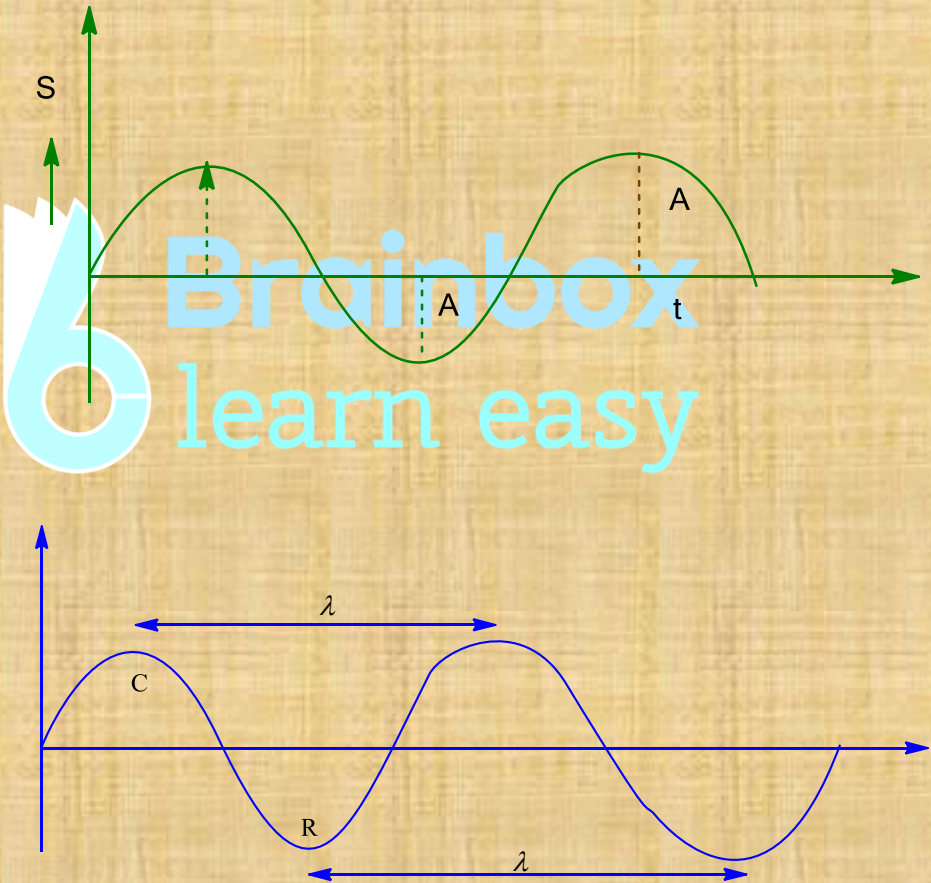


Chapter 13

SOUND

MATHEMATICAL REPRESENTATION OF WAVE:



Mathematical representation of variation of displacement of medium particle with time and position as,

$$S(x, t) = S_m \sin(kx - \omega t)$$

S_m = Displacement amplitude

$$k = \frac{2\pi}{\lambda}, \omega = 2\pi f$$

