

(Start from definition of Polarization)

1. Mechanical Experiment showing Polarization
2. Plane Polarized light, Ordinary or Natural light is Unpolarized, Representation of Unpolarized and Polarized light
3. Methods for Production of Polarized light
 - (1) By Reflection (Brewster's Law)
 - (ii) Its explanation & Detection by Experiment
 - (2) By Refraction (Pile of Plates)
 - (3) By Scattering
4. Law of Malus
5. Double Refraction
6. Types of Crystal
7. Nicol Prism
8. Negative & Positive Crystals
9. Optical Rotation
10. Polarimeters
11. Laurent's Half shade Polarimeter

Unit - 4

Theory of Specific Heat of Solid

- ① What are three different models
 - Dulong Petit's Model
 - Einstein Model
 - Debye Model
- ② Dulong & Petit's Law
- ③ Derivation of Dulong & Petit's Law
(Complete)
- ④ Einstein Theory
(Complete)
- ⑤ Failure of Einstein Theory
- ⑥ Assumptions of Debye Model (Do not do proof)
- ⑦ Success of Debye Model
- ⑧ Limitations of Debye Model