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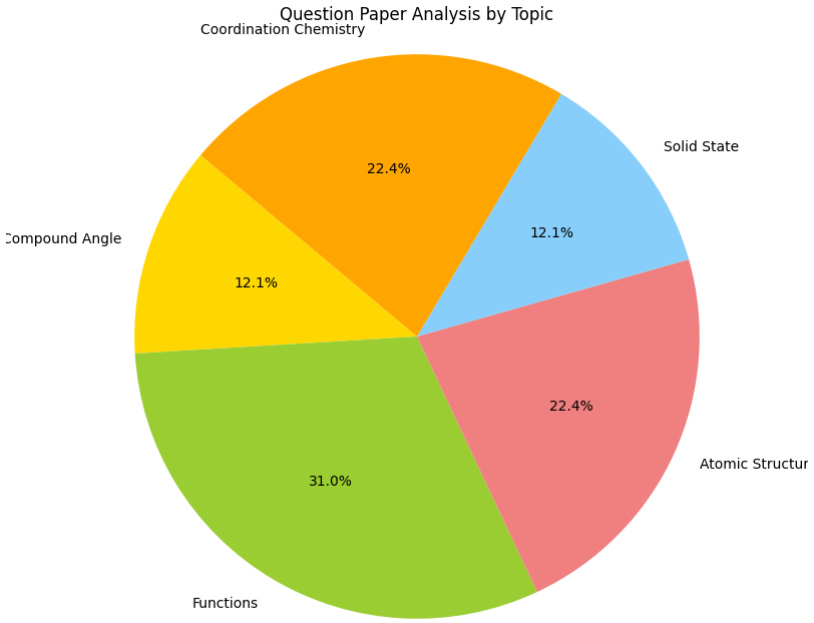
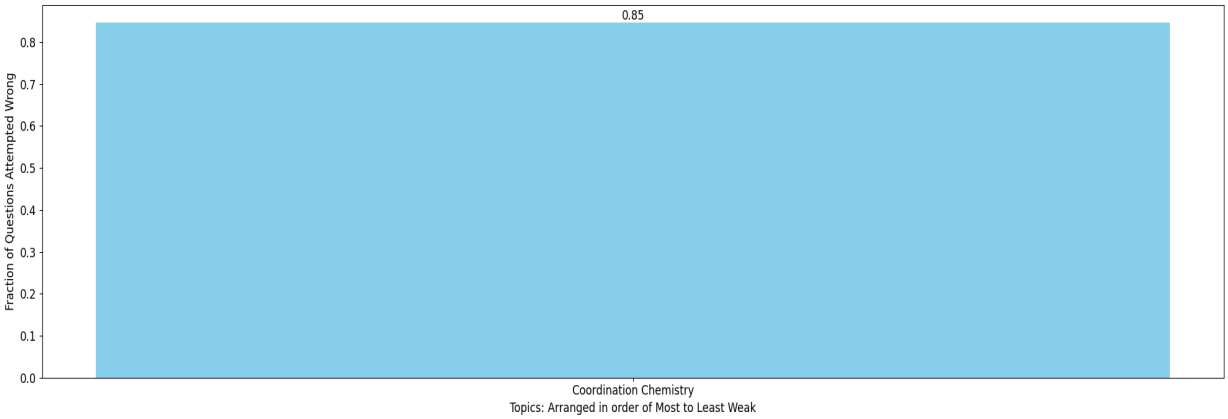
Question Paper Analysis:



Weak Topic Analysis:



Practice Questions:

Coordination Chemistry:

9. **Statement-1**: $K_3[Fe(CN)_6]$ is a low spin complex.
Statement-2: Fe^{2+} ion in this complex undergoes sp^3d^2 hybridization.
(A) Statement-1 is true, statement-2 is true and statement-2 is correct explanation for statement-1.
(B) Statement-1 is true, statement-2 is true and statement-2 is NOT the correct explanation for statement-1.
(C) Statement-1 is true, statement-2 is false.
(D) Statement-1 is false, statement-2 is true.

19. The coordination number and the oxidation state of the element 'E' in the complex $[E(en)_2(C_2O_4^{-2})]NO_2^{\ominus}$(where (en) is ethylene diamine) are, respectively - **[AIEEE–2008]**
(1) 6 and 2 (2) 4 and 2 (3) 4 and 3 (4) 6 and 3

25. The magnetic moment (spin only) of $[NiCl_4]^{2-}$ is :- **[AIEEE–2011]**
(1) 2.82 BM (2) 1.41 BM (3) 1.82 BM (4) 5.46 BM

9. Predict the magnetic nature of A and B. **[JEE 2006]**
(A) Both are diamagnetic.
(B) A is diamagnetic and B is paramagnetic with one unpaired electron.
(C) A is diamagnetic and B is paramagnetic with two unpaired electrons.
(D) Both are paramagnetic.

47. When concentrated HCl is added to an aqueous solution of $CoCl_2$, its colour changes from reddish pink to deep blue. Which complex ion gives blue colour in this reaction ?:- **[J-MAIN–2015, Online]**
(1) $[Co(H_2O)_6]^{2+}$ (2) $[CoCl_6]^{3-}$ (3) $[CoCl_4]^{2-}$ (4) $[CoCl_6]^{4-}$