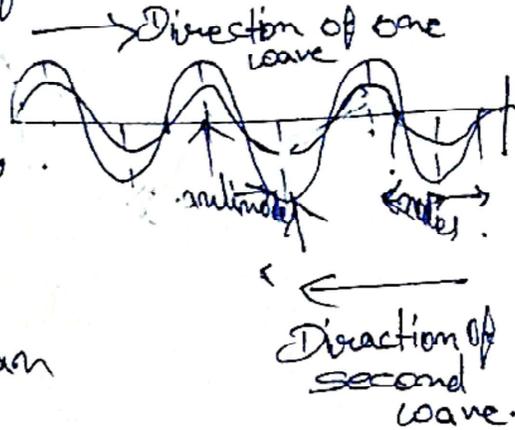


Date
13/08/2016
Unit I / Paper II
MTC-Physics / sem-II

Characteristics of normal modes vibrations in bulk
Oscillation \rightarrow

It are specific,
independent
patterns of
motion in an



Oscillating system where all parts vibrate
sinusoidally at the same natural frequency
and phase.

- (1) Independence of motion — a mode can be excited independently and the general motion of a complex system is a linear superposition of its normal modes.
- (2) Orthogonality — Normal modes are mathematically orthogonal to each other.
- (3) Natural Frequency — Each mode ~~be~~ oscillates at a specific frequency.
- (4) Mode shape — Represents the shape of the deformation during that mode of vibration.