



PON VIDYASHRAM GROUP OF CBSE SCHOOLS

PERIODIC TEST - 2 (2017-2018)

CLASS: IX

WORKSHEET - 1

SUBJECT: PHYSICS

ANSWER THE FOLLOWING:

A. Very Short Answer Type Questions

1. What is a note?

Ans.

2. On what factor, does the loudness of a sound depend?

Ans.

3. Which has a higher pitch—guitar or car-horn?

Ans.

4. 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 sound is 346 m/s?

Ans.

5. If an explosion takes place at the bottom of lake, what type of shock waves in water will take place?

Ans.

6. What kind of waves are used in SONAR?

Ans.

7. Earthquake produces which kind of sound before the main shock waves begins?

Ans.

8. How long sound persists in our ears?

Ans.

9. Which property of a wave determines (a) loudness (b) pitch?

Ans.

10. Name the different forms of wave motion.

Ans.

11. Name two physical quantities involved in the motion of sound in a medium.

Ans.

B. Short Answer Type Questions

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

Ans.
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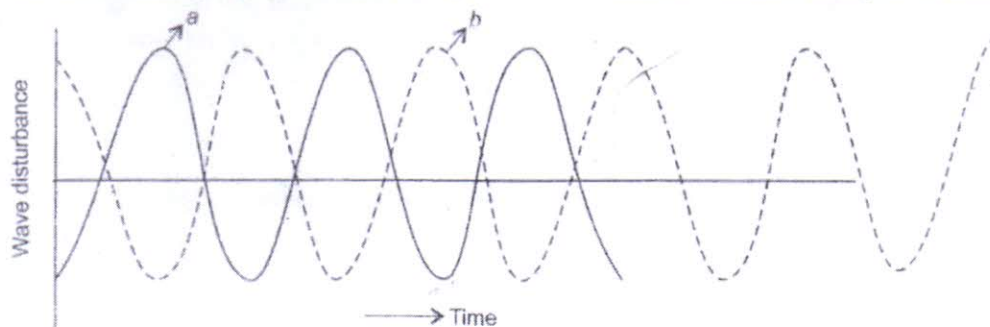
2. A human heart beats 75 times in a minute. Calculate its frequency.

Ans.
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3. Why is the ceilings and walls behind the stage of good conference halls made curved?

Ans.
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4. Which of the below two graphs (a) and (b) represent the human voice is likely to be male voice?



Ans.
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5. What is the difference between supersonic and ultrasonic?

Ans.
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CLASS: IX

WORKSHEET - 2

SUBJECT: PHYSICS

ANSWER THE FOLLOWING:

1. A person has a hearing range from 20 Hz to 20 kHz. What are the typical wavelengths of sound waves in air corresponding to these two frequencies? (Speed of sound = 344 m/s)

Ans.

2. If any explosion takes place at the bottom of a lake, what type of shock waves in water will take place?

Ans.

3. A boy stands at one end of a corridor, both the doors of which are closed. When he claps his hands together, the echo of the hand clap continues for a few seconds with decreasing loudness. Why?

Ans.

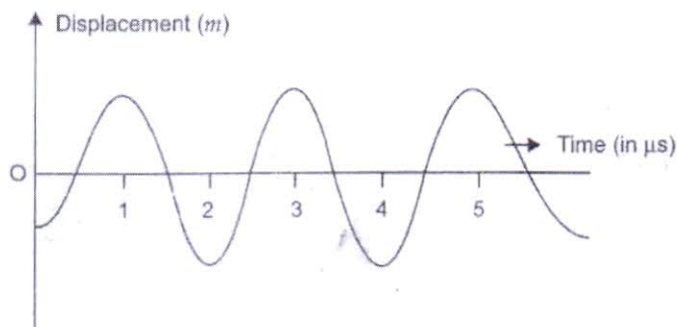
4. Audio frequency range of a human ear is 20 Hz to 20,000 Hz. Express the range in terms of time-period.

Ans.

5. Why is soft furnishing avoided in concert halls? The grandparents and parents of a two-year old girl are playing with her in a room. A sound source produces a 28 kHz sound. Who in the room is most likely to hear the sound?

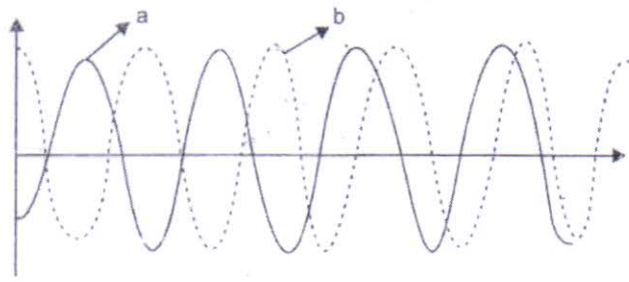
Ans.

6. The given graph shows the displacement versus time relation for a disturbance travelling with velocity of 1500 m/s. Calculate the wavelength of the disturbance.



Ans.
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7. Which of the two graphs (a) and (b) given below represent the human voice is likely to be the male voice? Give reason for your answer.



Ans.
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