

## LESSON PLAN

Discipline: <b>Drilling Engineering</b>		Semester: <b>4th semester</b>		Name of the Teaching Faculty: <b>Sabyasachi Biswal (PTGF)</b>	
Subject: <b>Engineering Geology-II</b> Sub code: <b>TH.3</b>		No of days /week class allotted: <b>02</b>		Semester from Date: <b>14/02/2023 to 23/05/2023</b> No of weeks: <b>16</b>	
Month	Week	No of periods available	Class Day	Theory topics to be covered	
FEBRUARY	1 <sup>st</sup>	NA	NA	NA	
	2 <sup>nd</sup>	02P	20.02.2023	<b>Briefing about the Syllabus.</b> Introduction /Most important topic taught in last semester	
			20.02.2023	<b>Fossil fuels</b> Coal & the different ranks of coal. 1)Peat 2)Lignite 3)Sub bituminous 4)Bituminous 5)Anthracite Different grades of coal viz.A,B,C,D	
			27.02.2022	<b>Chemical properties of coal.</b> 1)moisture content 2)volatile matter 3)fixed carbon 4)fuel ratio	
	3 <sup>rd</sup>	2P	27.02.2022	<b>Chemical properties of coal</b> 5)ash content 6)sulfur content 7)calorific value	
MARCH	4 <sup>th</sup>	NA	NA	NA	
	5 <sup>th</sup>	02P	06.03.2023	In-situ theories accounting for the origin of coal	
			06.03.2023	Drift theories accounting for the origin of coal	
	6 <sup>th</sup>	02P	13.03.2023	Description of different lower gondwana coal fields of India.	
			13.03.2023	Petroleum and its composition. Organic theories accounting for the origin of petroleum.	
	7 <sup>th</sup>	02P	20.03.2023	Inorganic theories accounting for the origin of petroleum	
			20.03.2023	Migration of petroleum.	
	8 <sup>th</sup>	02P	27.03.2023	<b>Monthly Test-01</b>	
			27.03.2023	Oil traps, its formation and types of oil traps. Oil pool and its formation	
APRIL	9 <sup>th</sup>	02P	03.04.2023	Process of accumulation of oil.	
			03.04.2023	Description of different important oil fields of India.	
	10 <sup>th</sup>	02P	10.04.2023	Sampling and assaying	

			10.04.2023	Methods of preparation of sample assay <b>TYPES OF SAMPLING</b> • Grab Sampling • Chip Sampling • Channel Sampling
	11 <sup>TH</sup>	02P	17.04.2023	<b>TYPES OF SAMPLING</b> • Bulk Sampling • Dump Sampling • Trench Sampling
			17.04.2023	Different methods of sampling outlined by BIS
	12 <sup>TH</sup>	02P	24.04.2023	<b>Prospecting and exploration</b> Definition of Prospecting and exploration & difference between exploration and prospecting.
			24.04.2023	Use of Multishot camera for Borehole direction test.
MAY	13 <sup>TH</sup>	02P	01.05.2023	Geological exploration.
			01.05.2023	Description of various criteria for geological exploration
	14 <sup>TH</sup>	02P	08.05.2023	Geophysical prospecting and Different methods of geophysical prospecting.
			08.05.2023	Different methods of geophysical prospecting.
	15 <sup>TH</sup>	02P	15.05.2023	Geo chemical prospecting and methods. Bio-geochemical & Geo botanical Prospecting.
			15.05.2023	<b>Previous year question &amp; Answer discussion</b>
	16 <sup>TH</sup>	NA	22.05.2023	<b>VERY SIMILAR TEST /MOCK TEST</b>
			22.05.2023	

*Sabyasachi Biswal*  
14/02/23

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