Q1. MCQ Based Questions:

(a) The number of oscillations per sound is called its:

1. Frequency 2. Amplitude 3. Loudness 4. Pitch

(b) The loudness of sound depends on its:

1. Frequency 2. Amplitude 3. Time Period 4. Pitch

(c) Frequency of sound determines its:

1. Amplitude 2. Loudness 3. Pitch

Q2. Give Reasons for the following:

A. Why is there a difference in voices of men, women and children?

B. Trees must be planted on roadsides and along buildings. Why?

C. We cannot hear sounds above 20,000hz . Why?

Q3. Fill Ups:

1. The to and from motion of an object is called _____.
2. In human the sound is produced by _____.
3. ____ is a thin membrane in ear that vibrates to produce sound.
4. Unpleasant sounds are called _____.
5. The unit of frequency is _____.

Q4. Explain how sound is produced in humans?

Q5. Give an activity to show that sound cannot travel through vacuum.

Q6. What is the relation between loudness and amplitude of sound?

Q7. Case Based Question:

In March 2011, the Union government set up the National Ambient Noise Monitoring Network (NANMN) through CPCB and the state pollution control boards (SPCBs) to monitor noise on a 24×7 basis in India's seven largest cities.

(1) What is the need of such a control board?

(2) List some methods that can be followed to control Noise Pollution?

(3) What is the difference between noise and music?

Q8. Source Based Question:

Outer ear collects sound waves and channels them into the ear canal, where the sound is amplified. The sound waves then travel toward a flexible, oval membrane at the end of the ear canal called the eardrum. Sound waves cause the eardrum to vibrate and passes the vibrations to three small bones in the middle ear. These bones amplify the vibrations and pass them on to the inner ear. The inner ear sends the signals to the brain.

(1) What causes the eardrum to vibrate?

(2) We must never put any sharp object in our ear. Why?

(3) Complete the sequence to show travelling of sound in our ears:

Outer Ear : _____ : _____ : Middle Ear : _____ : Brain