

M. Sc. GEOLOGY FIRST SEMESTER

Paper – II
102

Mineralogy

Code: Geol

Unit- I

Polarized light, Nicol prism and working of petrological microscope. Study of orthoscopic and conoscopic properties of minerals. Optical accessories and their use. Uniaxial and biaxial indicatrix and interference figures.

Unit- II

Systematic mineralogy- structure, mineral chemistry, P.T. stability, Physical and optical properties, mode of occurrence of Olivine, garnet, pyroxene and amphibole group of minerals.

Unit- III

Study of Mica, feldspar, silica and nepheline group of minerals with respect to their chemical composition, crystal structure, P-T stability, physical and optical properties and mode of occurrence.

Unit- IV

Mineralogical study of non-silicates such as spinel, sulfide, sulfate, halides, Phosphate and carbonate (calcite, aragonite, dolomite) group of minerals.

Unit- V

Study of precious and semiprecious minerals. Introduction to X-Ray, Bragg's Law Application of X-ray to the study of minerals.