

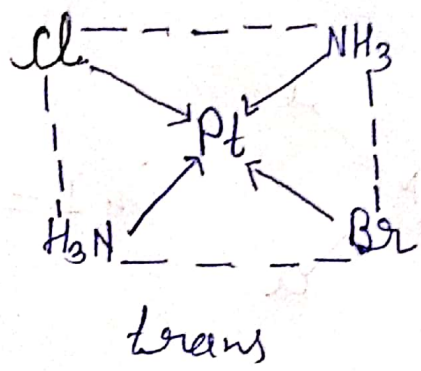
1

Co-ordination compounds - I 30 marks

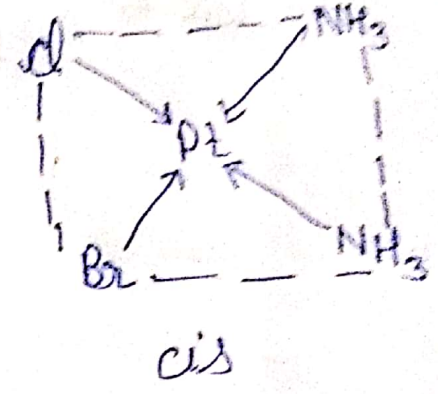
B.Sc (II) Hois
 D.B. college (Jyngar)
 Akhilesh kumar singh

8750390921

Type - II Ma_2bc

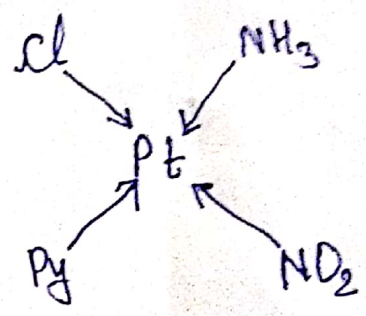
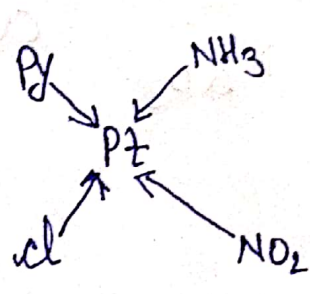
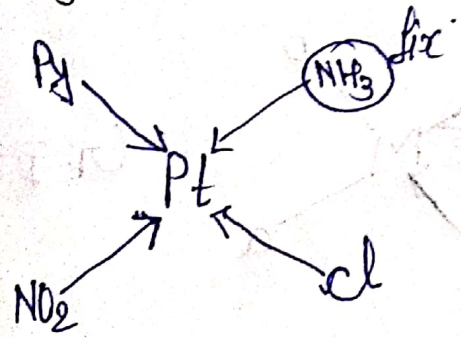


$M \rightarrow CMA$
 a, b, c - monodentate ligands

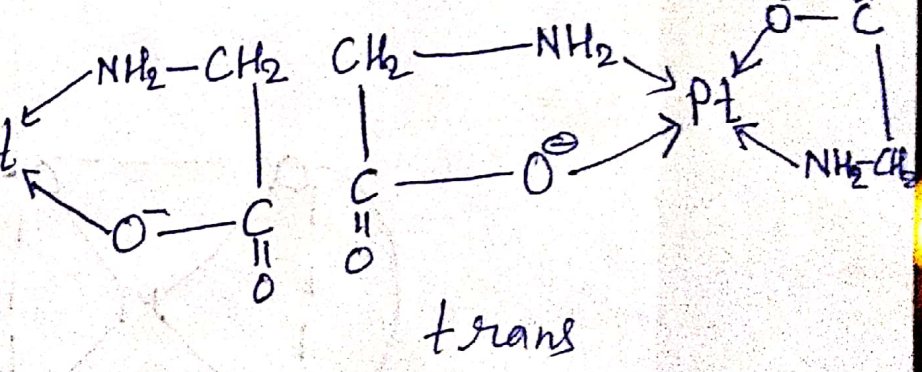
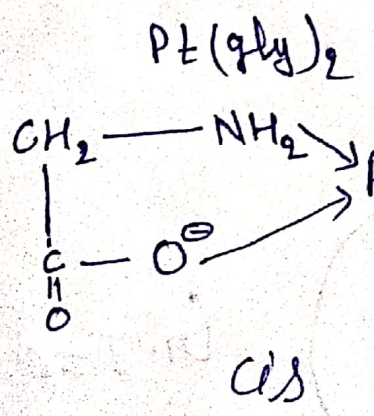


Type - III $Maabcd$

G.I = 3



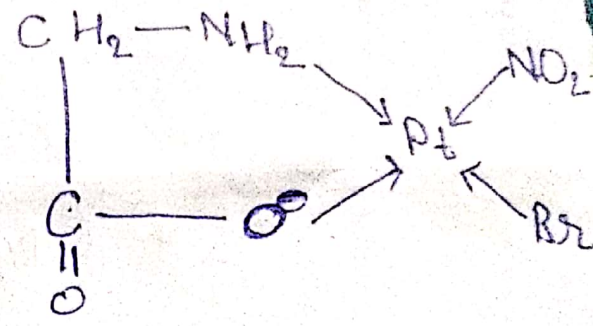
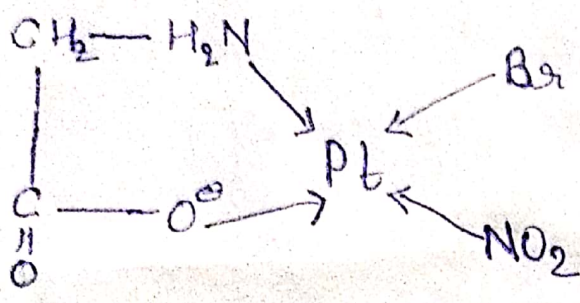
Type - IV $[M(ab)_2]$
 unsymm. bidentate
 G.I. = 2



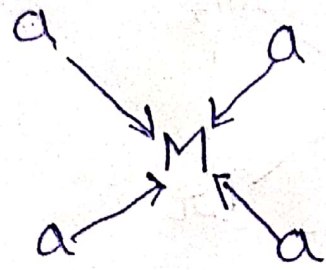
Type V $[M(ab)cd]$
 unsymm. bi mono

G.I = 1

10

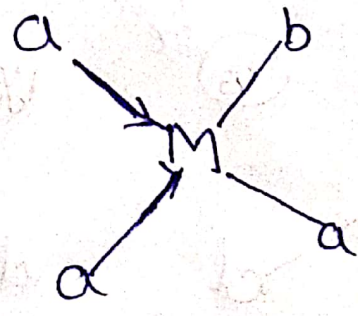


TYPE VI $M a_4$



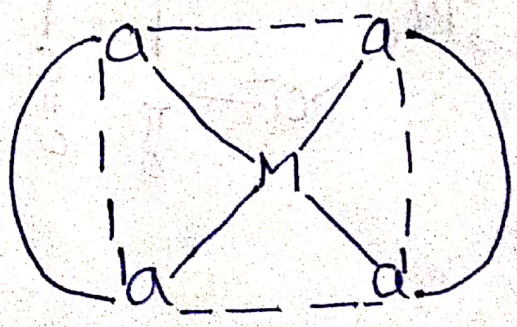
Cr. I = 0

TYPE VII $M a_3 b$
or $M a b_3$



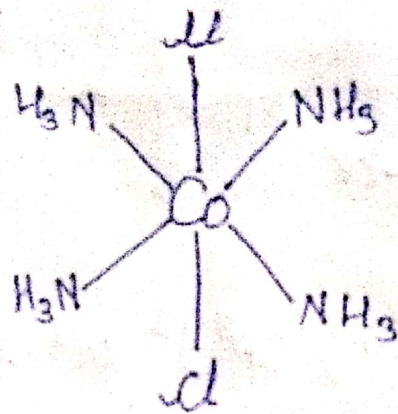
Cr. I = 0

TYPE VIII $M(aa)_2$ $\text{Pt}(\text{en})_2$

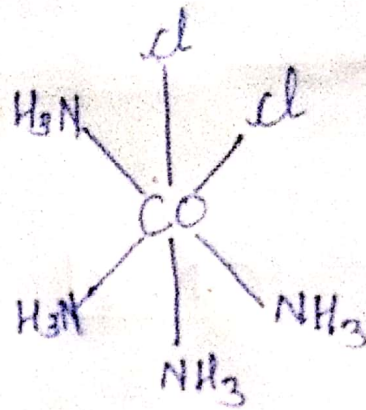


Cr. I = 0

③ Ma_4b_2



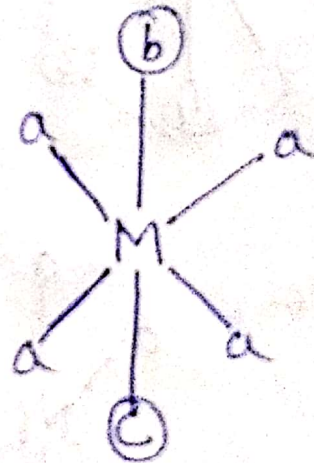
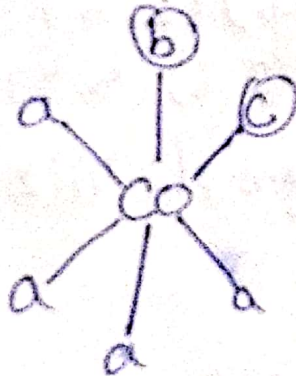
trans



cis

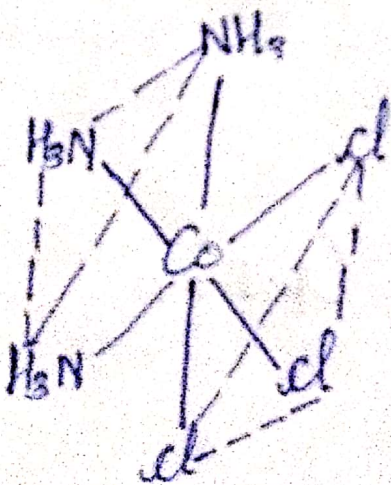
Cr. I. = 2

④ Ma_4bc

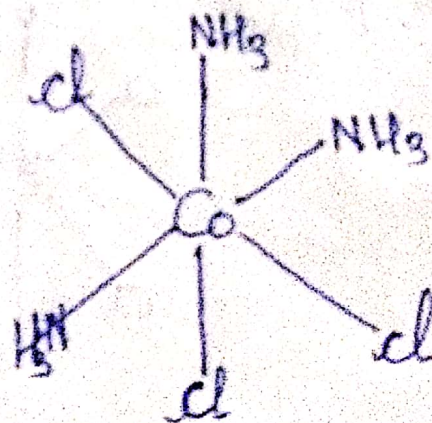


Cr. I. = 2

⑤ Ma_3b_3



Facial or
fac isomer

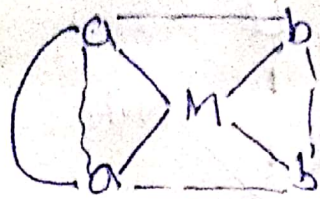


Meridional
or mer isomer

Cr. I. = 2

Type $M(aa)_2b_2$

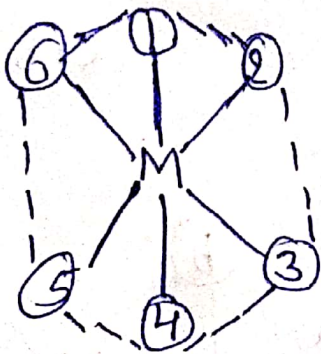
(4)



Cr. I. = 0

C.N. = 6

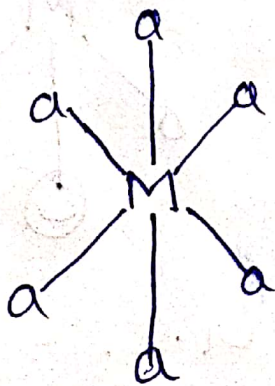
d^2sp^3/sp^3d^3 octahedral



Cis $\rightarrow (1,2)(1,3)(1,5)(1,6)(4,3)$
 $(4,2)(4,6)(4,5)$
 $(2,6)(2,3)$
 $(5,6)(5,3)$

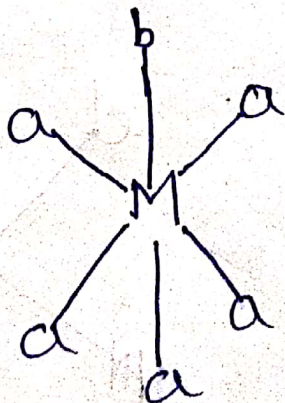
trans $\rightarrow (1,4)(2,5)(3,6)$

① Ma_6



Cr. I. = 0

② Ma_5b



Cr. I. = 0