

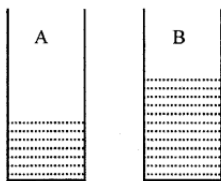
Board – ICSE

Class – 8<sup>th</sup>

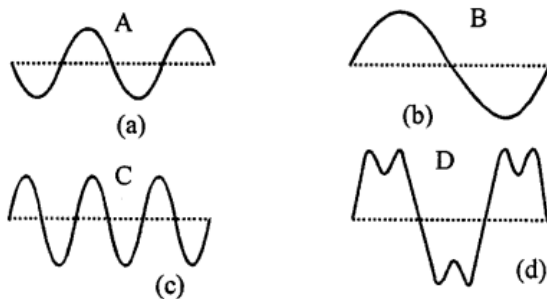
Topic – Sound

- Two waves have frequencies 256 Hz and 512 Hz, but same amplitude. Compare their (i) loudness, and (ii) pitch;
- What is longitudinal wave ?
- Define the following terms :
  - Amplitude
  - Frequency
  - Time period.

Answer:
- Obtain relationship between the time period and frequency.
- Name three characteristics of a musical sound.
- State three factors on which loudness of sound heard by a listener depends.
- Draw a diagram to show the wave pattern of high pitch note and a low pitch note, but of the same loudness.
- The frequencies of notes given by flute, guitar and trumpet are respectively 400 Hz, 200 Hz and 500 Hz. Which one of these has the highest pitch?
- Figure shows two jars A and B containing water up to different heights. Which will produce sound of higher pitch when air is blown on them ?



- Figure shows four waves A, B, C, and D.



Name the wave which shows

- a note from a musical instrument,

(b) a soft note

(c) a shrill note.

11. If the amplitude of a wave is doubled, what will be the effect on its loudness?
12. Why is the loudness of sound heard by a plucked wire increased when mounted on a sound board?
13. How is loudness related to the amplitude of wave ?
14. Explain the mechanism of formation of a longitudinal wave when source vibrates in air.
15. How does sound travel in air ?