CL8_Q1. State any three forms of the Heisenberg's Uncertainty Principle.

CL8_Q2. Demonstrate using Heisenberg's Uncertainty Principle that an electron can't exist inside a typical nucleus.

CL8_Q3. An atom in an excited state of life time $\Delta t=10^{-8}$s makes a transition to a lower state emitting a photon of frequency of 3×10^{14}Hz. Estimate the uncertainty in the frequency of the emitted photon.

CL8_Q4. State Heisenberg's uncertainty principle. Use the Gamma ray thought experiment to arrive at the principle.