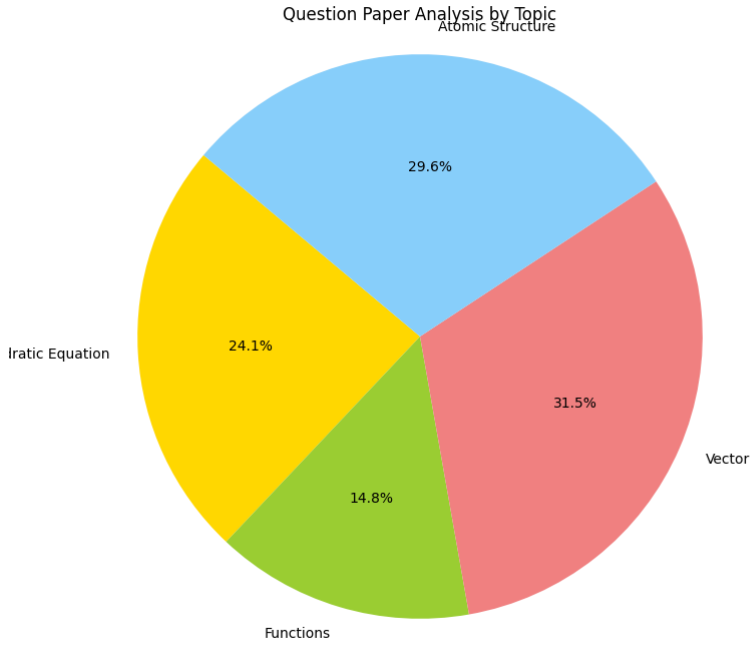
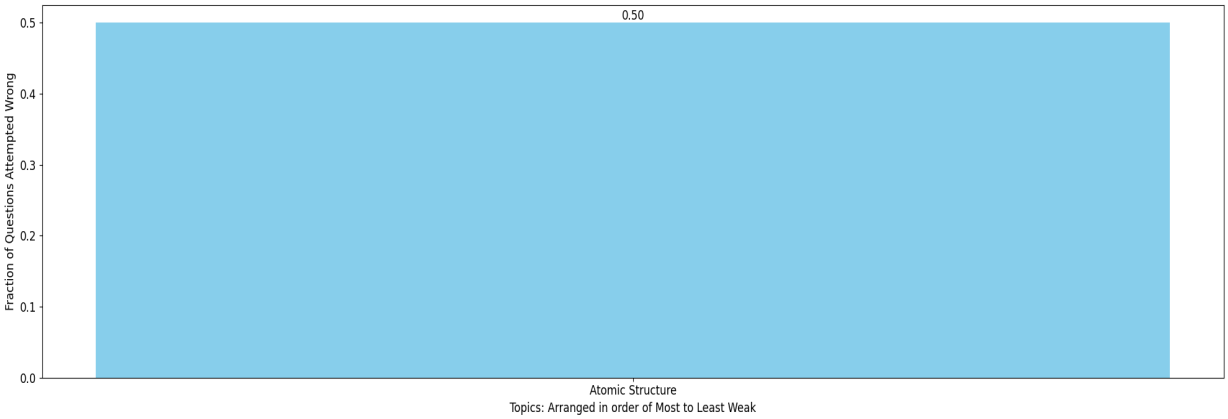
artikay_Shankar_Agrawal Total
MLAssist - Personalised DPP

Question Paper Analysis:



Weak Topic Analysis:



Practice Questions:

Atomic Structure:

7. In a H-like sample electrons make transition from 5^{th} excited state to 2^{nd} excited state

(A) 10 different spectral lines will be emitted

(B) 6 different spectral lines will be emitted

(C) Number of lines belonging to Balmer series will be 4

(D) Number of lines belonging to Paschen series will be 3

12. The maximum number of electrons that can have principal quantum number, n=3, and spin quantum number, $m_s = -1/2$, is **[JEE 2011]**

31. At temperature T, the average kinetic energy of any particle is kT- The de Broglie wavelength follows the order : **[JEE-Main(online) 2015]**

(1) Visible photon > Thermal electron > Thermal neutron

(2)Thermal proton > Thermal electron > Visible photon

(3)Visible photon > Thermal neutron > Thermal electron

(4) Thermal proton > Visible photon > Thermal electron

33. An atom has x energy level, then total number of lines in its spectrum are:-

(A) 1 + 2 + 3 .....(x + 1)

(B) 1 + 2 + 3 ..... (x^2)

(C) 1 + 2 + 3 ..... (x - 1)

(D) (x + 1) (x + 2) (x + 4)

15. Correct statement(s) regarding 3Py orbital is/are

(A) Angular part of wave function is independent of angles (θ and ϕ)

(B) Number of maxima when a curve is plotted between $4\pi r^2R^2(r)$ vs r are '2'

(C) 'xz' plane acts as nodal plane

(D) Magnetic quantum number must be '–1'

Assertion and Reason :