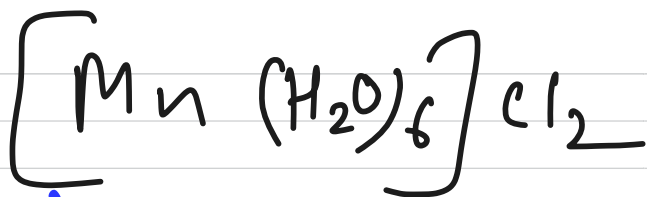
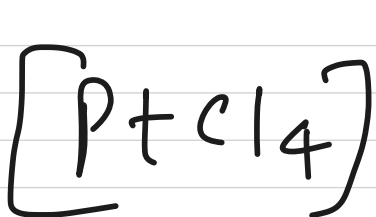


(10)

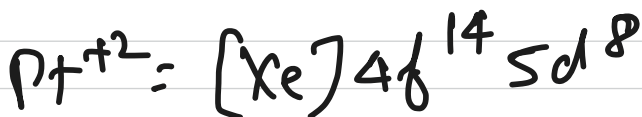


sp^3d^2 , octa, para, J35 B.M., outer orbital

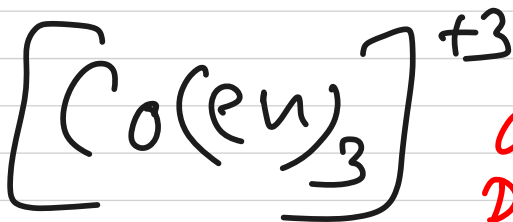
(11)



d^8sp^2 square
Dia, $\mu=0$ inner

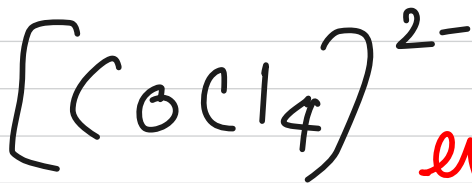


(12)



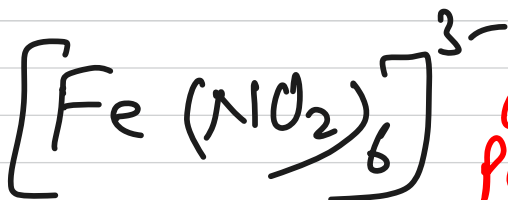
d^2sp^3 , octa
Dia $\mu=0$
inner orbital

(13)

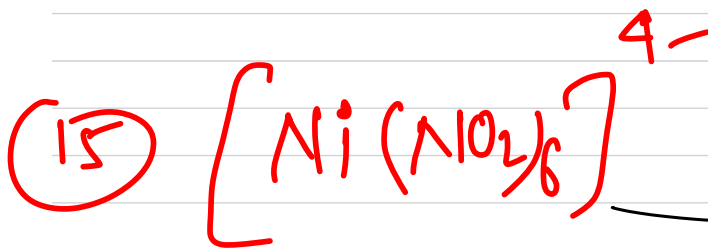
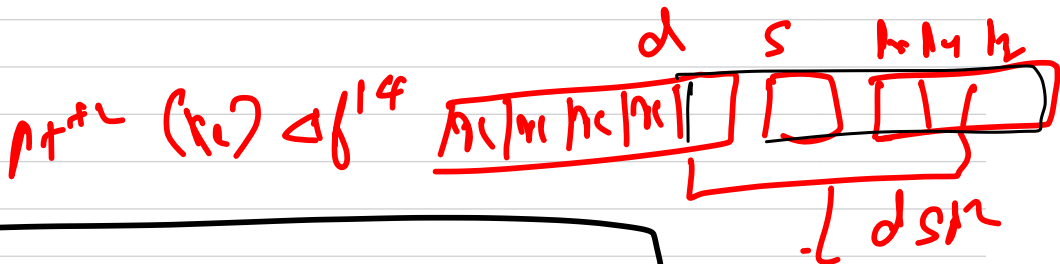
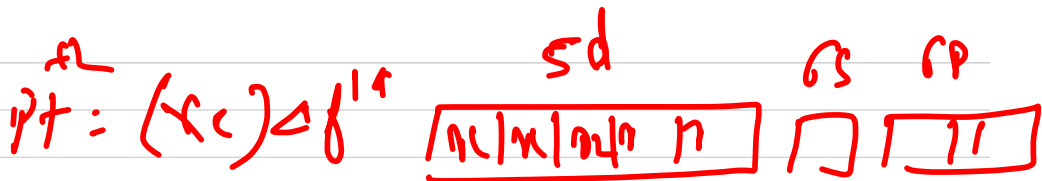


sp^3 , Td para
 $\mu=3.8$ B.M.

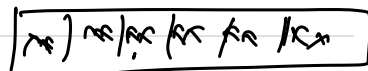
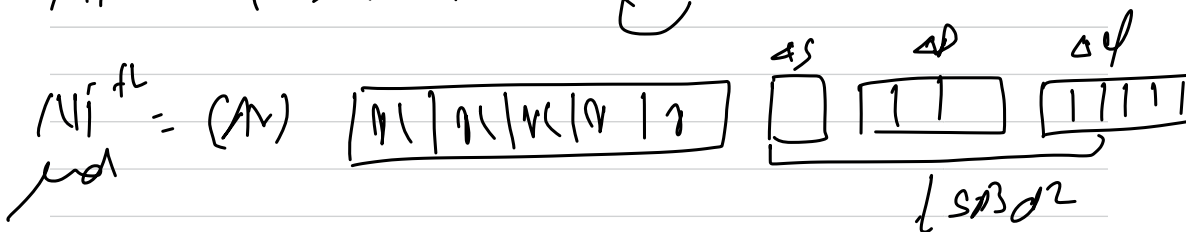
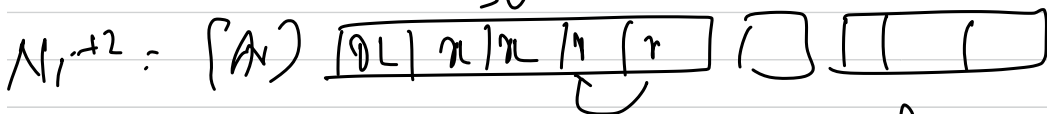
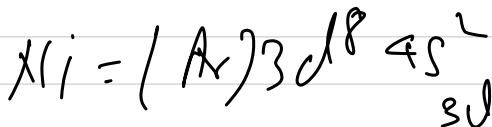
(14)



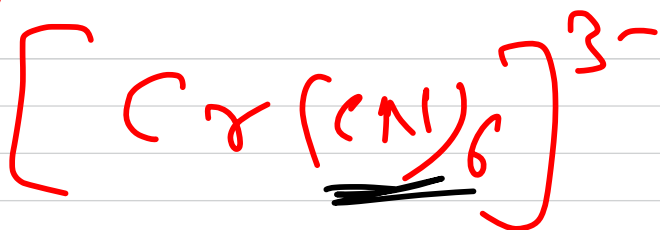
d^2sp^3 , octa
para, $\mu=3.8$ B.M.
inner orbital



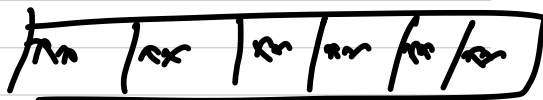
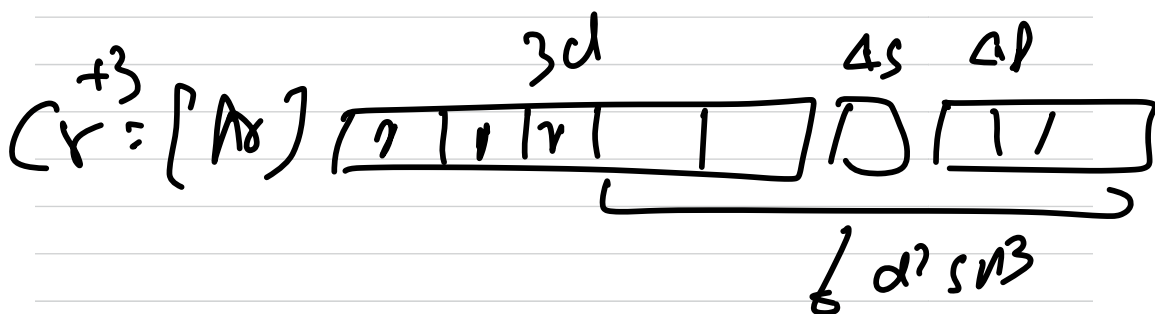
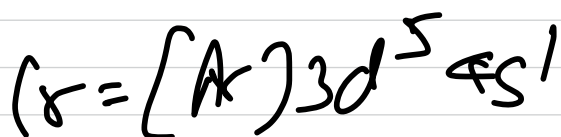
$\rightarrow \text{sp}^3\text{d}^2$, octahedral
 Pairing = 5g B.M
 outer shell



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d^2sp^3 , octah, Paare, $\mu = 1.73 BM$
Innere Valenz



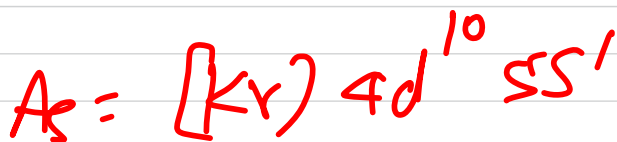


sp^3d , T.B.P ($d = d_{z^2}$)

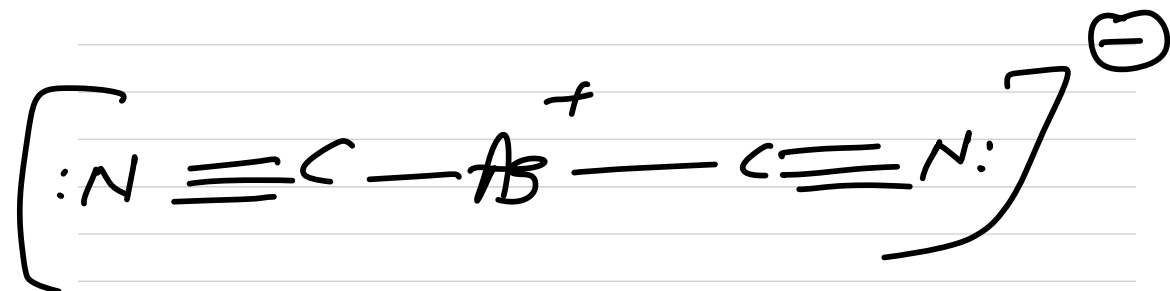
para

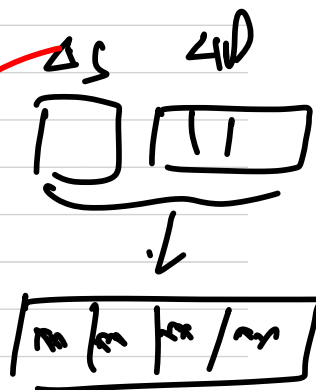
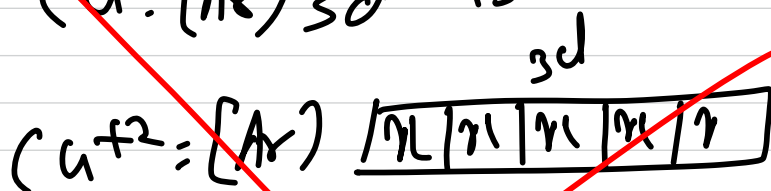
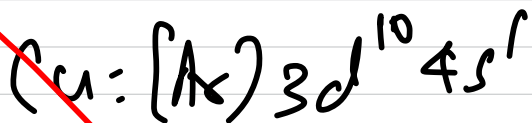
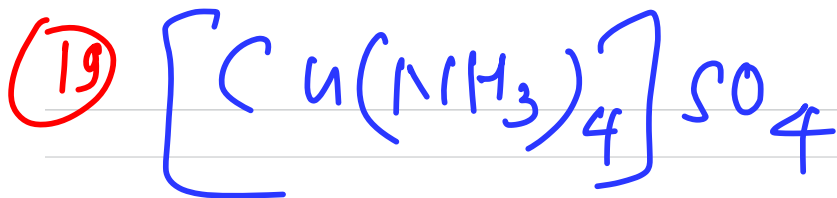
J_3 B.M.

out orbital,



SP, linear, Dia, $\mu = 0$



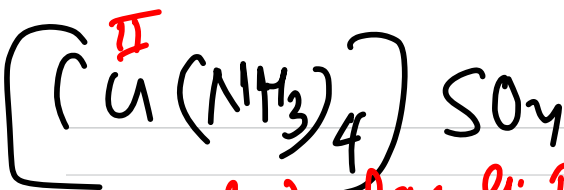


sp^3

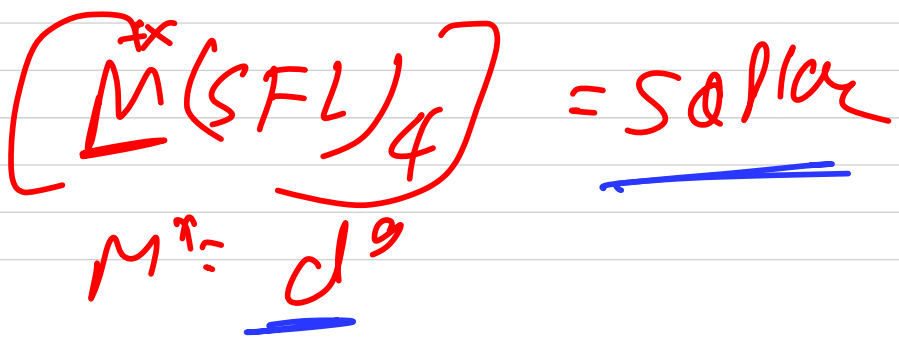
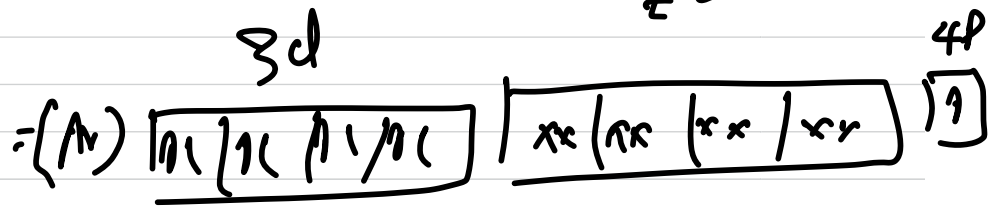
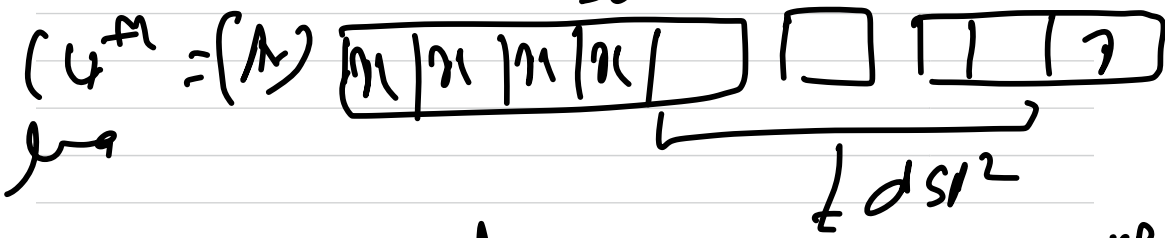
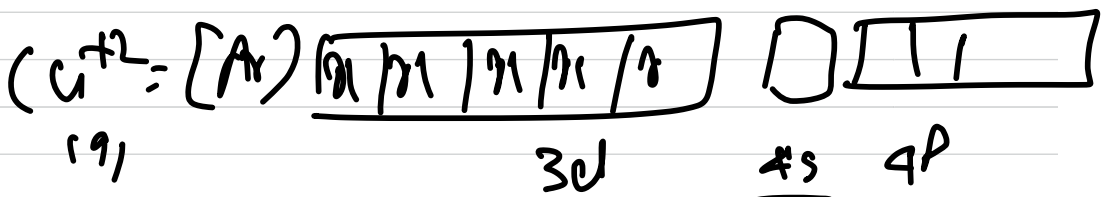
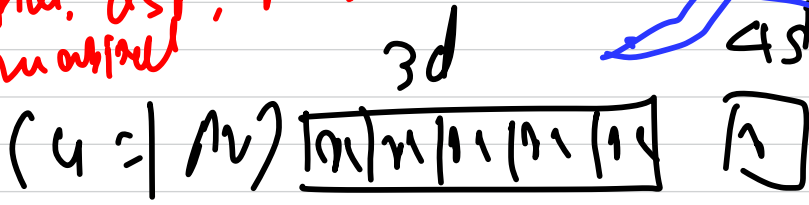
Td

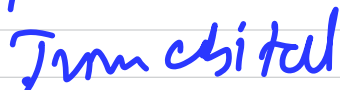
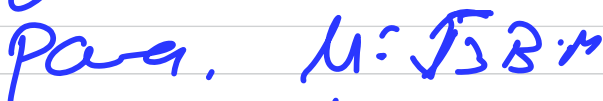
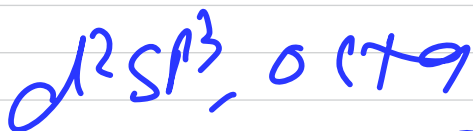
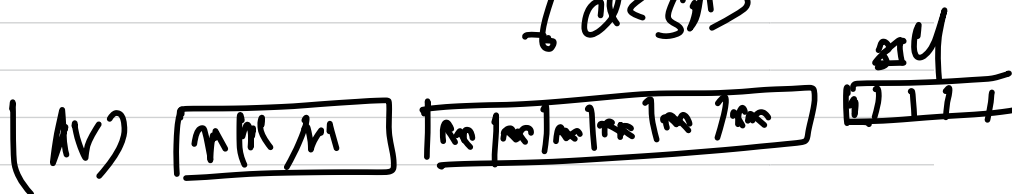
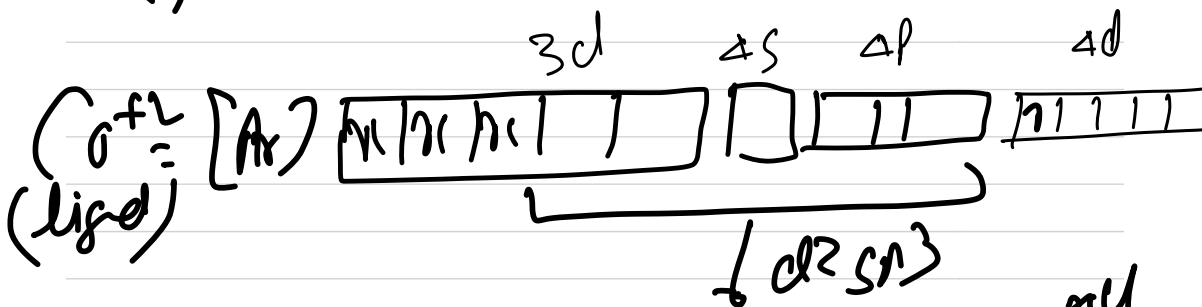
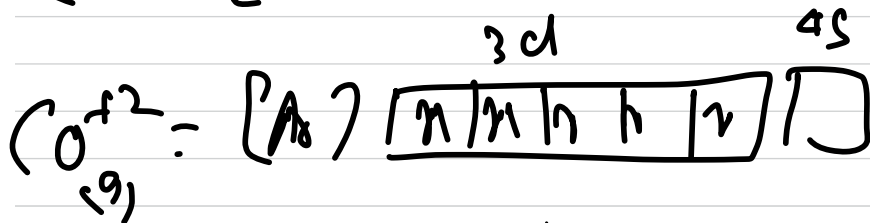
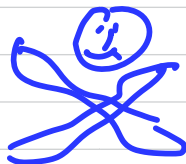
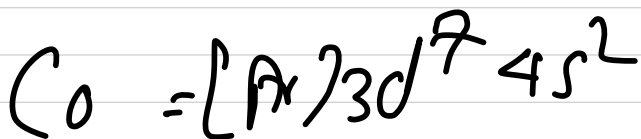
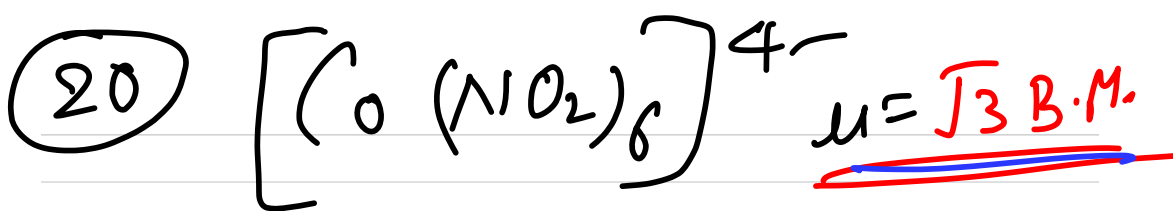
para

$\mu = \sqrt{3} \text{ BM.}$



SO₄ Plan. dsp², Par. 4: T.B.M.
 Transition





$$[M^{+x}(\text{SFL})_6]$$

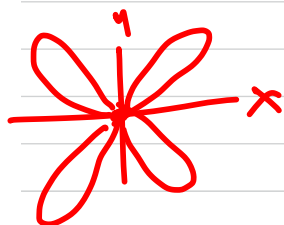
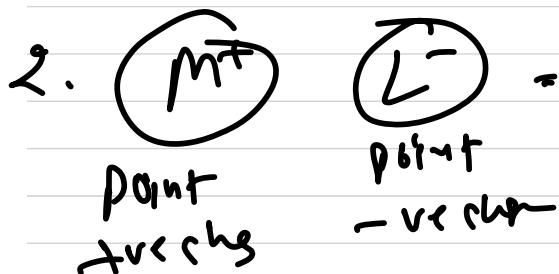
$$u = \sqrt{3} \text{ B.M.}$$

$$\mu^{fx} = d^2$$

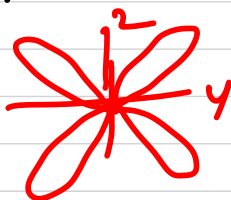


[C.F.T.]

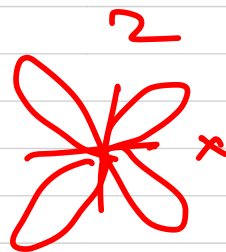
1. M & Ligand : Pure Electrostatic Attraction



d_{xy}



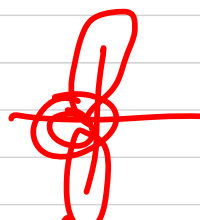
d_{yz}



$d_{x^2-y^2}$



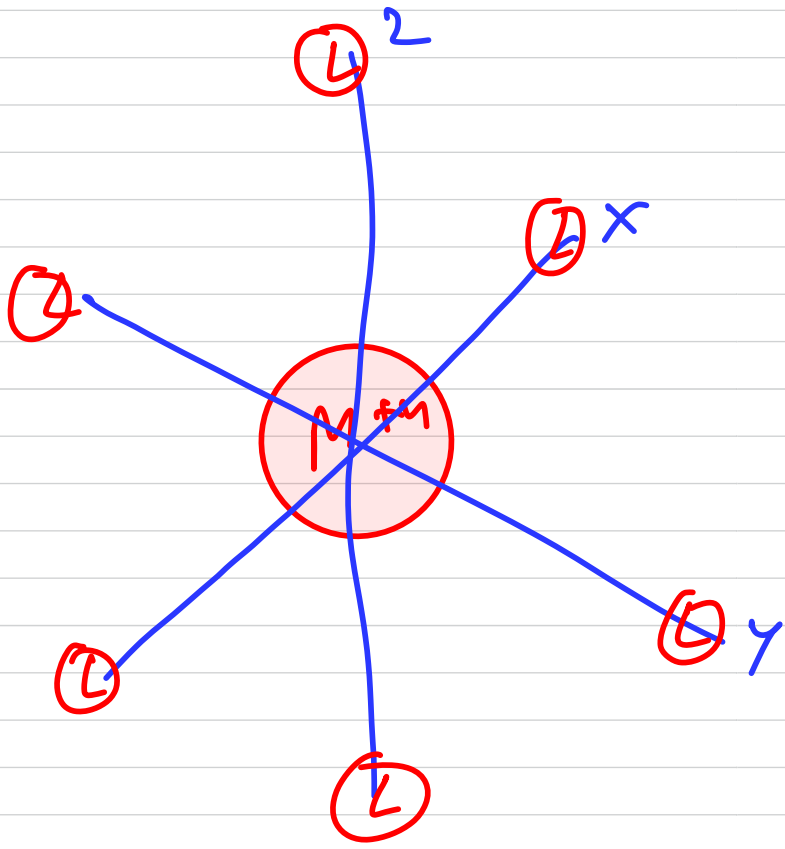
$d_{x^2-y^2}$



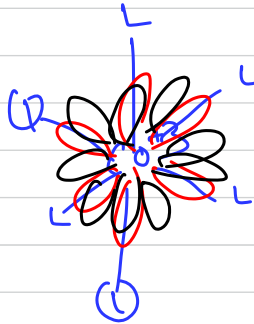
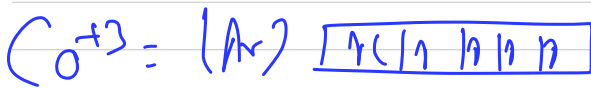
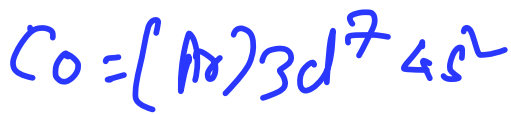
d_{z^2}

CN = 6 -

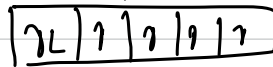
$[ML_6]$



$^{+3}$
 $Co = \underline{1s^2} \underline{2s^2 2p^6} \underline{3s^2 3p^6} 3d^6$



dr4 dr2 h2 dr2 d32



dr4 dr2 dr2 dr2 dr2

H.W.
Page - 20

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Paper discussion,