**Karan Arora**  **R.L. Institute M: 9416974837**

**Max Time : 1 hr** **Class = 9th Science Test Max Marks : 25**

**SOUND – 1**

1. Multiple choice questions : [ 1 X 5 = 5 ]
2. The wave in which the individual particles of the medium move about their mean position in a direction perpendicular to the direction of wave propagation , it is called as:

|  |  |  |  |
| --- | --- | --- | --- |
| a) Transverse waves | b) Longitudinal waves | c) Propagated waves | d) None of these |

1. The loudness or softness of a sound is determined basically by its :

|  |  |  |  |
| --- | --- | --- | --- |
| a) speed | b) amplitude | c) frequency | d) wavelength |

1. A source produce 50 crests and 50 troughs in 0.5 seconds. What is the frequency of the wave?

|  |  |  |  |
| --- | --- | --- | --- |
| a) 50 Hz | b) 100 Hz | c) 150 Hz | d) 200 Hz |

1. Sound can travel through :

|  |  |
| --- | --- |
| a) gases only | b) vacuum only |
| c) gases and liquids only | d) solids , liquids and gases |

1. Pitch of a sound depends upon its :

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1. What are mechanical waves? [ 1 ]
2. What is one complete oscillation? [ 1 ]
3. If any explosion takes place in the bottom of a lake, what type of shock waves in water will takes place?

[ 1 ]

1. What is intensity of sound? [ 1 ]
2. What are Longitudinal and transverse waves> Give 2 examples of each. [ 2 ]
3. Explain the following terms : (i) Crests and trough (ii) Compression and rarefaction [ 2 ]
4. A longitudinal wave of wavelength 1 cm travels in the air with a speed on 330 m/s. Calculate the frequency of the wave. [ 2 ]
5. If velocity of sound in air is 340 m/s, calculate : [ 3 ]

(i) Wavelength when frequency is 256 Hz (ii) Frequency when wavelength is 0.85 m.

1. (i) How does the sound produced by vibrating objects in a medium reach your ear? [ 3 ]

(ii) Distinguish between loudness and intensity of sound.

1. What are Wavelength , Frequency , Time period and Amplitude of a sound wave? [ 4 ]

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