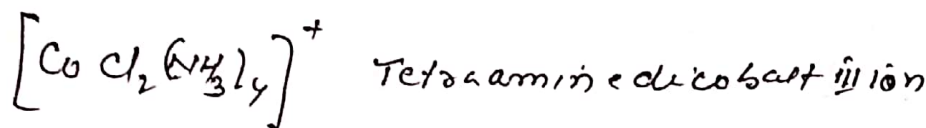
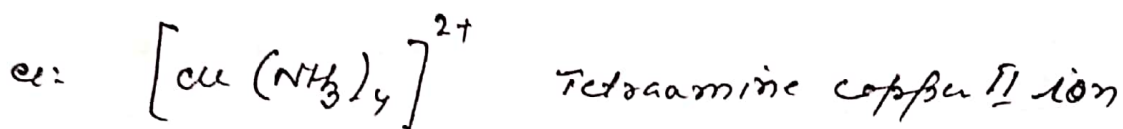


# ***Nomenclature of co-ordination compound for B.Sc II***

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H.O.D Chemistry***

## Naming of Complex ion/molecule

(i) In the name of ~~ligand~~ complex, name of ligand are written in alphabetical order before the name of metal. Here numerical prefixes are before ligands are not considered



(ii) If ligands are complexes or numerical prefix is already present in them special numerical prefixes are used and name of the ligand is written in parenthesis.

No.	Numerical Prefix	Special numerical Prefix
2	di	bis
3	tri	tris
4	Tetra	Tetrakis
5	Penta	Pentakis
6	Hexa	Hexakis

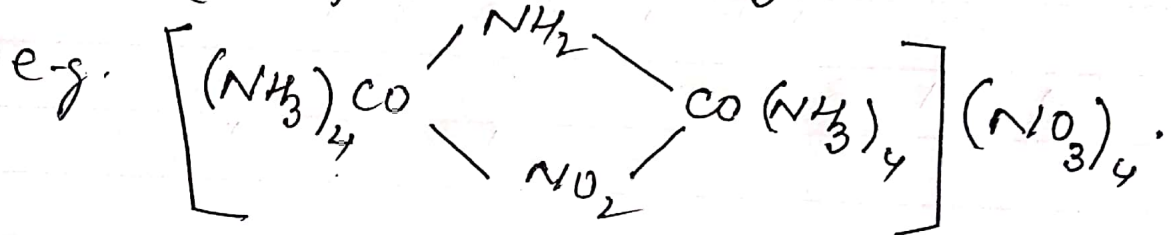
(iii) If complexes are cationic & neutral central metals are named as usual i.e. without any charge.

In Anionic complexes the name of metal is suffix by "ate"

e.g. Ag — Argentate, Zn — Zincate  
 Cu — cuprate Pt — Platinate  
 Fe — Ferrate

(iv) Oxidation no. of metal atom is written just after the name of metals in Roman numeral  
 e.g. I, II, III, IV etc.

(v) Ligands which joins two metals are known as Bridge ligands and they are prefixed by  $\mu$  (mu) i.e.



In this complex  $\text{NH}_2$  and  $\text{NO}_2$  are bridge ligands so they will be written as

$\mu$ -amido- $\mu$ -nitro

Note: Start the name of complex by small letter not by capital letter e.g.

e.g.  $[\text{Ni}(\text{CO})_4]$  tetracarbonylnickel(0)