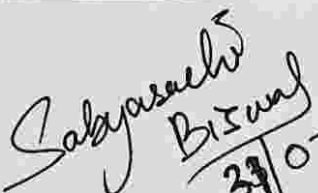


LESSON PLAN

Discipline: Drilling Engineering		Semester: 3rd Semester	Name of the Teaching Faculty: Sabyasachi Biswal (PTGF)	
Subject: Engineering Geology - I Sub code: Th.3		No of days /week class allotted: 02	Semester from Date: 01/08/2023 to 30/11/2023 No of weeks: 19	
Month	week	No of periods available	Class Day	Theory topics to be covered
AUGUST	1 st	02	NA	NA
	2 nd	2P	07.08.2023	Introduction about Geology & Scope of Geology in Drilling Field.
			07.08.2023	<u>Elements of Mineralogy</u> <u>Silicate structure</u> What is silicate structure, neso-silicate, soro-silicate.
	3 rd	2P	14.08.2023	<u>Silicate structure</u> Cyclo-silicate, phyllo-silicate, tecto-silicate.
			14.08.2023	Physical properties of Quartz group of minerals.
	4 th	2P	21.08.2023	Physical properties of Feldspar group of minerals
			21.08.2023	<u>Various optical properties of minerals.</u> • Birefringence, • uniaxial minerals, • biaxial minerals. Isotropic, anisotropic,
	5 th	2P	28.08.2023	<u>Various optical properties of minerals.</u> • Extinction, pleochroism, interference colour. refractive index, double refraction,
			28.08.2023	CLASS TEST-I
SEPTEMBER	6 th	02P	NA	NA
	7 th	02P	04.09.2023	<u>Surface processes causing rock disintegration</u> Weathering and different types of weathering. Physical weathering ,Chemical weathering ,Biological weathering
			04.09.2023	Erosion, difference between erosion and weathering
	8 th	02P	11.09.2023	<u>Erosional land forms produced by wind;</u> Introduction & process of wind erosion, Desert pavement, Hamada, blow-out, yardang
			11.09.2023	<u>Erosional land forms produced by wind;</u> • ventifacts, • mushroom rock, • cave rock
	9 th	02P	18.09.2023	<u>Depositional land forms produced by wind;</u> Introduction about how wind deposits the sediments. Loess
			18.09.2023	Sand dunes; its formation and types: longitudinal dunes, transverse dunes, barchans, parabolic dunes, star dunes

	10 TH	02P	25.09.2023	<u>Land forms produced by river;</u> Introduction, river profile, ideas about process of river erosion,
			25.09.2023	CLASS TEST-II
OCTOBER	11 th	NA	NA	NA
	12 th	2P	09.10.2023	Internal Assessment.
			09.10.2023	
	13 th	2P	16.10.2023	<u>Erosional land forms produced by river;</u> Potholes, river valley, gorges & canyon. Escarpment, dip slope, cuesta, hogback
			16.10.2023	<u>Erosional land forms produced by river;</u> Mesa & butte, water-fall, peneplain, pediplain, river-terraces,
	14 th	2P	30.10.2023	wadies, Flood plain deposits, meanders & ox-bow lake.
			30.10.2023	<u>Depositional land forms produced by river;</u> How the river deposits sediments Alluvial fans & cones, Natural levee, Braided river, Delta.
	NOVEMBER	15 th	NA	NA
16 th		2P	06.11.2023	Process of glacier erosion Introduction about glacier movement, difference between ice, snow, glacier What is ice-berg? Difference between glacier & ice-berg. <u>Erosional features produced by glacier;</u> Cirque, arete, horn, cols, U-shape valley, Hanging valleys, tarn, nunatak, crag & tails,
			06.11.2023	Roche mountains, glacial stairway, glacial groves, fiords, paternoster lake.
17 th		2P	13.11.2023	<u>Depositional land forms produced by glacier;</u> How glacier deposits sediments, till, erratic, drumlins, basket-egg topography.
			13.11.2023	<u>Moraine & its types;</u> Ground moraine, End moraine, terminal moraines, medial moraine, lateral moraine, recessional moraine.
18 th		2P	20.11.2023	Previous Year Semester Question Discussion Revision & Doubt Clearing Class.
			20.11.2023	DOUBT CLEARING CLASSES
19 TH		NA	NA	NA


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