GEOLOGY

PAPER : 1 (PHYSICAL GEOLOGY & CRYSTALLOGRAPHY)

CO	COURSE OUTCOMES	LEVEL
CO1	Demonstrate and understand to characterize the planet for the good development of the subject and understanding of Earth's genesis and make a time line	L4
CO2	Recognize different factors to govern the exogenic and endogenic processes of earth and can recognize the weathering, agents, rate of erosion and different landforms	L3
CO3	Recognize the erosional and depositional land forms by geological action of Ground water and Seas; and can recognize the erosional, Transportational and depositional landforms by geological action of Rivers, Wind and Glaciers	L4
CO4	Estimate the intensity of damage, prediction and methods of estimation by the dynamic action of Volcanoes, earthquakes, Tsunamis, Landslides and other Geological hazards and recognize the relationship between plate tectonics and magma originated rocks	L4
CO5	Recognize symmetry elements, crystal classes and morphology and can recognize the difference between different crystal classes	L2

PAPER : 2 (MINERALOGY & OPTICAL MINERALOGY)

CO	COURSE OUTCOMES	LEVEL
CO1	To Study minerals and rocks and measure them by their optical properties.	L3
CO2	To understand how Mineralogy and Optical Mineralogy are used to identify the mineralogical composition of geological materials in order to help reveal their origin and evolution.	L2
CO3	To study the rocks and minerals samples in the laboratory with a petrographic microscope	L3
CO4	To use the knowledge of Optical mineralogy to identify the mineralogical composition of geological materials in order to help reveal their origin and evolution.	L1

PAPER : 3 (PETROLOGY)

CO	COURSE OUTCOMES	LEVEL
CO1	To know the basics of formation of Igneous rocks, Sedimentary rocks origin, structure and composition of the Igneous rocks.	L2
CO2	To know about the origin, structure and composition of the Sedimentary rocks.	L4
CO3	To understand the significance of igneous petrology which is closely related to volcanology	L2
CO4	To have the knowledge about Metamorphic petrology with emphasis on the chemical and physical work done in natural systems in response to changing physical conditions.	L1

PAPER : 4 (Structural Geology, Paleontology & Stratigraphy)

CO	COURSE OUTCOMES	LEVEL
CO1	To understand the concepts of Structural geology - three dimensional distribution of large bodies of rocks, it is concerned with the study of rock layer and layering.	L2
CO2	To interpret stress and kinematic histories from structural measurements.	L3
CO3	To know about the relative position of strata and their relationship to the geological timescale	L2
CO4	To gain knowledge on the analysis of the order and position of layers of archaeological remains.	L3
CO5	To define and understand the terms and roles of palaeontologist	L2
CO6	To understand how the Paleontology helps in in knowing the history of organic life on earth.	L2

PAPER : 5 (INDIAN GEOLOGY & ECONOMIC GEOLOGY)

CO	COURSE OUTCOMES	LEVEL
CO1	To know about the Geology of India, i.e.,origin, age, type, place and distribution of Stratigraphic succession of India.	L2
CO2	To know about the kinds and features of rock masses, mineral deposits, mineral fuels including coal and oil resources occur in India.	L2
CO3	To have knowledge on Economic geology which is the study of the formation and extraction of earth materials that have some economic potential in society.	L2
CO4	To identify important ore-forming minerals, textures, and structures in hand sample and in the field.	L3
CO5	To Compare and contrast the principal ore-forming processes: magmatic, hydrothermal, and sedimentary.	L4
CO6	To use observed characteristics of an ore deposit to develop a genetic model for its origin	L5

PAPER : 6 (GROUNDWATER GEOLOGY, MINERAL EXPLORATION & ENGINEERING GEOLOGY)

CO	COURSE OUTCOMES	LEVEL
CO1	To have fundamental knowledge on the occurrences of the ground water, and its application in the irrigation and domestic purposes and able to use suitable data to calculate the exploitable storage, specific yield and specific retention of an aquifer.	L3
CO2	To have thorough knowledge of the types of rock that usually make good aquifers, and assess how good an aquifer a rock could be, given its porosity and hydraulic conductivity	L4
CO3	To use the knowledge to develop an exploration strategy for an ore deposit based on a genetic model.	L3
CO4	To understand the role played by a geologist in mining rocks and his pivotal role in the economy of the nation	L2
CO5	To know about the purpose of mineral exploration - the discovery and acquisition of new mineral deposit amenable to economic extractive operations now or in future.	L2
CO6	To make interpretation of land forms and earth processes to identify potential geologic and related manmade hazards that may impact civil structures and human development.	L4

PAPER : 7 (Environmental Geology, Remote Sensing & GIS)

CO	COURSE OUTCOMES	LEVEL
CO1	To have knowledge on the relation between Geology and environment and how to use the knowledge of Geology to prevent the natural disasters and protect the environment	L3
CO2	To apply the knowledge of Geology in understanding the reasons for environmental problems	L3
CO3	To have knowledge on Remote Sensing and GIS - studying mapping of geological characteristics of regions without physical contact with the areas being explored.	L2
CO4	To analyse the principles and components of photogrammetry and remote sensing.	L4
CO5	To compute an image visually and digitally with digital image processing techniques.	L3
CO6	To study about the application of knowledge of remote sensing and GIS in different civil engineering activities	L3