

CLASS – IX
PHYSICS
REVISION WORKSHEET

1. Which of the following is transmitted by a wave?
(a) amplitude (b) mass
(c) energy (d) matter
2. Range of audible sound waves is from:
(a) 20 Hz to 20000Hz (b) 100 Hz to 10000Hz
(c) 10 Hz to 20 Hz (d) none of these
3. Which of the following is a mechanical wave?
(a) light wave (b) sound wave
(c) radio wave (d) X-rays
4. The SI unit of frequency is:
(a) second (b) hertz
(c) decibel (d) watt/metre²
5. Sound waves in air are:
(a) longitudinal waves (b) transverse waves
(c) both transverse and longitudinal
6. Sound waves can travel:
(a) only in solids (b) only in liquids
(c) in liquids and gases only (d) in solids, liquids and gases
7. Which of the following is not a character of musical sound?
(a) pitch (b) loudness (c) wavelength (d) quality
8. The time period of a vibrating object is 0.005 s. the frequency of waves emitted by it is:
(a) 5×10^{-3} Hz (b) 5 Hz (c) 200 Hz (d) 2000 Hz
9. To hear a clear echo the reflecting surface must be at a minimum distance of :
(a) 34m (b) 17m (c) 170m (d) 340 m
10. A SONAR sends a pulse of frequency 500Hz towards the bottom of a lake. The echo is received after 0.4s. The speed of waves in water is 1450 ms^{-1} . The depth of the lake is:
(a) 200m (b) 1000m (c) 290m (d) 580m
11. Distinguish between:

- (i) loudness and intensity
- (ii) Longitudinal and Transverse Waves
- (iii) Echo and Reverberation

12. Draw a graphical diagram for the wave shape for:

- (i) low pitch sound
- (ii) high pitch sound
- (iii) soft sound
- (iv) loud sound

13. What arrangements should be made in an auditorium to control excessive reverberation?

14. Why are ceilings of concert hall made curved? Explain by giving the diagram.

15. Write four applications of ultrasound.