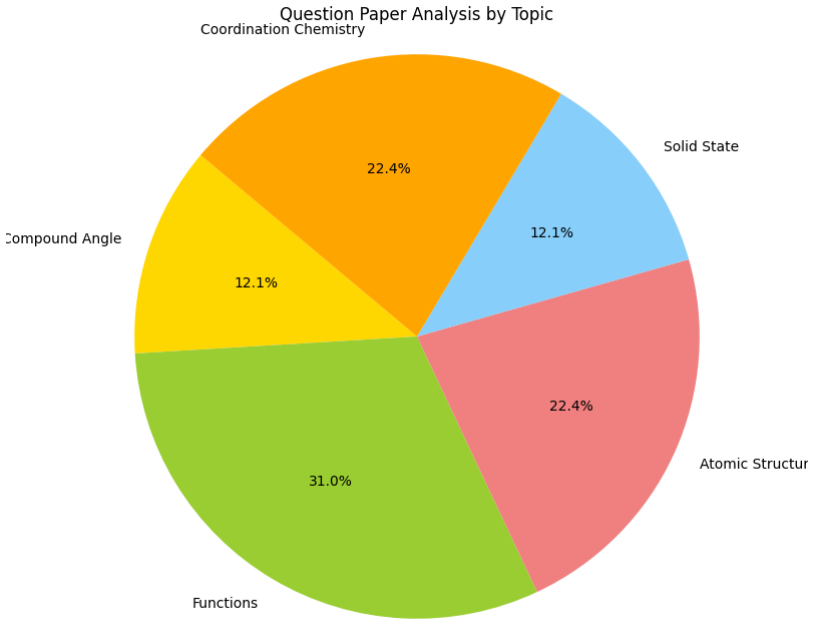
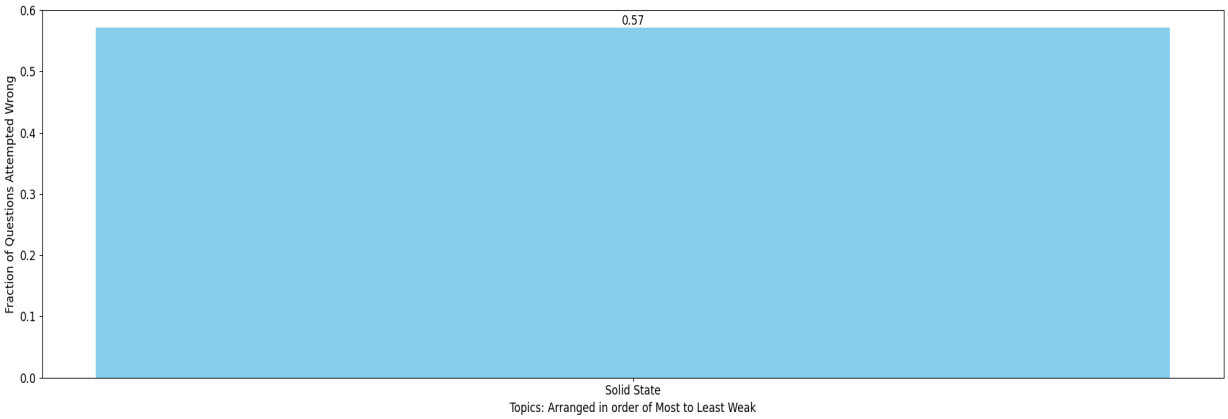
Raj Yadav Total
MLAssist - Personalised DPP

Question Paper Analysis:



Weak Topic Analysis:



Practice Questions:

Solid State:

20. An element crystallises in FCC lattice having edge length 400 pm. Calculate the maximum diameter which can be placed in interstitial sites without disturbing the structure.

[JEE 2005]

26. Experimentally it was found that a metal oxide has formula $M_{0.98}O$. Metal M, is present as M^{2+} and M^{3+} in its oxide. Fraction of the metal which exists as M^{3+} would be:

[Jee-Main (offline)-13]

(A) 7.01% (B) 4.08% (C) 6.05% (D) 5.08

12. Which of the following statements is correct in the rock-salt structure of ionic compounds?

(A) coordination number of cation is four whereas that of anion is six.

(B) coordination number of cation is six whereas that of anion is four.

(C) coordination number of each cation and anion is four.

(D) coordination number of each cation and anion is six.

17. The type of unit cell is:

(A) Simple cubic (B) BCC (C) FCC (D) Edge-centred

24. A crystal of lead (II) sulphide has NaCl structure. In this crystal the shortest distance between Pb^{+2} ion and S^{2-} ion is 297 pm. What is the length of the edge of the unit cell in lead sulphide? Also calculate the unit cell volume.

r. l