Physics - 10th Class Physics English Medium Chapter 10 Preparation

Q1. Define refraction.

Ans 1: When waves from one medium enter in the second medium at some angle their direction of travel may change.this phenomenon is called refraction of waves.

Q2. Give relation between frequency and time period?

Ans 1: The relation between frequency and time period is given below.
f=I/T

Q3. What is wave equation?

Ans 1: The relation between the velocity, frequency and wavelength of wave is known as wave equation. i.e. v = f lamda

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Q4. What is the displacement of an object in SHM when K.E. and P.E. are equal?

Ans 1: In simple harmonic motion when K.E. and P.E. are equal then the displacement will be the half of amplitude of vibrating body.

Q5. Define simple harmonic motion?

Ans 1: Simple harmonic motion occurs when the net force is directly proportional to the displacement from the mean position and always directed towards the mean position.

Q6. What is ripple tank?

Ans 1: Ripple tank is a device to produce water waves and to study their properties. Like reflection, refraction and diffraction.

Q7. What is reflection?

Ans 1: When waves moving in one medium fall on the surface of another medium they bounce back into the first medium such that the angle or incidence is equal to the angle of reflection. This phenomenon is called reflection of waves.

Q8. What is time period?

Ans 1: The time taken by vibrating body to complete its one vibration is called time period. .It is denoted by T. Its unit is second.

Q9. Difference between longitudinal and transverse waves with suitable example.

Ans 1: Transverse waves: Waves in which particles of medium move perpendicular to the direction of propagation of waves are called transverse waves.
Example: Water waves.

Ans 2: Longitudinal waves: Waves in which particles of medium move parallel along the direction of propagation of waves are called.
Example: Waes of sound in air.

Q10. What is meat by wave front?

Ans 1: Wave front: The parts of waves where the motion of all particles of medium is same, these parts are called wave fronts.
Example: Crests.