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GIS 404: FUNDAMENTALS OF EARTHSCIENCES

Skills, employability and entrepreneurship: Students admitted from deferent disciplines are provided bride type of basics/fundamental of Earth Sciences. Students learn about the formation and properties of minerals and rocks. Therefore, tis course will help students to identify better quality materials for the constructions dimensional and decorative stones for major civil engineering structures. Students exit out of this course have skills to work in industries related to earth resources, agricultural and soil survey and public works. They will be exposed to start their own entrepreneurship. This course may also be helpful in various government exams, including NET, SET, GATE, and other similar tests.

Unit 1	Introduction**:** Formation of the earth, composition of earth crust, mantle and core. Plate tectonics, Major and Minor plates, continental drift and ocean floor spreading.	08 hrs
Unit 2	Mineralogy: Introduction to important Rock forming Minerals.	08 hrs
Unit 3	Outlines of Igneous Rocks: Intrusive and Extrusive igneous rocks, Granite, diorite, gabbro, pegmatite, peridotite, dolerite, basalt, andesite, dacite, obsidian, pumice, rhyolite, scoria and tuff etc.	08 hrs
Unit 4	Outlines of Metamorphic Rocks: Contact and regional matamorphism, Important metamorphic rocks: Gneiss, Schist, Quartzite, Granulites, Marble, Slate, etc.	08 hrs
Unit 5	Outlines of Sedimentary Rocks: Origin of sediments. Breccia, Conglom-erate, Sandstone, Limestone, Shale, Morphology & Origin of Laterites.	08 hrs
Unit 6	Structural Geology: Primary and Secondary Structures. Folds, Faults, Joints & Unconformities.	08 hrs

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