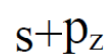
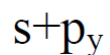
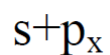
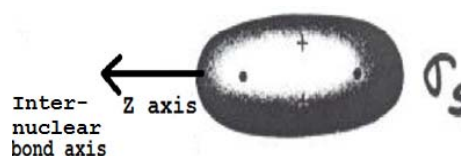


H.W. 1

Draw the overlap of the following orbital and predict the resulting situation for bonding.

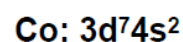
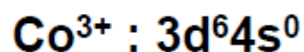


Convention:
*Internuclear bond axis
 as the Z-axis.*

**H.W. 2**

How can you justify, 'CO' as a weak π -acid?

**H.W. 3. Why some times Co(II) forms inner sphere and other times outer sphere complex?
Justify the effect of ligand.**

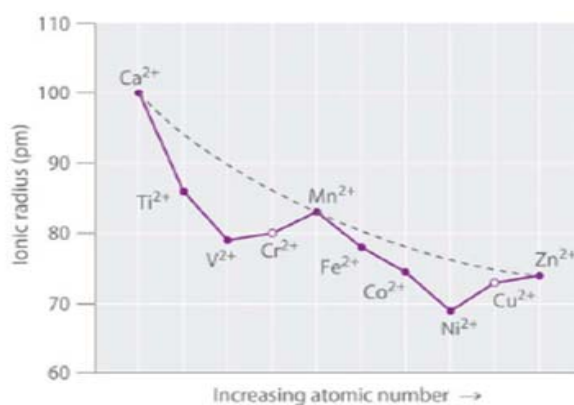


H.W. 4. Why the Δ_{td} is differing from Δ_{oh} ? Identify the reason.

H.W. 5 How can you stabilize metals in low oxidation states in compounds?

- **Note: In low oxidation states, the electron density on the metal ion is very high.**

H. W. 6. How can you explain the trend in ionic radii of transition metal ions?



H.W. 7: In case of strong field ligand (CN^-) ionic radii of M^{2+}

