Ques 9: Polarisation of Light :-

Answer :- [redacted]

→ According to wave theory of Huygens, the light waves are of two types :-
① Longitudinal waves.
② Transverse waves.

→ When Huygens discovered the phenomenon of polarisation, on basis of longitudinal waves. Then, after 140 yrs after Huygens, Fresnel proved after that the wave of light are transverse and not longitudinal.

→ According to polarisation - Experiment with tourmaline crystal, which proves that the rays of light are transverse.

→ Thus, Vibration of the light wave happens,

in only one plane ⊥ to the wave motion. Such waves are known as plane organised polarised waves & this phenomenon is known as "Polarisation of light".

→ In Exp.t, Crystal A that polarises light waves is known as "polariser" & B that analyses light waves whether the light is polarised or not, is known as "Analyser."