CL22_Q1. Where is the concept of linear harmonic oscillator used in Physics?

CL22_Q2. What is a linear harmonic oscillator? When can the oscillations become “anharmonic”?

CL22_Q3. The lowest energy of the harmonic oscillator is non-zero. Explain why?

CL22_Q4. What mathematical functions best describe the Eigen functions of a linear harmonic oscillator?

CL22_Q5. Establish Schrodinger’s equation of a linear harmonic oscillator and write its solution.

CL22_Q6. Sketch the wave functions and probability densities for the first two quantum states of quantum harmonic oscillators.