

Terminology of wave motion →

(1) Time Period ( $T$ ) → This is the time to complete one vibration.

$$\text{Time Period} = \frac{1}{\text{frequency } (n)}$$

$$\text{then } \boxed{T = \frac{1}{n}}$$

(2) Intensity → Intensity is denoted by ~~(I)~~ 'I'. The energy transferred by a wave in unit time, perpendicular to the direction of its propagation from the unit area, is known as wave intensity. ∴ Intensity ( $I$ )  $\propto |A|^2$

Here The intensity of a wave is proportional to the square of the wave's amplitude.

(3) Amplitude ( $A$ ) → The  $A$  of the wave is the maximum displacement of a particle of the medium from its equilibrium position.