

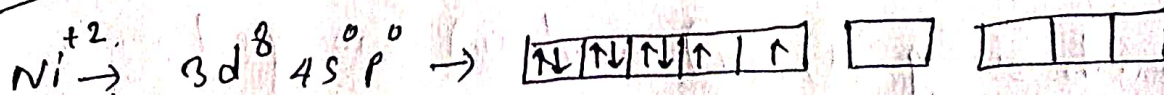
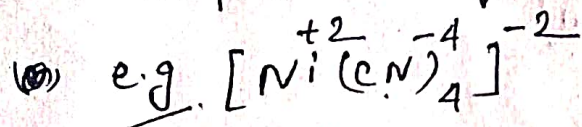
Sem-IV
Paper-4

Concept of Complex Comp

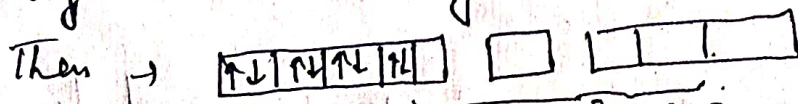
Valence bond Theory $\rightarrow$ The nature of Co-valent bond in Complex Compound is given by Pauling and called Valence bond Theory (VBT).

Nature of bond and its character depends upon nature of ligand as follows

- (i) if ligand is strong then following information can be formed.
- (a) Complex Compound is low spin complex.
- (b) The Complex Comp. having four Co-ordination number is either ~~sp^3~~ or dsp^2 hybridised and shape is square planar.



if ligand is strong.



dsp^2 (Square planar)

- (ii) if Co-ordination number is six. Then
- (a) This complex is low spin.
- (b) Hybridisation is d^2sp^3
- (c) And shape is octahedral