

Physics - 10th Class Physics English Medium Chapter 10 Preparation

Q1. 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
Q2. 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.
Q3. Give relation between frequency and time period?
Ans 1: The relation between frequency and time period is given below. f=\/T
Q4. 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 = VT
Q5. Define vibration?
Ans 1: One complete round trip of vibrating body abut its mean position is called one vibration.
Q6. 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.
O7. What is most by ways 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.

Q8. 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.

Q9. Describe the structure of ripple tank/

Ans 1: Ripple tank consist of a rectangular tray having glass bottom and is placed nearly half meter above the surface of a table. Waves can be produced on the surface of water present in the tray by means of a vibrator.

Q10. 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.