



	SECTION B (3x2 =6 marks)	
6.	Draw the cis and trans isomers of $[\text{Pt}(\text{en})_2\text{Cl}_2]^{2+}$	2
7.	How is ortho nitro phenol and para nitro phenol separated? Give reason.	2
8.	Write with equation Riemer Tiemann reaction	2
	SECTION C (3x3 =9 marks)	
9.	Prove using valence bond theory that $[\text{Ni}(\text{CN})_4]^{2-}$ is square planar in shape while $[\text{Ni}(\text{CO})_4]$ is tetrahedral in shape.	3
10.	Write the mechanism of dehydration of alcohol with con. $\text{H}_2\text{SO}_4$ producing alkene.	3
11.	a) Write the equation of the reaction of anisole with HI. b) Using crystal field theory draw the filled diagram of an octahedral complex having configuration $d^4$ if $\Delta_o > P$	1+2

PREPARED BY: KOCHURANY THOMAS