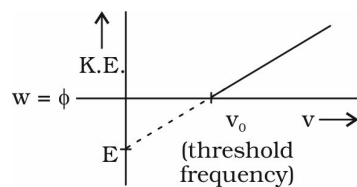


Daily Tutorial Sheet-14

Level - 3

154.(BC) $L = \frac{nh}{2\pi}$; check yourself that (B) is a correct statement.

155.(ABC) D → incorrect



156.(A) $E \propto \frac{-Z^2}{n^2}$ $\therefore E \propto n$

157.(ABC) (D) incorrect → wave in any of the orbit should be stationary wave same as energy levels are stationary in Bohr's model.

158.(A) $\lambda = \frac{h}{p} \Rightarrow p = \frac{h}{\lambda} = \frac{6.626 \times 10^{-34} \text{ Js}}{2.2 \times 10^{-11} \text{ m}} = 3.0 \times 10^{-23} \text{ kg ms}^{-1}$

159. (ABC) $r_n \propto \frac{n^2}{Z}$ $V_n \propto \frac{Z}{n}$ $E_n \propto \frac{Z^2}{n^2}$ $L = \frac{nh}{2\pi}$ (doesn't depend on Z)