PHYSICS

BOOKS - MODERN PUBLICATION

SOUND

Example

1. A wave moves a distance of 8 m in 0.05 s. Find the velocity of the wave.

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2. A wave moves a distance of 8 m in 0.05 s. What is the wavelength of the wave if its frequency is 200 Hz?

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3. A bat can hear sound of frequencies upto 120 kHz. Determine the wavelength of sound in air at this frequency. Take the speed of sound in air as 344 m/s

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4. Two children are at opposite ends of an iron pipe. One strikes his end of the iron pipe with a stone. Find the ratio of times taken by the sound wave in air and in iron to reach the other child. Given, velocity of sound in air is 344 ms −1 and that in iron is $5130ms^{-1}$.

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5. A source of wave produces 40 crests and 40 trough in 0.4 s. Find the frequency of wave.

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6. A stone is dropped into a well 44.1 m deep. The splash is heard 3.13 seconds after the stone is dropped. Find the velocity of sound in air.

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7. Using the SONAR, sound pulses are emitted at the surface of water. These pulses after being reflected from the bottom of water, are detected. If the time interval from the emission to the detection of sound pulses is 8 s, find the depth of water :(net of sound in water =1531 m/s given)

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8. A child hears an echo from a cliff 4 seconds after the sound from a powerful cracker is

produced. How far away is the cliff from the child? Velocity of sound in air at $20^{\circ}C$is 344 m/s :

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9. How does the sound produced by the vibrating object in a medium reach your ear ?

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10. Explain how sound is produced by your school bell ?

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11. Why are sound waves called mechanical waves ?

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12. Suppose you and your friend are on the moon. Will you be able to hear any sound produced by your friend ?

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13. Which wave property determines: Loudness.

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14. Which wave property determines: pitch.

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15. Guess, which sound has a higher pitch : guitar or a car horn ?

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16. What are wavelength, frequency, time period and amplitude of a sound wae?

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17. How are the wavelength and frequency of a sound wave related to its speed ?

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18. Calculate the wavelength of a sound wave whose frequency is 220 Hz and speed is 40 m/s in a given medium.

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19. A person is listening to a tone of 500 Hz sitting at a distance of 450 m from the source of sound. What is the time interval between successive compressions from the source ?

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20. Distinguish between loudness and intensity of sound.

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21. In which of the three media, air, water or iron sound travel the fastest at a particular temperature ?

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22. An echo returned in 3 s. What is the distance of reflecting surface from the source ? Given that the speed of sound is $342 s^{-1}$.

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23. Why are the ceilings of concert halls curved?

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24. What is the audible range of average human ear?

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25. What is the range of frequencies associated with : infrasound ?

Watch Video Solution

26. What is the range of frequencies associated with: ultrasound?

Watch Video Solution

27. A submarine emits a sonar pulse, which returns from underwater cliff in 1.02 s. If the speed of sound in salt water is $1531 ms^{-1}$ how far away is the cliff ?

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28. What is sound and how is it produced ?

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29. Describe with the help of diagram, how compressions and rarefactions are produced in air near a source of sound ?

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30. Cite an experiment to show that sound need a material medium for its propagation?

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31. Why is sound wave called longitudinal wave?

Watch Video Solution

32. Which characteristic of the sound help you to identify your friend by this voice while sitting with others in a dark room.

Watch Video Solution

33. Flash and thunder are produced simultaneously. But thunder is heard a few seconds after the flash is seen. Why?

Watch Video Solution

34. A person has a hearing range from 20 Hz to 20 KHz. What is the typical wavelength of sound waves in air corresponding to these frequencies ? Take the speed of sound in air as $344ms^{-1}$.

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35. Two children are at opposite ends of an aluminium rod. One strikes the end of the rod with a stone. Find the ratio of times taken by the sound wave in air and in aluminium to reach the second child. Velocity of sound in air and aluminium is $340ms^{-1}$ and $6420ms^{-1}$ respectively.

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36. The frequency of source of sound is 100 Hz. How many times does it vibrate in a minute ?

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37. Does sound follow the same laws of reflection as light does ? Explain.

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38. When a sound is reflected from a distant object, an echo is produced. Let the distance between the reflecting surface and the source of sound production remains the same. Do you hear echo sound on a hotter day ?

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39. Give two practical applications of reflection of sound waves.

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40. A stone is dropped from the top of a tower 500 m high into a pond of water at the base of the tower. When is the splash heard at the top ? Given, $g = 10ms^{-2}$ and speed of sound = $340ms^{-1}$.

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41. What is reverberation ? How can it be reduced ?

Watch Video Solution

42. What is loudness of sound ? What factors does it depend on ?

Watch Video Solution

43. Explain how bats use ultrasounds to catch a prey ?

Watch Video Solution

44. How is ultrasound used for cleaning ?

Watch Video Solution

45. Explain the working and applications of SONAR.

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46. A sonar device on a submarine sends out a signal and receives an echo 5s later. Calculate

the speed of sound in water if the distance of the object from submarine is 3,625 m.

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47. Explain how defects in a metal block can be detected using ultrasound ?

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48. Explain how the human ear works.

Watch Video Solution

49. Sound is produced by vibratory motion, explain why then a vibrating pendulum does not produce sound?

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50. An explosion takes place at the bottom of a lake.What type of waves are produced inside the water?

Watch Video Solution

51. Why are the ceilings of concert halls curved?

Watch Video Solution

52. Represent graphically by two separate diagrams in each case. Two sound waves having different ampltiudes and also different wavelengths.

Watch Video Solution

53. Represent graphically by two separate diagrams in each case. Two sound waves having the same frequecy but different amplitudes?

Watch Video Solution

54. Represent graphically by two separate diagrams in each case. Two sound waves having different ampltiudes and also different wavelengths.

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55. Establish the relationship between speed of sound , its wavelength and frequency. If velocity of sound in air is 340 m/sec , calculate frequency when wavelength is 0.85 m

Watch Video Solution

56. Establish the relationship between speed of sound , its wavelength and frequency. If

velocity of sound in air is 340 m/sec , calculate frequency when wavelength is 0.85 m

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57. Draw a curve showing density or pressure variations with respect to distance for a disturbance produced by sound. Mark the position of compression and rarefaction on this curve. Also define wavelengths and time period using this curve :

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58. The frequency of a source is of sound 40 Hz. How many times does it vibrate in half a minute?

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59. An echo is heard after 4s. What is the distance of reflecting surface from the source, given that the speed of sound is $342ms^{-1}$.

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60. A baby recognizes her mother by her voice. Name the characteristics of sound involved.

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61. How are wavelength, speed and time period related for a sound wave?

Watch Video Solution

62. Name two devices using multiple reflections of sound.

Watch Video Solution

63. A sound wave of frequency 3kHz and a wavelength of 45 cm. How long will it take to travel 1.8 km?

Watch Video Solution

64. When a sound is reflected from a distant object, an echo is produced. Let the distance between the reflecting surface and the source of sound production remains the same. Do you hear echo sound on a hotter day ?

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65. Draw a graph showing a person with soft and loud voice.

Watch Video Solution

66. What is echo-ranging?

Watch Video Solution

67. The sound of explosion on the moon cannot be heart on earth, why?

Watch Video Solution

68. A person is listening to a tone of 500 Hz sitting at a distance of 450 m from the source of sound. What is the time interval between successive compressions from the source ?

Watch Video Solution

69. Differentiate between crest and trough.

Watch Video Solution

70. When a person uses deodorant spray, the other person standing at a distance would hear the sound of spraying first and the fragrance of spray would reach him later. Why so?

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71. Can we get echo in a small room?

Watch Video Solution

72. Give one advantage and one disadvantage of reverberation.

Watch Video Solution

73. Give three medical uses of ultrasound.

Watch Video Solution

74. Give example of multiple echoes.

Watch Video Solution

75. Explain how ultrasound is used to clean spiral tubes and electronic components.

Watch Video Solution

76. Name the physical quantity whose unit is hertz.

Watch Video Solution

77. Sound is produced by vibratory motion, explain why then a vibrating pendulum does not produce sound?

Watch Video Solution

78. Waves of special frequencies are used for cleaning hard to reach places. Name the waves.

Watch Video Solution

79. Waves of special frequencies are used for cleaning hard to reach places. What is the frequency of these waves?

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80. Which wave property determines: Loudness.

Watch Video Solution

81. List the three characteristics of sound waves. State the factors on which each of these characteristics depends.

Watch Video Solution

82. Represent graphcically two sound waves having the same amplitude but different frequencies.

Watch Video Solution

83. Seema went to an opera house. She appreciated its architecture and furnishing. The curved ceiling draperies, cushions and curtains were perfectly place. She also saw sound board behind the stage. She now wondered if each of these accessories were placed for the sake aesthetics of the hall or had a scientific reason too. What is the purpose of curtains, cushions and draperies in an opera house?

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84. Seema went to an opera house. She appreciated its architecture and furnishing. The curved ceiling draperies, cushions and curtains were perfectly place. She also saw sound board behind the stage. She now wondered if each of these accessories were placed for the sake aesthetics of the hall or had a scientific reason too. How does curved ceiling and sound board help?

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85. Seema went to an opera house. She appreciated its architecture and furnishing. The curved ceiling draperies, cushions and curtains were perfectly place. She also saw sound board behind the stage. She now wondered if each of these accessories were placed for the sake aesthetics of the hall or had a scientific reason too. List some characteristic qualities of Seema.

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86. A student plucks a stretched string. What type of waves are produced in the string ?.

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87. For measuring the speed of the pulse through a string. The jerk gives to be string be light or strong?

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88. Sonia a student of class IX was going on a picnic by a bus. Her friend Sania took out her I-Pod and started listening songs at full volume. She went-on and on with her listening. After 30 minutes Sonia asked Sania to switch off her I-Pod. What is the range of audible frequency?

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89. Sonia a student of class IX was going on a picnic by a bus. Her friend Sania took out her I-

Pod and started listening songs at full volume. She went-on and on with her listening. After 30 minutes Sonia asked Sania to switch off her I-Pod. Why did Sonia asked Sania to switch off her I-Pod.

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90. Sonia a student of class IX was going on a picnic by a bus. Her friend Sania took out her I-Pod and started listening songs at full volume. She went-on and on with her listening. After

30 minutes Sonia asked Sania to switch off her I-Pod. What are the values shown by Sonia?

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91. A girl Ankita felt severe itching in her ear while sitting in the classroom. To rest her itching she icked up a pencil and put its sharp end ito the ear canal. Her friend Sonia asked her not to do so, instead go to first adi room for help as the pointed end could damage her

eardrum.

Where is the eardrum located?

Watch Video Solution

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eardrum.

What are the values shown by Sonia?

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Exercise

1. In which of the three media, air, water or iron sound travel the fastest at a particular temperature ?

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2. Which wave property determines: Loudness.

Watch Video Solution

3. Which wave property determines: pitch.

Watch Video Solution

4. Which as higher pitched voice : male or female?

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5. Sound waves cannot travel through _____.

Watch Video Solution

6. Speed greater than the speed of _____ is known as supersonic speed.

Watch Video Solution

7. Temperature has no effect on speed of sound in air. (T or F)

Watch Video Solution

8. Sound is produced by a ..... body.

Watch Video Solution

9. The frequency of a source on sound is 256 Hz. It vibrates _____ times in a second.

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10. Frequency of infrasonic waves > Frequency of ultrasound waves. (T or F)

Watch Video Solution

11. Give two examples in which a vibrating object produces sound.

Watch Video Solution

12. What is supersonic speed?

Watch Video Solution

13. Define frequency.

Watch Video Solution

14. Define intensity.

Watch Video Solution

15. Define quality.

16. Make a list of different types of musical instruments and find the part of the instrument which vibrates to produce sound.

17. Name two sound waves inaudiable to human beings. Give their range of frequencies

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18. SONAR stands for _____

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19. Can we get echo in a small room?

Watch Video Solution

20. Name the phenomenon responsible for rolling of thunder.

Watch Video Solution

21. The good directional property of ultrasound waves are used for _____.

Watch Video Solution

22. Due to the high power of ultrasound waves, it is used for breaking and cutting objects. (T or F)

Watch Video Solution

23. The multiple reflection of sound in a hall is called _____

Watch Video Solution

24. What are laws of reflection of sound ? Give three applications of reflection of sound.

Watch Video Solution

25. What is the minimum distance of the obstacle from the source of sound for hearing distinct echo ?

Watch Video Solution

26. What is reverberation ? How can it be reduced ?

Watch Video Solution

27. What is ultrasound?

Watch Video Solution

28. Give some properties of ultrasound.

Watch Video Solution

29. Write a short note on human lungs.

Watch Video Solution

30. What are applications of ultrasound ?

Watch Video Solution

31. The eardrum is a

A. coiled tube

B. bone

C. fluid

D. a stretched membrane

Answer:

Watch Video Solution

32. An object moving at a speed greater than that of sound is moving at

A. ultrasoic speed

B. sonic speed

C. supersonic speed

D. infrasonic speed

Answer:

Watch Video Solution

33. Loudness of sound is related to

A. frequency

B. speed

C. amplitude

D. none

Answer:

Watch Video Solution

34. In a wave motion transfer, which of the following takes place?

A. energy only

B. momentum only

C. both energy and momentum

D. neither energy nor momentum

Answer:

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35. In which of the following medium does sound travel faster?

A. solid

B. liquid

C. gas

D. both solid and liquid

Answer:

Watch Video Solution

36. Sound waves cannot pass through

A. solid

B. liquid

C. gas

D. vacuum

Answer:

Watch Video Solution

37. The distance between a consecutive crest and trough is x. Then wavelength of the wave is

A. 2x

B. $\frac{x}{2}$

C. x

D. 4x

Answer:

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38. The velocity of sound in air at room temperature

A. $332ms^{-1}$

B. $468ms^{-1}$

C. $232ms^{-1}$

D. $618ms^{-1}$

Answer:

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39. The upper limit of frequency of sound waves audible to human beings are

A. 5 Hz

B. 20 Hz

C. 20,000 Hz

D. 35,000 Hz

Answer:

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40. The wave pulse can be produced on a roped whose one end is fixed

A. By giving a single jerk to the other end

B. By giving more jerks to the other end.

C. By giving continuous jerks

D. Either (a) or (b) or (c)

Answer:

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41. Wave transfers a physical quantity 'X' from one place to another, where 'X' is

A. Mass

B. Velocity

C. Energy

D. Density

Answer:

Watch Video Solution

42. Find out which of the following statements regarding sound is false?

A. sound waves are longitudinal waves

B. sound is a form of energy

C. sound travels in form of wave

D. sound travels faster in vacuum than in air

Answer:

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43. What is a wave or wave motion ?

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44. Define time period. How is time period related to frequency?

Watch Video Solution

45. Define amplitude of a wave.

Watch Video Solution

46. How is sound produced?

Watch Video Solution

47. Can sound travel in vacuum?

Watch Video Solution

48. What is quality of sound?

Watch Video Solution

49. What is the minimum distance of the obstacle from the source of sound for hearing

distinct echo ?

Watch Video Solution

50. What is the minimum distance between the observer and the reflecting suface to hear an echo?

Watch Video Solution

51. What is reverberation ? How can it be reduced ?

Watch Video Solution

52. What is ultrasound?

Watch Video Solution

53. Write the full form of SONAR.

Watch Video Solution

54. Name the disease that can be caused by UV rays.

Watch Video Solution

55. If 20 waves are proeduced per second. What is the frequency in Hertz?

Watch Video Solution

56. Give classification of waves on the basis of movement of particles.

Watch Video Solution

57. What are the important properties of a medium required for propagation of sound wave?

Watch Video Solution

58. Give two examples in which a vibrating object produces sound.

Watch Video Solution

59. What is a Stethoscope? How does it work?

Watch Video Solution

60. What is the use of a megaphone?

Watch Video Solution

61. Give some properties of ultrasound.

Watch Video Solution

62. What are the uses of ultrasonic sound?

Watch Video Solution

63. Make a list of different types of musical instruments and find the part of the

instrument which vibrates to produce sound.

Watch Video Solution

64. Define the term time-period of a wave.

Watch Video Solution

65. Give relation among the speed of sound v, wavelength λ and frequency v.

Watch Video Solution

66. A sound wave travels at a speed of $339 ms^{-1}$. If its wavelength is 1.5 cm, what is the frequency of the wave ? Will it be audible ?

Watch Video Solution

67. An echo is returned in 6 seconds. What is the distance of the reflecting surface from source.

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68. 20 waves pass through a point in 2 seconds. If the distance between one crest and adjacent through it 1.5m, calculate the frequency

Watch Video Solution

69. 20 waves pass through a point in 2 seconds. If the distance between one crest and adjacent through it 1.5m, calculate wavelength.

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70. Sound is produced when school bell is struck with a hammer. Why?

Watch Video Solution

71. Which characteristic of the sound help you to identify your friend by this voice while sitting with others in a dark room.

Watch Video Solution

72. A body is vibrating 6000 times in one miute. If the velocity of sound in air is $360ms^{-1}$. Find frequency of vibration in hertz

Watch Video Solution

73. A body is vibrating 6000 times in one miute. If the velocity of sound in air is $360ms^{-1}$. Find wavelength of the wave produced.

Watch Video Solution

74. What is echo ranging? State one application of this technique.

Watch Video Solution

75. Differentiate between transverse waves and longitudinal waves.

Watch Video Solution

76. What are importat characterstics of wave? Define them.

Watch Video Solution

77. List three factors which influence water potential.

Watch Video Solution

78. How the bats make use of ultrasonic waves to catch their prey? Explain.

Watch Video Solution

79. Calculate the wavelength of a sound wave whose frequency is 220 Hz and speed is 40 m/s in a given medium.

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80. Why are cannot hear an echo in a small room?

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81. A wave moves a distance of 8 m in 0.05 s. Find the velocity of the wave.

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82. A wave moves a distance of 8 m in 0.05 s. What is the wavelength of the wave if its frequency is 200 Hz?

Watch Video Solution

83. State a condition for an echo to be heard.

Watch Video Solution

84. Bats cannot see then how do they catch their prey.

Watch Video Solution

85. A sound wave travels at a speed of $339ms^{-1}$. If its wavelength is 1.5 cm, what is the frequency of the wave ? Will it be audible ?

Watch Video Solution

86. How does the sound produced by the vibrating object in a medium reach your ear ?

Watch Video Solution

87. State the characteristics of wave motion.

Watch Video Solution

88. Give some uses of ultrasound.

Watch Video Solution

89. Explain the working of SONAR.

Watch Video Solution

90. Describe the human ear.

Watch Video Solution

91. What is the wavelength corresponding to a freqency of 200 Hz. Given the speed of sound

in air is $344ms^{-1}$

Watch Video Solution

92. Calculate the wavelength of a sound wave whose frequency is 220 Hz and speed is $440ms^{-1}$ in a given medium.

Watch Video Solution

93. A person clapped his hands near a cliff and heard the echo after 5 s. What is the distance

of the cliff from the person if the speed of the sound v is taken as $346ms^{-1}$?

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94. Find the frequency of a wave whose time-period is 0.001 second?

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95. A sound wave creates oscillation in air at a place 1000 times in 100 secons. Find the time

period and frequency.

Watch Video Solution

96. A sound wave travels at a speed of $339ms^{-1}$. If its wavelength is 1.5 cm, what is the frequency of the wave ? Will it be audible ?

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97. A bat hears the echo of its squeak after 0.1 s. How far is the obstacle from the bat? Speed

of sond is 344 m/s.

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98. Note is a sound

A. of mixture of several frequencies

B. of mixture of two frequencies only

C. of a single frequency

D. always unpleasant of listen

Answer:

Watch Video Solution

99. A key of a mechanical paino struck gently and then struck again but much harder this time. In the second case.

A. sound will be louder but pitch will not be different

B. sound will be louder and pitch will also be higher

C. sound will be louder but pitch will be loawer

D. both loudness and pitch will remains unaffected

Answer:

Watch Video Solution

100. In SONAR, we use

A. ultrasonic waves

B. infrasonic waves

C. raido waves

D. audible sound waves

Answer:

Watch Video Solution

101. Sound travels in air if

A. particles of medium travel from one place to another

B. there is no moisture in the atmophere

C. disturbance moves

D. both particles as well as distrubance travel from one place to another

Answer:

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102. When we change feeble sound to loud we increase its

A. frequency

B. aplitude

C. velocity

D. wavelength

Answer:

Watch Video Solution

103. Earthquake produces which kind of sound before the main shock wave begins

A. ultrasound

B. infrasound

C. audible sound

D. none of the above

Answer:

Watch Video Solution

104. Infrasound can be heard by

A. dog

B. bat

C. rhinoceros

D. human beings

Answer:

105. Before playing the orchestra in a musical concert, a sitarist tries to adjust the tension and pluck the strign suitably. By doing do, he is adjusting

A. intensity of sound only

B. amplitude of sound only

C. frequency of the sitar string with the frequency of other musical instruments

D. loudness of sound

Answer:

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106. The total energy of a particle executing smple harmonic motion of amplitude 'A' is proportional to

A. A^2

B. A^{-2}

C. A

D. 1/A

Answer:

Watch Video Solution

107. The frequency of a source of sound is 50 Hz. How many times does it vibrate in one minute?

A. 50

B. 300

C. 3000

D. 30000

Answer:

Watch Video Solution

108. A key of a mechanical paino struck gently and then struck again but much harder this time. In the second case.

A. sound will be louder but pitch will not be different

B. sound will be louder and pitch will also be higher

C. sound will be louder but pitch will be loawer

D. both loudness and pitch will remains unaffected

Answer:

Watch Video Solution

109. The intensity of sound wave gets reduced by 20% on passing through a slab. The reduction in intensity on passing through two consecutive slabs is

A. 0.4

B. 0.36

C. 0.3

D. 0.5

Answer:

Watch Video Solution

110. Sound travels the fastest in

A. aluminium

B. water

C. hydrogen

D. oxygen

Answer:

Watch Video Solution

111. A person clapped his hands near a cliff and heard the echo after 5 s. What is the distance of the cliff from the person if the speed of the sound v is taken as $346ms^{-1}$?

A. 17.1 m

B. 17.2 m

C. 17.3 m

D. 34.6 m

Answer:

Watch Video Solution

112. The frequency of seconds pedulum is

A. 0.5 Hz

B. 1.0 Hz

C. 2.0 Hz

D. 1.5 Hz

Answer:

Watch Video Solution

113. A source emits sound of frequency 600 Hz inside water. The frequency heard in air will be

A. 300 Hz

B. 120 Hz

C. 600 Hz

D. 6000 Hz

Answer:

Watch Video Solution

114. Distance between a consecutive crest and trough is 5 cm. The wave length of wave is

A. 10 cm

B. 2.5 cm

C. 20 cm

D. 1.25 cm

Answer:

Watch Video Solution

115. In which part of the ear are sound waves amplified?

A. Cohclea

B. Middle ear

C. Outer ear

D. Inner ear

Answer:

Watch Video Solution

116. Which of the following help in the communication between two astronatus on the moon?

A. Light waves

B. Sound waves

C. Radio waves

D. A face-to-face talk

Answer:

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117. A marine survey ship sends a sound wave straight to the sea bed. It detects an echo 4.0

s later. What is the approximate depth of the sea?

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118. What is the least time interval required to hear a distinct echo?

A. 0.3 s

B. 0.1 s

C. 0.5 s

D. 20 s

Answer:

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119. Which of the following statements about sound waves is correct?

A. Sound waves are not affected by the medium through which it travels

B. Sound waves travel faster in air than in liquid

C. Sound waves travel faster in solid than in air

D. Sound waves cannot travel through a solid

Answer:

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120. The regions of compressions and rarefractions of sound wave are established because

A. the sound wave undergoes diffraction behind obstacles

B. the reflected sound wave at fixed end interferes with the incident wave.

C. the longitudianl movement of air molecules produce pressure fluctuations

D. the speed of the sound wave changes as it travels through a medium

Answer:

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121. Identify the longitudinal waves from the following.

A. Light waves

B. Radio waves

C. Ultrasonic waves

D. Surface water waves

Answer:

Watch Video Solution

122. A wave source produces 10 oscillations in 100 ms . Find the time period of the wave

A. 1 second

B. 0.01 second

C. 10 second

D. 0.1 second

Answer:

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123. What does a wave transfer?

Watch Video Solution

124. Differentiate between crest and trough.

Watch Video Solution

125. Why are cannot hear an echo in a small room?

Watch Video Solution

126. Mention the types of mechanical waves. Identify the type which can be produced in solids, liquids and gases.

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127. Draw graph for a wave representing wave disturbances and time for a sound changing from low pitch to high pitch, keeping amplitude of the sounds same.

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128. When does the ear drum of human ear vibrate?

Watch Video Solution

129. List three points which an engineer should use while designing an auditorium.

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130. A man fires a rifle in front of a cliff and hears the echo after 3 seconds. Calculate the distance of the man form if velocity of sound in air is 340 m/s.

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131. Waves of special frequencies are used for cleaning hard to reach places. Name the waves.

Watch Video Solution

132. Waves of special frequencies are used for cleaning hard to reach places. What is the frequency of these waves?

Watch Video Solution

133. Waves of special frequencies are used for cleaning hard to reach places. Explain how do these waves perform this work.

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134. In SONAR, we use

A. ultrasonic waves

B. infrasonic waves

C. Radio waves

D. audible sound waves

Answer:

 Watch Video Solution

135. When we change feeble sound to loud we increase its

A. frequency

B. aplitude

C. velocity

D. wavelength

Answer:

Watch Video Solution

136. A pulse is generated at one end of the slinky of length 10 m. The pulse returns back to its point of generation in 10 seconds. The velocity of the pulse in the slinky will be

A. 4m/s

B. 3 m/s

C. 2 m/s

D. 1 m/s

Answer:

137. A longitudinal pulse is produced in a slinky. The frequency of the pulse is 60 Hz and it travel at a speed of 30cm/s . The separation between consecutive compression is

A. 90 cm

B. 0.5 cm

C. 2 cm

D. 1.25 cm

Answer:

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