

CC-II (Common core-II) Theory-Crystallography and Mineralogy

Block-I Crystallography

Unit-1 Introduction to Crystallography and classification of crystals

Unit-2 Isometric (Cubic), Tetragonal and Hexagonal Systems

Unit-3 Orthorhombic, Monoclinic and Triclinic systems

Block-II Mineralogy

Unit-4 Introduction to mineralogy

Unit-5 Classification of minerals

Unit-6 Physical and Chemical properties of minerals

Block-III Mineral families

Unit-7 Neso, Soro, and Cyclo silicates

Unit-8 Ino, Phyllo and Tecto silicates

Unit-9 Other groups of minerals

Block-IV Optical Mineralogy

Unit-10 Scope and development of Optical mineralogy

Unit-11 Description of polarizing Microscope

Unit-12 Optical Properties of Minerals

Core Course - II Practical - Crystallography and Mineralogy

Block - I - Crystallography

Unit - 1 Concepts of Crystallography

Unit - 2 Identification of Crystal Models of Isometric (Cubic) System

Unit - 3 Identification of Crystal Models of Tetragonal and Hexagonal Systems

Unit - 4 Identification of Crystal Models of Orthorhombic, Monoclinic and Triclinic Systems

Block - II - Mineralogy

Unit - 5 Physical Properties of Minerals

Unit - 6 Megascopic Identification of minerals: Olivine, Garnet, Tourmaline, Beryl, Hypersthene, Enstatite, Augite, Diopside, Anthophyllite, Tremolite, Actinolite, Hornblende, Muscovite, Biotite, Orthoclase, Microcline, Plagioclase, Sodalite, Leucite, Quartz, Chalcedony, Opal, Beryl, Natrolite, Kyanite, Calcite, Corundum, Barytes, Talc, Apatite, Gypsum

Unit-7 Description of Polarizing Microscope

Unit-8 Microscopic identification of minerals: Olivine, Garnet, Hypersthene, Augite, Hornblende, Muscovite, Biotite, Orthoclase, Microcline, Plagioclase, Sodalite, Calcite, Apatite, Quartz.