

Date: - 25.11.24 [PHYSICS] [Ch-6 (Sound) Continue] [CLASS-VII] [Page-1]

Q21: - Define one vibration.

Ans: The to and fro motion which constitute one wave is called one vibration.

Q22: → Define wavelength.

Ans: → The length of a wave corresponding to one vibration is called wavelength.

Q23: → Define Time period.

Ans: → The time taken by the wave to complete one vibration is called its time period.

Q24: → Define frequency.

Ans: → It is defined as the number of vibrations produced in one second.

Q25: → Which one of the following has high pitch sound or a shrill sound?

(a) a whistle (b) a musical drum

Ans: - A whistle has high pitch or a shrill sound.

Q26: → What is audible sound?

Ans: Sounds with frequency ranging from 20 Hz to 20,000 Hz are audible to humans.

Q27: → What is ultrasonic sound?

Ans: → Sounds of frequency greater than 20,000 Hz are known as ultrasonic sounds.

Q28: → What are infrasonic sounds?

Ans: → Sounds of frequency smaller than 20 Hz are called infrasonic sounds.

Q29: → Name the animals which can hear ultrasonic sounds.

Ans: → Dogs, bats, monkeys, deers and leopards can hear ultrasonic sounds.

Q30: → Can sound travel through solids and liquids? In which of these two ^{does} it travel faster?

Ans: → Yes, sound can travel through solids and liquids. Sound travels much faster in solids than in liquids.

Q31: → During a thunderstorm, the sound of a thunder is heard after the lightning is seen. Why?

Ans: It is because light travels much faster than sound. It takes negligible time for light to reach us, while sound takes a much longer time to reach us.

Q32: → Name the characteristics of sound which differentiates two sounds of the same pitch and same loudness.

Ans: - Quality or Timbre.

Q33: - What is Quality or Timbre?

Ans: - It is the characteristic of a sound which allows the ear to distinguish sounds which have same pitch and loudness.

Q34: → A musician recognizes the musical instrument by hearing the sound produced by it; even without seeing the instrument. Which characteristic of sound makes this possible?

Ans: → It is possible due to Quality of sound.