

The simple Bohr model cannot be directly applied to calculate the energy levels of an atom with many electrons. This is because

- (a) of the electrons not being subject to a central force.
- (b) of the electrons colliding with each other
- (c) of screening effects
- (d) the force between the nucleus and an electron will no longer be given by Coulomb's law.

Correct option is A)

As the mass of an electron is negligible as compared to a nucleon, so electron cannot being subject to central force verifies answer (a).