read the following statements and identify the wrong ones:- Both can show optical Isomerism.



[Watch Video Solution](#)

53. What is meant by chelate effect? Give an example.



[Watch Video Solution](#)

**54.** Briefly explain the concept of -Crystal field theory.



**Watch Video Solution**

**55.** What is understood by the generalisation-Magnetic criteria of the bond type'? Illustrate your answer with suitable example.



**Watch Video Solution**

**56.** What is meant by unidentate, didentate and ambidentate ligands? Give two examples for each?



**Watch Video Solution**

**57.** Give the IUPAC name of  $\text{K}[\text{Ag}(\text{CN})_2]$



**Watch Video Solution**



58. Tetrahedral complexes, do not show geometrical isomerism. Why?



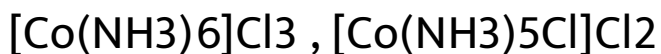
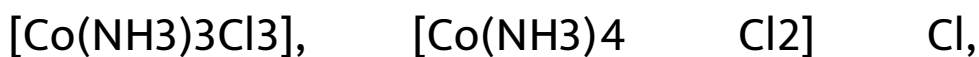
[Watch Video Solution](#)

59. Which type of isomerism is shown by the following complex? (i)  $[\text{Co}(\text{en})_3]^{3+}$



[Watch Video Solution](#)

60. Arrange the following complexes in order of increasing electrical conductivity .



Watch Video Solution

61. A coordination compound has the formula



but precipitates chloride ions as silver

chloride. Give the IUPAC name of complex.



Watch Video Solution



Watch Video Solution

62. The values of dissociation constants, of  $[Cu(NH_3)_4]^{2+}$  and  $[Co(NH_3)_6]^{3+}$  are  $1 \times 10^{-12}$  and  $6.2 \times 10^{-36}$  respectively.

Which complex would be more stable and why?



Watch Video Solution

63. Why only transition metals are known to form 'pi' complexes?



[Watch Video Solution](#)

**64.** How many coordination sites are there in ethylenediamine figure



[Watch Video Solution](#)

**65.** Give one example for chelate complex?



[Watch Video Solution](#)

**66.** What is crystal field 'splitting energy'? How does the magnitude of 'Delta', decide the actual configuration of d orbitals in a coordination entity?



**Watch Video Solution**

**67.** Why complexes are preferred in the electrolytic bath for electroplating?



**Watch Video Solution**

68. What is the solution in which photographic film is washed? What is reaction



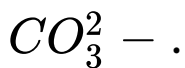
Watch Video Solution

69. 'In the formula  $Fe(\eta^5 - C_5H_5)$ , What does the prefix  $\eta^5$  . denote?



Watch Video Solution

70. What type of hybrid orbitals are associated with a)  $Ni$  in  $[Ni(CN)_4]^{2-}$  – b)  $C$  atom in



[Watch Video Solution](#)

71. With conc.  $H_2SO_4$ , all the  $H_2O$  molecules are present in the coordination sphere



[View Text Solution](#)

72. Write chemical formula of compound, sodium trloxalato'ferrate (III).



[Watch Video Solution](#)

**73.** A metal complex having composition  $Cr(NH_3)_4Cl_2Br$  has been isolated in two forms  $A$  and  $B$ . The form  $A$  reacts with  $AgNO_3$  to give a white precipitate readily soluble in dilute aqueous ammonia, whereas  $B$  gives a pale yellow precipitate soluble in concentrated ammonia. Write the formula, of  $A$  and  $B$



**Watch Video Solution**



74. A solution containing 0.319 g of complex  $CrCl_3 \cdot 6H_2O$  was passed through cation exchange and the solution given out was neutralised by 2.85 mL of 0.125 M NaOH. What is the correct formula of the complex.



[Watch Video Solution](#)

75. Calculate, the following. (i) Ratio of  $[Ag(NH_3)_2]^+$  and  $[Ag^+]$  in '0.1 M'  $NH_3$  solution. (ii) Ratio of  $[Ag(S_2O_3)_2]^{3-}$  and  $[Ag^+]$  in '0.1 M'  $S_2O_3^{2-}$  solution. Given that the

stability-formation constants for

' $[\text{Ag}(\text{NH}_3)_2]^+$ ' and ' $[\text{Ag}(\text{S}_2\text{O}_3)_2]^{3-}$ ' are ' $1.7 \times 10^7$ ' and ' $1 \times 10^{13}$ ' respectively.



[Watch Video Solution](#)

**76.** Dimethyl glyoxime is added to alcoholic solution of  $\text{NiCl}_2$ . When ammonium hydroxide is slowly added to it, a rosy red precipitate of a. complex appears. (i) give the structure of the complex showing hydrogen bonds (ii) give oxidation state and hybridisation of neutral

metal ion (iii) Identify whether it is paramagnetic or diamagnetic



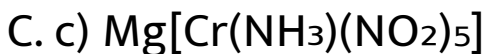
[Watch Video Solution](#)

77.  $\text{FeSO}_4$  solution mixed with  $(\text{NH}_4)_2 \text{SO}_4$  solution in 1 : 1 molar ratio gives the test of  $\text{Fe}^{2+}$  ion but  $\text{CuSO}_4$  solution mixed with aqueous ammonia in 1 : 4 molar ratio does not give the test of  $\text{Cu}^{2+}$  ion. Explain why?



[Watch Video Solution](#)

78. Arrange the following complexes in the increasing order of their molar conductivity.



**Answer:**



**Watch Video Solution**

79. A metal ion  $M^{n+}$  having  $d^4$  valence electronic configuration. combines with 3 didentate ligands to form a complex compound. Assuming  $\Delta_0 > P$  (i) Draw the diagram showing d orbital splitting during the complex formation (ii) Write the electronic configuration of the valence electrons of the metal  $M^{n+}$  ion in terms of  $t_{2g}$  and  $e_g$ . (iii) What is the hybridisation of  $M^{n+}$  ions? (iv) Name the type of isomerism exhibited by this complex.



**Watch Video Solution**

**80.** What are (A) and (B) give IUPAC name of (A).find the spin only magnetic moment of (B)



**Watch Video Solution**

**81.** (i) Why should  $[\text{Al}(\text{H}_2\text{O})_6]^{3+}$  be a stronger acid than  $[\text{Mg}(\text{H}_2\text{O})_6]^{2+}$  (ii)' Why HCl and not  $\text{H}_2\text{O}$  is liberated on heating  $\text{AlCl}_3 \cdot 6\text{H}_2\text{O}$ ?



**Watch Video Solution**

82. The number of halide ions in

$[Pt(NH_3)_3Cl_2Br]Cl$  will be : 4, 3, 2, 1

A. 4

B. 3

C. 2

D. 1

**Answer: D**



**Watch Video Solution**

83. Which of the following is an organometallic compound? Lithium methoxide, Lithium acetate, Lithium dimethyl amide, methyl lithium

- A. Lithium methoxide
- B. Lithium acetate
- C. Lithium dimethyl amide
- D. methyl lithium

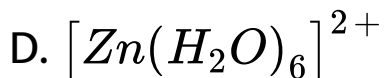
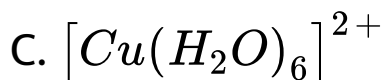
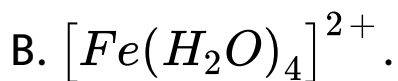
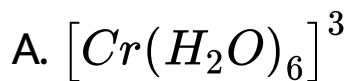
**Answer: D**



**Watch Video Solution**



84. Arrange the following ions which one has the highest paramagnetism



**Answer: B**



**Watch Video Solution**

85. Which compound is zero valent metal complex?



**Answer: C**



**Watch Video Solution**

86. The oxidation number of cobalt in  $K(\text{Co}(\text{CO})_4)$  is i) '+1' ii) '+3' iii) '-1' iv) '-3'

A. 1

B. 3

C. -1

D. -3

**Answer: C**



**Watch Video Solution**

87. In the compound Lithium tetrahydrido aluminate (III) the ligand is

A. H

B.  $\text{H}^-$

C.  $\text{Al}^+$

D. none of these

**Answer: C**



**Watch Video Solution**

**88.** The compound which does not show paramagnetism is



**Answer: B**



**Watch Video Solution**

89. In  $\text{Fe}(\text{CO})_5$ , the Fe-C bond possesses

- A.  $\pi$  character only
- B. both  $\sigma$  and  $\pi$  characters
- C. ionic character
- D.  $\sigma$  character only

**Answer: B**



**Watch Video Solution**

90. The correct structure of  $\text{Fe}(\text{CO})_5$ , is

A. octahedral

B. tetrahedral

C. square pyramidal

D. trigonal bipyramidal

**Answer: D**



**Watch Video Solution**

**91.** The geometry of  $\text{Ni}(\text{CO})_4$  and  $\text{Ni}(\text{PPh}_3)_2\text{Cl}_2$  are

A. both square planar

B. tetrahedral and square planar  
respectively

C. both tetrahedral

D. square planar and tetrahedral  
respectively

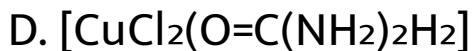
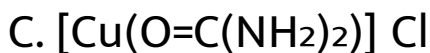
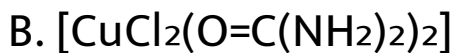
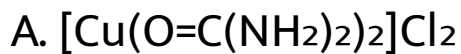
**Answer: C**



**Watch Video Solution**



92. The formula of dichlorobis (urea) copper (II) is



**Answer: D**



**Watch Video Solution**

93. The shape of cuprammonium ion is

A. square planar

B. octahedral

C. tetrahedral

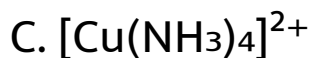
D. trigonal

**Answer: A**



**Watch Video Solution**

94. The ion which is not tetrahedral in shape is



**Answer: C**



**Watch Video Solution**

**95.** Which of the following shell form an octahedral complex

A.  $d^4$  (low spin)

B.  $d^8$ (high spin)

C.  $d^6$  (low spin)

D. all of these

**Answer: C**



**Watch Video Solution**

**96.** Specify the coordination geometry around and hybridisation of N and B atoms in a 1:1 complex of  $\text{BF}_3$  and  $\text{NH}_3$

A. N : tetrahedral,  $sp^3$  B : tetrahedral,  $sp^3$

B. N : pyramidal,  $sp^3$  , B : pyramidal,  $sp^3$

C. N : pyramidal,  $sp^3$  , B : planar,  $sp^2$

D. N : pyramidal,  $sp^3$  , B : tetrahedral,  $sp^3$

**Answer: A**



**Watch Video Solution**

**97.** Which of the following has a square planar geometry?



**Answer: A**



**Watch Video Solution**

**98.** Among the following the species having square planar geometry for central atom are

(i)  $\text{XeF}_4$  (ii)  $\text{SF}_4$  (iii)  $[\text{NiCl}_4]^{2-}$  (iv)  $[\text{PtCl}_4]^{2-}$

A. (i) and (iv)

B. (i) and (ii)

C. (ii) and (iii)

D. (iii) and (iv)

**Answer: A**



**Watch Video Solution**

**99.** Hybridisation, shape and magnetic moment of  $K_3[Co(CO)_6]$  is

A.  $d^2 sp^3$  , octahedral , 4 . 9 BM

B.  $sp^3 d^2$  , octahedral , 4.9 B.M

C.  $dsp^3$  , square planar, 4.9 B.M

D.  $sp^3$  tetrahedral, 4.9 BM

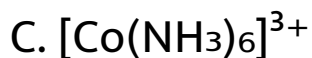
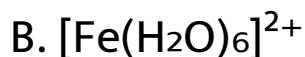
**Answer: B**



**Watch Video Solution**

**100.** Among the following complexes, which has a magnetic moment of 5.9 BM?





**Answer: D**



**Watch Video Solution**

**101.** The total number of possible isomers. for the complex compound  $[\text{Cu}(\text{NH}_3)_4][\text{PtCl}_4]$  are

A. 3

B. 6

C. 5

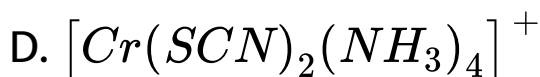
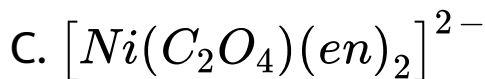
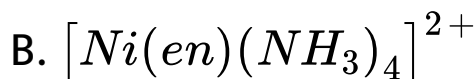
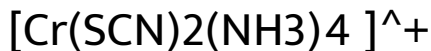
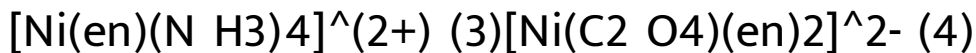
D. 4

**Answer: D**



**Watch Video Solution**

**102.** Which of the following will give maximum number of isomers? (1)  $[\text{Co}(\text{NH}_3)_4 \text{Cl}_2]$  (2)



**Answer: D**



**Watch Video Solution**

**103.** Which one of the following octahedral complexes does not show geometrical isomerism?



**Answer: D**



**Watch Video Solution**

**104.** Consider the coordination compound  $[Co(NH_3)_5SO_4]Br$ . Which type of structural isomerism is exhibited by the above coordination compound?

A. ionic

B. linkage

C. coordination

D. optical

**Answer: A**



**Watch Video Solution**

105. Which one of the following complexes will

have four isomers? :  $[Co(en)(NH_3)_2Cl_2]Cl$ ,

$[Co(pph_2)^2(NH_3)_2Cl_2]Cl$ ,  $[Co(en)_3]Cl_3$ ,

$[Co(en)_2Cl_2]Br$

A.  $[Co(en)(NH_3)_2Cl_2]Cl$

B.  $[Co(pph_2)^2(NH_3)_2Cl_2]Cl$

C.  $[Co(en)_3]Cl_3$

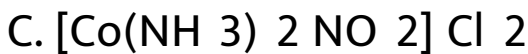
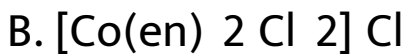
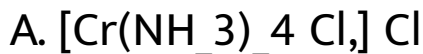
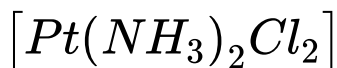
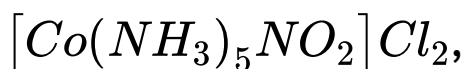
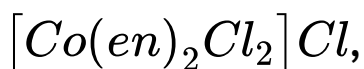
D.  $[Co(en)_2Cl_2]Br$

**Answer: D**



**Watch Video Solution**

**106.** Which of the following will not show geometrical isomerism?  $[Cr(NH_3)_4Cl_2]Cl$ ,



D.  $[\text{Pt}(\text{NH}_3)_2\text{Cl}_2]$

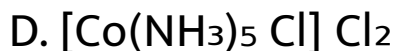
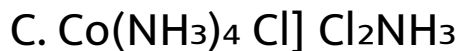
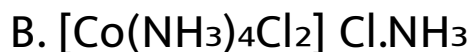
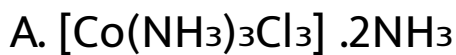
**Answer: C**



**Watch Video Solution**

**107.** One mole of complex compound  $[\text{Co}(\text{NH}_3)_5\text{Cl}]^{2+}$  gives 3 moles of ions on dissolution in water. One mole of the same complex reacts with 2 moles of  $\text{AgNO}_3$  solution to yield 2 moles of  $\text{AgCl}$ . The structure of the complex is



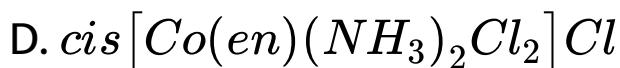
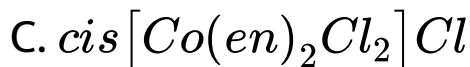
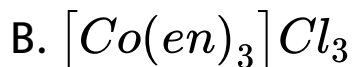
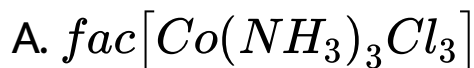
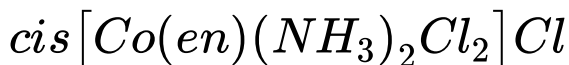
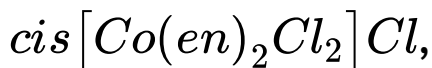
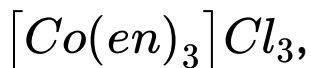


**Answer: D**



**Watch Video Solution**

**108.** Which of the following does not show optical isomerism ?  $fac[\text{Co}(\text{NH}_3)_3\text{Cl}_3]$ ,



**Answer: A**



**Watch Video Solution**

109. Which type of isomerism is shown by the octahedral complex  $Co(NH_3)_4Br_2Cl$ ?  
geometrical and ionisation, geometrical and optical, optical and ionisation, geometrical only

A. geometrical and ionisation

B. geometrical and optical

C. optical and ionisation

D. geometrical only

**Answer: A**



Watch Video Solution

**110.** How many EDTA (ethylene diaminetetraacetic acid) molecules are required to make an octahedral complex with a  $\text{Ca}^{2+}$  ion?

A. one

B. two

C. six

D. three

**Answer: A**



**Watch Video Solution**

**111.** The number of possible isomers of an octahedral complex  $[Co(C_2O_4)_2, (NH_3)_2]^-$  :

1, 2, 3, 4

A. 1

B. 2

C. 3

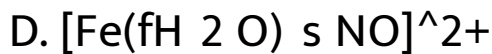
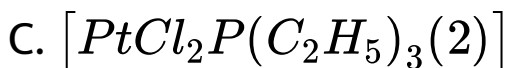
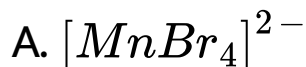
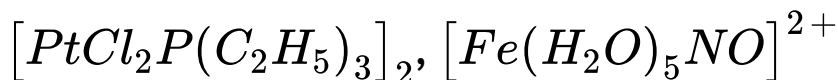
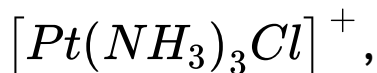
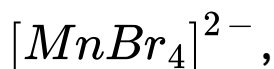
D. 4

**Answer: C**



**Watch Video Solution**

**112.** Which can exhibit geometrical isomerism?

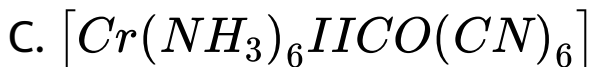
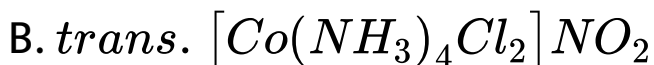
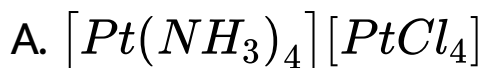


**Answer: C**

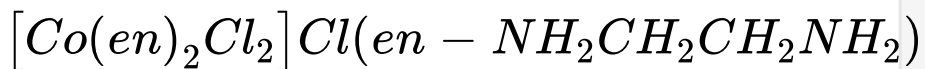


**Watch Video Solution**

**113.** Which of the following will give a pair of enantiomorphs



D.



**Answer: D**



**Watch Video Solution**