**Assignment 4: Geometry and Construction of Nicol Prism**

Nicol prism is mainly used for the purpose of producing as well as analysing plane polarised light.

Double refraction is the phenomenon associated with it.

Construction:

The base material is calcite crystal (ABCD).

Length is three times that of breadth.

End faces - AB and CD cut in a way that the principal section angles come to 68° and 112°.

Then, crystal is cut in a diagonal manner generating two parts; surfaces made flat and polished nicely.

Polished surfaces are then joined with Canada Balsam (a type of special cement).

