Physics - 10th Class Physics English Medium Chapter 11 Preparation

Q1. Difference Between the loudness and intensity of sound.

Ans 1: Loudness: i. Characteristics of sound by which we can distinguish between loud and faint Sounds is called loudness.
ii. It is not physical quantity.

Ans 2: Intensity os Sound: i. Sound energy passing per second through a unit area held perpendicular to the direction of propagation of sound waves is called intensity of sound.
ii. It is physical quantity. Its unit is Wm-2

Q2. What is musical sound?

Ans 1: Sounds which are pleasant to our ears are called musical sounds. e.g. sounds of guitar and violin.

Q3. What are sources of noise pollution?

Ans 1: Transportation equipment, heavy machinery, loud vehicles horns and alarms are the source of noise pollution.

Q4. What is diaphragm?

Ans 1: the chest piece consists of a plastic disc called diaphragm in stethoscope.

Q5. Why ultrasound is useful in medical field?

Ans 1: Ultrasonic waves carry more energy and short wavelength therefore ultrasonic waves are used to diagnose and treat different ailments.

Q6. Define wavelength of sound wave.

Ans 1: Distance between two consecutive compressions or rarefactions is called the wavelengths of sound wave.

Q7. What is frequency.

Ans 1: The number of vibration s per cycle of a vibrating body n one second is called frequency.

Q8. Define loudness? On what factors loudness depends.

Ans 1: "Loudness is the characteristics of sound by which loud and faint sounds cab be distinguished". Loudness depends upon a number of factors. Such as.
i. Amplitude of the vibrating body
ii. Araa of the vibrating body
iii. Distance from the vibrating body
iv. Physical condition of ear.

Q9. Difference between frequency and pitch.

Ans 1: Frequency: The number of vibration completed in one second is called frequency. Its unit is hertz.(Hz)

Ans 2: Pitch: Pitch is the characteristics of sound by which we can distinguish between a shrill and grve sound. It has no unit.

Q10. Why the voice of women is shriller than that of men?

Ans 1: The frequency of the voice of ladies is higher than that of men.There fore, the voice of ladies is shrill and of high pitch.
