

KARIMPUR PANNADEVI COLLEGE
UG 5th Semester Examination 2022
Internal Assessment
CHEMISTRY [HONOURS]
Course Code: HCC-T-11 (Inorganic)
Full Marks: 10

Answer any five questions from the following: [2x5=10]

1. Calculate the CFSE of a d^7 configuration of octahedral complex in presence of strong field ligand. Give an example of low spin tetrahedral complex.
 2. Draw the optically active and optically inactive structures of $[\text{Co}(\text{NH}_3)_2(\text{ox})_2]^-$.
 3. Explain why $\text{K}_2[\text{NiF}_6]$ is diamagnetic while $\text{K}_3[\text{CoF}_6]$ is paramagnetic although both having central metal with d^6 configuration?
 4. Write a short note on Jahn-Teller effect.
 5. An octahedral metal complex absorbs light in wave length 535nm. What is the crystal field splitting (Δ_o) for the complex?
 6. What do you mean by magnetic moment and magnetic susceptibility?
 7. State Curie's law on magnetization.
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