

CHAPTER 13

SOUND

Range of audible sound:

The human ear can hear the sounds if their frequencies are between the range of 20 Hz to 20,000 Hz.

< 20 Hz – Inaudible by the human ear, and is called Infrasonic.

> 20 KHz – Inaudible by the human ear, and is called Ultrasonic.

Noise and Music:

The sounds, which are unpleasant to the ear, are called noise. For example,

- Sounds from the horns of buses,
- Sounds produced by crackers,
- A number of people that are talking with each other.

The sounds which are pleasant to the ears are called Musical sounds.

Ex. Melodious singing, Musical instruments.

Noise pollution:

The presence of excessive or unwanted sounds causes noise pollution. The common causes of noise pollution are machines, loudspeakers, high volumes in radio & television, air conditioners, crackers, etc.

Noise pollution causes health-related problems such as high blood pressure, anxiety, lack of sleep, etc., and could lead to impairment of hearing.

To reduce noise pollution, all vehicles should have proper silencers, the use of automobile horns must be minimized, and trees must be planted on roadsides, which act as sound absorbers.