

GOVERNMENT POLYTECHNIC JAIPUR

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DEPARTMENT OF MINING ENGINEERING


LESSON PLAN

Discipline: MINING	Semester: 6th	Name of the Teaching faculty: SOMESH JENA	
Subject: MINING GEOLOGY- II	No of Days/Week class allotted: 4	Semester from Date: 04/02/25 No of weeks: 15	To Date: 17/05/25
Week	Class Day	Topics	
1st	1st	Describe the principles of stratigraphy.	
	2nd	Describe the geological time Scale.	
	3rd	Describe the stratigraphic sequence, lithology og iron ore series	
	4th	Distribution economic mineral deposits of Iron Ore series	
2nd	1st	Describe the stratigraphic sequence, lithology of Cuddpah supergroup .	
	2nd	Distribution & economic mineral deposits of Cuddpah Supergroup.	
	3rd	Describe the stratigraphic sequence, lithology of Vindhyan supergroup.	
	4th	Distribution & economic mineral deposits of Vindhyan Supergroup.	
3rd	1st	Describe the stratigraphic sequence, lithology of Gondwana supergroup.	
	2nd	Distribution & economic mineral deposits of Gondwana Supergroup.	
	3rd	Describe the different ranks of coal.	
	4th	Describe different grades of coal like A,B,C,D.	
4th	1st	Describe the various theories accounting for the origin of coal.	
	2nd	Describe various important lower gondwana Coalfields of India.	
	3rd	Describe the organic & inorganic theories accounting for the origin of petroleum.	
	4th	Describe the organic & inorganic theories accounting for the origin of petroleum.	
5th	1st	Define oil pool & oil trap, Describe process of accumulation of oil.	
	2nd	INTERNAL-1	
	3rd	Describe favorable conditions for accumulation of oil.	
	4th	Describe different important oil fields in India.	
6th	1st	Define prospecting	
	2nd	Differentiate between prospecting & exploration.	
	3rd	Differentiate between prospecting & exploration.	
	4th	Use of multi shot camera for borehole direction test.	
7th	1st	Use of multi shot camera for borehole direction test.	
	2nd	Enumerate & describe various criteria for geological exploration.	
	3rd	Enumerate & describe various criteria for geological exploration.	
	4th	Describe various methods of Geophysical prospecting.	
8th	1st	Describe various methods of Geophysical prospecting.	
	2nd	Describe various methods of Geophysical prospecting.	
	3rd	Explain Geochemical prospecting.	
	4th	Explain Geochemical prospecting.	
9th	1st	Differentiate between biogeochemical & geo botanical prospecting.	
	2nd	Differentiate between biogeochemical & geo botanical prospecting.	
	3rd	Define ore & gangue. Define tenor & grade.	

	4th	CLASS TEST
10th	1st	Describe the mineralogy, mode of occurrence of iron ore deposits in India .
	2nd	Describe the mineralogy, mode of occurrence of iron ore deposits in India .
	3rd	Describe the mineralogy, mode of occurrence of Chromites ore deposits in India .
	4th	Describe the mineralogy, mode of occurrence of Chromite ore deposits in India .
11th	1st	Describe the mineralogy, mode of occurrence of copper deposits
	2nd	Describe the mineralogy, mode of occurrence of copper deposits
	3rd	Distribution of copper deposit in india & uses of this metal
	4th	Describe the mineralogy, mode of occurrence of lead & zinc deposits in india.
12th	1st	Distribution of lead & zinc deposit in india & uses of this metal.
	2nd	UNFC (United Nation Framework of Classification) code of classification of reserves.
	3rd	UNFC (United Nation Framework of Classification) code of classification of reserves.
	4th	UNFC (United Nation Framework of Classification) code of classification of reserves.
13th	1st	UNFC (United Nation Framework of Classification) code of classification of reserves.
	2nd	Define sampling, outline the method of preparation of samples for assay.
	3rd	Define sampling, outline the method of preparation of samples for assay.
	4th	Explain sampling
14th	1st	Describe different methods of sampling as outlined by Bureau of Indian Standards (BIS)
	2nd	Describe different methods of sampling as outlined by Bureau of Indian Standards (BIS)
	3rd	INTERNAL 2
	4th	PREVIOUS YEAR QUESTION DISCUSSION
15th	1st	REVISION/DOUBT CLEARING CLASSES/REMEDIAL CLASSES
	2nd	REVISION/DOUBT CLEARING CLASSES/REMEDIAL CLASSES
	3rd	REVISION/DOUBT CLEARING CLASSES/REMEDIAL CLASSES
	4th	REVISION/DOUBT CLEARING CLASSES/REMEDIAL CLASSES

RECOMMENDED BOOKS

SL NO.	Name of	Title of Books
	Author	
1	M.S. Krishnan	Geology of India & Burma
2	N.L.Sharma,	An Introduction to geology of Coal & coalfields of India
	K.S.V.Ram	
3	A.I.Levorsen	Geology of petroleum
4	V.K.Kreiter	Geological prospecting & Exploration
5	A.K.Sen,	A Hand Book of economic geology
	P.K.Guha	
6	R.K. Sinha,	Mineral Economics
	N.L.Sharma	


Signature of Faculty