

Discipline Mining Engg.	Semester 3 rd	Name of the Teaching faculties Lilina Priyadarshinee Swain
Subject TH3 Mine Geology-I	No. of Days Per week class allotted 04	Semester From Date :- 15/09/2022 To Date :- 2/10/2023 No. of weeks :- 15
Week 1 st	Class Day	Theory
Physical Geology	1 st	Definition of weathering
	2 nd	Definition of erosion
	3 rd	with sketches the erosional land forms Produced by wind
	4 th	- do -
	5 th	- do -
	6 th	with sketches the depositional land forms Produced by wind
	7 th	- do -
	8 th	with sketches the erosional land forms Produced by river
	9 th	with sketches the erosional Depositional land forms Produced by river.
	10 th	- do -
11 th	1 st	Definition of glaciers and ice bergs
12 th	2 nd	Differentiate between glaciers and ice bergs.
13 th	3 rd	the erosional features Produced by glaciers.

4th	glacial depositional features produced by glacial
1st	Definition of Moraine
2nd	Different type of Moraine
3rd	- do -
4th	Definition of Rock
5th	Definition of Mineral
1st	Differentiate between Rock and Mineral
2nd	Definition of Igneous rocks
3rd	Various textures and structures found in igneous rocks
4th	Definition of sedimentary rocks
5th	Some important structures of sedimentary rocks along with sketches
1st	Definition of Metamorphic rocks
2nd	Various structures found in Metamorphic rocks

	3 rd	various structure found in metamorphic rocks.
Structural Geology	4 th	Definition of Dip. Distinguish between true dip and apparent dip.
5 th	1 st	Definition of strike
	2 nd	Definition of Gols, classification of Gols with description
	3 rd	Definition of faults, various types of fault
	4 th	Definition of unconformity, various type of unconformity
6 th	1 st	Definition of joints, various joints
Element of Crystallography	2 nd	Definition of crystal
	3 rd	Types of crystals.
	4 th	-do-
10 th	1 st	Introduction to Miller indices
	2 nd	Definition of crystallographic planes
	3 rd	Miller indices Definition
	4 th	Construction of Miller planes
11 th	1 st	Rules for Miller indices.

	2 nd	General principles of Miller indices.
	3 rd	Description of the symmetry elements
	4 th	Symmetry elements of isometric system
12 th	1 st	- do -
Element of Mineralogy	2 nd	Definition of a mineral
	3 rd	Physical Properties of Minerals
	4 th	- do -
13 th	1 st	Optical properties of minerals.
	2 nd	- do -
	3 rd	Silicate structures with diagrams.
	4 th	- do -
14 th	1 st	- do -
	2 nd	Classification of Minerals.
	3 rd	- do -
	4 th	Description of mineralogy
15 th	1 st	Physical Properties of Olivine group of minerals.

2nd

Physical Properties of Quartz group
of minerals

3rd

Physical Properties of Feldspar group
of minerals

4th

Physical Properties of Pyroxene group
of minerals.

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15/9/22