

SOUND

<1M>

1.Loudness of sound is measured on a scale called:

- (A) Vernier scale. (B) Decibel scale. (C) Meter scale. (D) Screw gauge.

2.What is velocity of sound in water?

- (A) 1500 m/s. (B) 330 m/s. (C) 200 m/s. (D) 330 m/s.

3.For an echo to be heard, the minimum distance between the source and reflecting surface must be

- (A) 17 m. (B) 17 cm. (C) 10 m. (D) 10 cm.

4.A pendulum vibrates 50 oscillations in 5 seconds. Calculate its frequency?

- (A) 10 Hz. (B) 20 Hz. (C) 50 Hz. (D) None.

5.What is sound?

6.How is a sound produced?

7.How is sound propagates?

8.What is the amplitude of the wave?

9.What is the use of reflection of sound?

10.On what factor does loudness of sound depend?

11.Where will the sound travel faster, in wood or water?

12.Define frequency of sound.

13.Define the term pitch.

14.Define the term echo.

15.What is the audible range of human ear?

16.What is the full form of SONAR?

17.Name the section of throat in which human voice is produced.

18.What is ultrasound?

19.Write one difference between musical sound and noise.

20.Name the two animals that use echo-location to guide them.

21.Sound can travel through:

- (A) Gases only. (B) Solids only. (C) Liquids only. (D) Solid, liquids and gases.

22.What is velocity of sound in air?

- (A) 300 m/s. (B) 330 m/s. (C) 280 m/s. (D) 200 m/s.

23.The number of oscillations per second is called:

- (A) Time period. (B) Amplitude. (C) Frequency. (D) None.

24.On what factor does loudness of sound depend?

- (A) Pitch. (B) Frequency. (C) Time period. (D) Amplitude.

25. Sound is produced when objects:
(A) Rotate. (B) Vibrate. (C) Circulate. (D) None.
26. Name the section of throat in which the human voice is produced.
(A) Wind pipe. (B) Larynx. (C) Vocal cord. (D) None.
27. The audible range of frequency for human ear is:
(A) Less than 20 Hz. (B) 20 to 20,000 Hz. (C) More than 20,000 Hz. (D) None.
28. Bats and dolphins can produce and hear sounds with a frequency of:
(A) 12,000 Hz. (B) 1,20,000 Hz. (C) 1200 Hz. (D) 120 Hz.
29. Shrillness of a sound is determined by the of vibration.
(A) Frequency. (B) Amplitude. (C) Time period. (D) Loudness.
30. Vibrating part of the tabla is:
(A) Stretched membrane. (B) Stretched string. (C) Air column. (D) Water column.
31. Frequency is measured in:
(A) Hertz. (B) Second. (C) Per second. (D) (a) & (c).
32. Vibrating part of the sitar is:
(A) Stretched membrane. (B) Stretched string. (C) Air column. (D) Water column.
33. Vibrating part of the flute is:
(A) Stretched membrane. (B) Stretched string. (C) Air column. (D) Water column.
34. Vibrating part of the Jaltarang is:
(A) Stretched membrane. (B) Stretched string. (C) Air column. (D) Water column.
35. Waves of frequency greater than 20,000 Hz are called:
(A) Panasonic. (B) Ultrasonic. (C) Sonic. (D) None.
36. In which medium speed of sound is maximum:
(A) Solid. (B) Liquid. (C) Air. (D) Vacuum.
37. A small instrument having two prongs is called:
(A) Tuning fork. (B) Larynx. (C) (a) & (b). (D) None.
38. A sensation depending upon frequency is known as:
(A) Loudness. (B) Pitch. (C) Noise. (D) Shrill.
39. Which is not characteristic of sound:
(A) Pitch. (B) Noise. (C) Loudness. (D) Shrill.
40. Reflected sound is called:
(A) Music. (B) Noise. (C) Echo. (D) None.
41. To and fro motion of an object about its mean position is called:
(A) Oscillatory motion. (B) Linear motion. (C) Circular motion. (D) None.
42. The loudness of sound is proportional to the:
(A) Amplitude. (B) Square of amplitude. (C) Frequency. (D) Square of frequency.
43. If the amplitude of sound become twice then loudness increases by factor:
(A) 2. (B) 4. (C) 8. (D) It will not increase.
44. The voice of a woman has a higher and than that of a man.

- (A) Loudness and amplitude. (B) Loudness and pitch.
(C) Frequency and pitch. (D) Frequency and amplitude.

45. High pitch sound has frequency.

- (A) high (B) low (C) negative (D) None.

46. Sounds of frequencies less than about 20 vibrations per second called:

- (A) Audible. (B) Ultrasonic. (C) Inaudible. (D) None.

47. Presence of excessive or unwanted sounds in the environment is called:

- (A) Music. (B) Noise. (C) Noise pollution. (D) None.

48. Which of the following voices is likely to have minimum frequency?

- (A) Baby girl. (B) Baby boy. (C) A man. (D) A woman.

49. The maximum distance through which a vibrating body is displaced from its mean position is called:

- (A) Frequency. (B) Amplitude. (C) Pitch. (D) None.

50. In human beings, voice is produced by the vibration of their:

- (A) Wind pipe. (B) Vocal chord. (C) Larynx. (D) None.

51. If an object makes 10 oscillations in 1 second, then what is its frequency?

- (A) 1 Hz. (B) 10 Hz. (C) 5 Hz. (D) 8 Hz.

52. If an object makes 10 oscillations in 2 seconds, then what is its frequency?

- (A) 1 Hz. (B) 10 Hz. (C) 5 Hz. (D) 8 Hz.

53. If an object makes 10 oscillations in 1 second, then what is its time period?

- (A) 1 sec. (B) 0.1 sec. (C) 0.01 sec. (D) 10 sec.

54. Time taken by an object to complete one oscillation is called:

- (A) Frequency. (B) Pitch. (C) Amplitude. (D) Time period.

55. Vibration below is called infra sound.

- (A) 10 dB. (B) 0 dB. (C) 90 dB. (D) None.

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56. What is ultrasound? State one characteristic of ultrasound which makes it useful in the process of echo-location.

57. What is timber?

58. In cinema halls and auditoria, the walls, floor and ceilings are covered by sound absorbing materials, why?

59. Write the following frequency in their increasing order: (i) Voice of a child, (ii) Voice of a man, (iii) Voice of a woman.

60. A pendulum produces 20 oscillations in 5 second. Calculate its time period?

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61. Give reason:

- (i) During a thunderstorm, we first see the lightning and then hear the thunder.
(ii) We do not hear the supersonic jet approaching, but hear a sudden boom after it has passed away

62. How is the human voice produced?

63. Explain how sound is produced by each of the following types of musical instruments.

- (i) Wind instruments. (ii) String instruments. (iii) Percussion instruments.

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64. How would you describe the sound produced if

1. A large number of vibrations are produced per second.
2. The amplitude is small.
3. Vibrations are produced at irregular intervals.

65. Sound produced by a mosquito is quite different from the roar of a lion. Explain.

66. Write differences between musical sound and noise.

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67. What do you understand by term noise pollution? Write some harmful effects of noise pollution.

68. Differentiate between loudness and pitch.

69. What do you understand by term noise pollution? Suggest some ways of minimizing noise pollution.

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