

Date
07/02/24

B.Sc
Sem III, Unit III

* Wave front \rightarrow :

\rightarrow A wave front is an imaginary surface representing corresponding points of a wave that vibrate in unison.

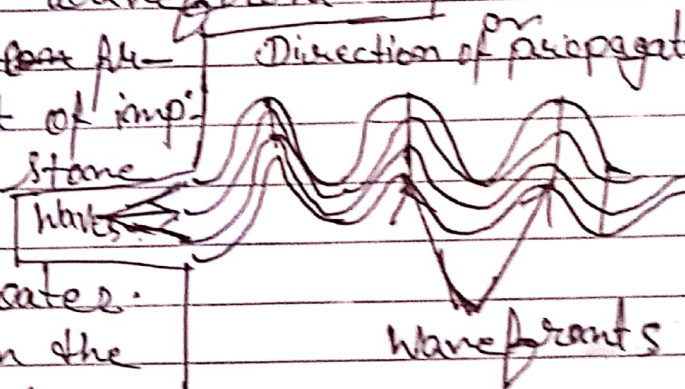
\rightarrow A wave front is the set of all locations in a medium where a wave is at the same phase. ~~It is~~ This could be where all the ~~crest~~ crests are, where all the troughs are, or any ~~of~~ phase in between.

* Example of wave front \rightarrow

\rightarrow Wave propagation from the point of impact a small stone is dropped into a still pool of water.

every point on the ground begins to oscillate. A snapshot

of the ground at any one time would capture the circular rings where the disturbance is greatest. Since each point on a circle is at the same distance to the source, it is obvious that they are all oscillating in phase. Thus a wave front is a group of points that oscillate in phase and is described as a surface with continuous phase.



* \rightarrow There are three types of wave front.

- (1) Spherical wave front \rightarrow
- (2) cylindrical wave front \rightarrow
- (3) plane wave front \rightarrow