Name: _____ Date: _____

Sound

Q1.   What is the frequency of a vibrating body whose time-period is 0.05 second?

Ans.   _____

_____

_____

Q2.   By how much will the loudness of a sound change when the amplitude of vibrations is: (a) doubled? (b) halved?

Ans.   _____

_____

_____

_____

Q3.   Your parents are going to buy a house. They have been offered one on the roadside and another three lanes away from the roadside. Which house would you suggest your parents should buy? Explain your answer.

Ans.   _____

_____

_____

_____

Q4.   Explain in what way noise pollution is harmful to humans.

Ans.   _____

_____

_____

_____

Sound

Q1. What is the frequency of a vibrating body whose time-period is 0.05 second?

Ans. Time period = 1/(Frequency of Oscillation)

Or Frequency = 1/ Time period

= 1/0.05 second = 20 Hz

Q2. By how much will the loudness of a sound change when the amplitude of vibrations is: (a) doubled? (b) halved?

Ans. (a) If the amplitude of vibrations is doubled, then the loudness will become four times.

(b) If the amplitude of vibrations is halved, then the loudness will become one-fourth.

Q3. Your parents are going to buy a house. They have been offered one on the roadside and another three lanes away from the roadside. Which house would you suggest your parents should buy? Explain your answer.

Ans. I would suggest my parents to buy the house which is three lanes away from the roadside because being away from the road will reduce noise pollution caused by heavy traffic on the road. The intensity of noise decreases with the distance between the source and the listener.

Q4. Explain in what way noise pollution is harmful to humans.

Ans. Presence of excessive noise in the surroundings may cause many health related problems. Lack of sleep, hypertension (high blood pressure), anxiety and many more health disorders may be caused by noise pollution. A person who is exposed to a loud sound continuously may get temporary or even permanent impairment of hearing.