

Q12: → How does a bat make use of ultrasonic waves to find its way?

Ans: Bats produce ultrasonic sound as they fly. When this ultrasonic sound comes back after reflection from any object (or obstacle) in their way, Bats hear it and thus they detect the presence of obstacle and change their path.

Q13: → What is the speed of audible and inaudible sound in a particular medium?

Ans: → The speed of sound is same for a particular medium for audible and inaudible sound.

Q14: → Name two characteristics of sound which differentiate any two sounds from each other.

Ans: —

- (1) Loudness
- (2) Pitch

Q15: → On what factor does the loudness of a sound depend?

Ans: → The loudness of sound depends on the amplitude of vibration of the vibrating body producing the sound. Greater is the amplitude of vibrations, louder is the sound produced.

Q16: → The outer case of the bell in a temple is made big. Give reason?

Ans: → We know that greater is area of the vibrating body, louder is the sound produced. So the outer case of the bell in a temple is made large to produce loud sound.

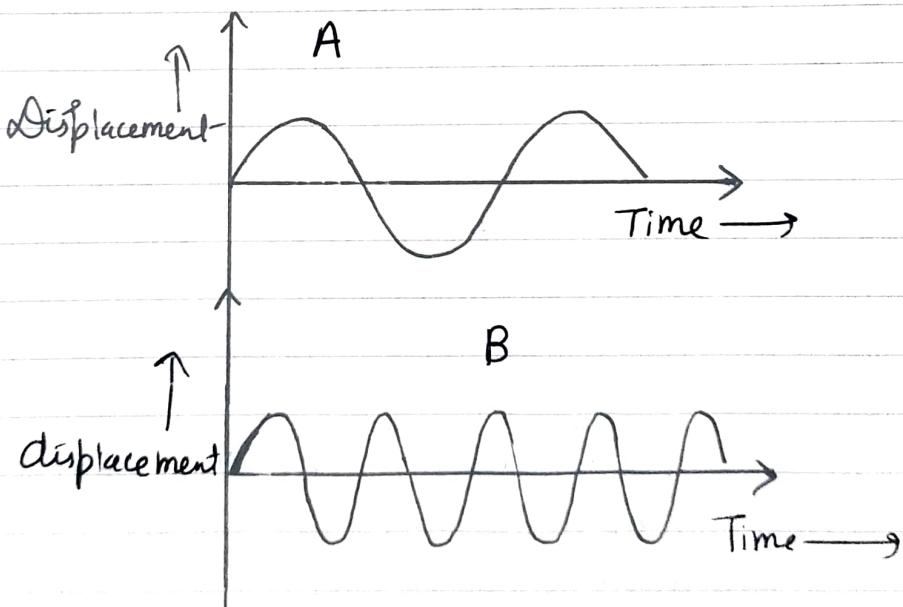
Q17 → Define Pitch.

Ans → Pitch is a characteristic of sound which distinguishes a shrill sound from a flat (or grave) sound.

Q18 → State the factor on which the pitch of a sound depends.

Ans → The pitch of a sound depends upon its frequency i.e. number of vibrations produced per second by the body. A sound of high frequency is said to have high pitch while a sound of low frequency is said to have low pitch.

Q19 → Which of the two waves A and B, is of higher frequency?



Ans → The wave 'B' is of high frequency (High pitch sound)

Q20 → Define displacement of a wave?

Ans → The distance travelled by a wave in one direction is called displacement of a wave.