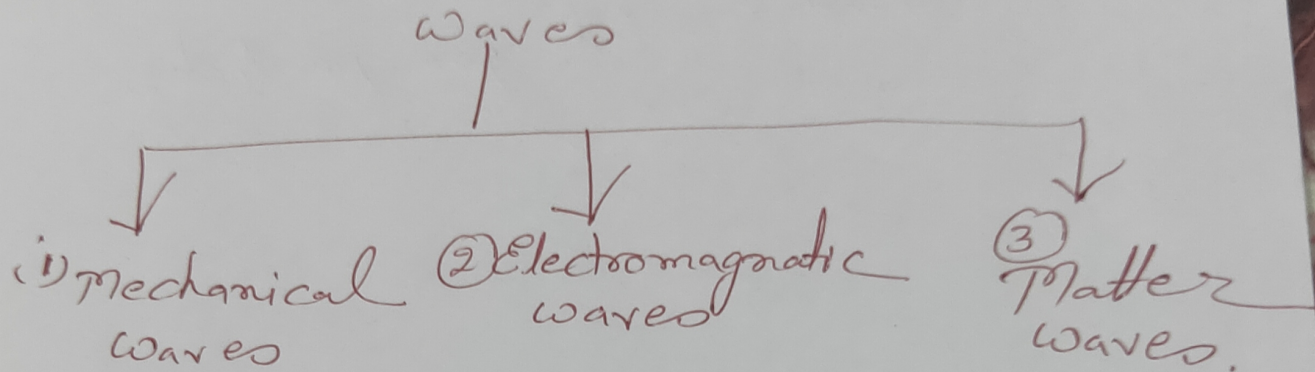


Wave :-

A wave is a vibratory disturbance in a medium which carries energy from one point to another point without any actual movement of the medium.



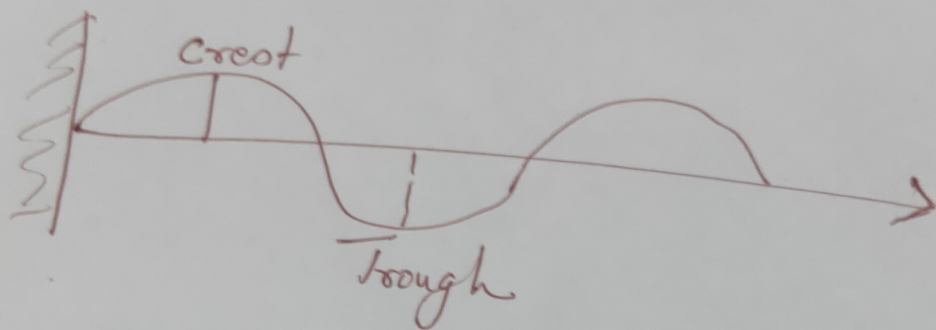
(1) Mechanical waves :- These waves which required a material medium for their propagation, are called mechanical waves, e.g. Sound waves, water waves etc.

(2) Electromagnetic waves :- These waves which do not require a material medium for their propagation are called electromagnetic waves, eg. light waves, radio waves etc.

(3) Matter waves :- These waves are commonly used in modern technology but they are unfamiliar to us, these waves are associated with electrons, protons & other fundamental ~~part~~ particles.

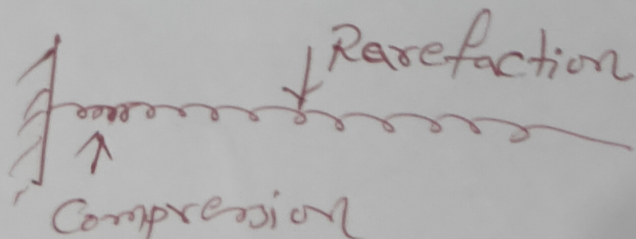
Nature of waves: -

① Transverse waves: - A wave in which the particles of the medium vibrate at right angles to the direction of propagation of waves, is called a transverse wave.



These waves travel in the form of crests & troughs.

② Longitudinal waves: - A wave in which the particles of the medium vibrate in the same direction in which wave is propagating, is called a longitudinal wave.



These waves travel in the form of compressions & rarefactions.