Chapter 13: Sound

Exercise | Q 1.1 | Page 96
Fill in the blank with the proper word.
The propagation of sound does not occur through a _____.

SOLUTION

The propagation of sound does not occur through a **vacuum**.

Exercise | Q 1.2 | Page 96
Fill in the blank with the proper word.
Noise pollution is a _____ issue.

SOLUTION

Noise pollution is a **social** issue.

Exercise | Q 1.3 | Page 96
Fill in the blank with the proper word.
The sound which is disagreeable to the ears is called _____.

SOLUTION

The sound which is disagreeable to the ears is called **noise.**

Exercise | Q 1.4 | Page 96
Fill in the blank with the proper word.
Noise has adverse effects on our _____.

SOLUTION

Noise has adverse effects on our **health**.

Exercise | Q 2.1 | Page 96
What should we do?
The silencer of a motorcycle is broken.

SOLUTION

If the silencer of a motorcycle is broken, then take the motorcycle to a mechanic and get it reinstalled or repaired.

Exercise | Q 2.2 | Page 96
What should we do?
A factory in the surroundings is producing continuous loud noise.

If a factory in the surroundings is producing continuous loud noise, then we can lodge a complaint against the factory to a local government body citing the troubles faced by the residents around and the danger it is causing to the environment.

Exercise | Q 3.1 | Page 96
Write the answer in your own words.
What is meant by vibration?

SOLUTION

The to and from motion of a body about its mean position is known as vibration.

Exercise | Q 3.2 | Page 96
Write the answer in your own words.
Explain with the help of practical examples how sound is propagated through solids.

SOLUTION

Sound is propagated in the form of waves in solids. It can be explained clearly from the below examples:

- Place your ear on one end of a long table. Ask your friend to tap the table from the other end. You can hear the produced sound. Sound reaches your ear after travelling through the table. This indicates that sound can travel through solids and in the form of waves.

- Stethoscope is another example of sound travelling through solids. Doctors use stethoscopes to listen to our heartbeat.

Exercise | Q 3.3 | Page 96

What is meant by noise pollution?

SOLUTION 1

The disturbance produced in the environment due to undesirable loud and harsh sound of level above 120 dB from the various sources such as loudspeaker, moving vehicles etc. is called noise pollution.

SOLUTION 2

Noise pollution is the excess of unwanted sound in the environment. It can adversely affect human and other living beings health.

Exercise | Q 3.4 | Page 96
Write the answer in your own words.
What measures will you take to control noise pollution?

Following measures can be taken to control noise pollution:

- To control noise pollution, we must control its source. Hence, silencers must be installed in vehicles such as motorcycles, cars, trucks, buses, and other noise producing machines.

- We should watch television and listen to music at a low volume. Also, use of loudspeakers as well as horns of buses and trucks should be minimized.

- Regular maintenance of automobiles should be done so that noise produced by them can be kept under check.

- All industrial work should be done away from residential areas.

- More trees should be planted in residential areas as they help in reducing noise.

Exercise | Q 4 | Page 96
Complete the table.

Nature of sound	Unpleasant	Pleasant
Speaking		
Whispering		
Aeroplane sounds		
Horns of Vehicles		
Railway Engine		
Rustling of leaves		
Neighing of a horse		
Ticking of a clock		

Nature of sound	Unpleasant	Pleasant
Speaking		Pleasant
Whispering		Pleasant
Aeroplane sounds	Unpleasant	

Horns of Vehicles	Unpleasant	
Railway Engine	Unpleasant	
Rustling of leaves		Pleasant
Neighing of a horse	Unpleasant	
Ticking of a clock	Unpleasant	