Physics - 10th Class Physics English Medium Chapter 10 Preparation

Q1. Difference between mechanical and electromagnetic waves. Give examples of each.

Ans 1: Mechanical waves: Wave which require any material medium for their propagation are called mechanical waves.
Example: i. Water wave
ii. Sound waves

Ans 2: Electromagnetic waves: Wave which don't require any material medium for their propagation are called electromagnetic waves.
Example: i. X-Rays ii. Light waves

Q2. 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.

Q3. How can you define term wave?

Ans 1: Wave: A wave is disturbance in the medium which causes the particles of medium to undergo virbratory motion about their mean position in equal intervals of time.

Q4. Define vibration?

Ans 1: One complete round trip of vibrating body abut its mean position is called one vibration.

Q5. Define frequency?

Ans 1: The number of vibration or cycle of a vibrating body in one second is called its frequency.
It is reciprocal of time period i.g. f = I/T

Q6. 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.

Q7. Define amplitude?

Ans 1: The maximum displacement of a vibrating body on either side from its mean position is called amplitude. OR the distance

between mean position and extreme position is called amplitude.

Q8. 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.

Q9. 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.

Q10. Think several examples of motion in every day life that are simple harmonic.

Ans 1: i. Motion of pendulum clock ii. Motion of Ball in bowl
iii. Motion of spring iv. Motion of the prong of the tuning fork.
