

Syllabus for Geology for Engineers: (Tentative no. of lectures: 35)

How elements are formed and finally distributed and concentrated over the Earth at specific places depending on their chemical affinity (2). Internal structure of the Earth and large-scale processes responsible for first order element partitioning (2). What are the tectonic/lithospheric plates and how they shaped the Earth using internal heat source (2). Geological time scale, relative and absolute dating, and important geological events (3). Classification of minerals and their formation pathways from magma (3). How different types of magma and their crystallization process cause element/mineral partitioning (2). Classification of Igneous, Sedimentary, and Metamorphic rocks, their texture and properties (8). Coal: An organic sedimentary rock, its texture, structure, properties and formation through sedimentary processes (3). Importance of rock type, pressure, and temperature for forming geological structures through brittle-ductile style of deformation (2). Classification of the geological structures like fold, faults, joints etc. and where and how do they form (3). How knowing the structure of the rock body helps in making a successful exploration strategy (1). Stereonet and its utility in understanding-interpretation-representing structural data/map (2). Mineral/coal/petroleum resource map of India and why they are there (2).