

Discipline : mining | Semester - 3rd | Name of the faculty :-

Subject :- mine geology | no. of classes allotted per week : 04 | no. of weeks - 15  
 From :- | To :-

week	class	Topics
1st	1st	→ Definition of weathering → Definition of erosion and produced erosional landforms
	2nd	→ Evolution of different type of erosion landform and their depositional landform hints
	3rd	→ Types of geomorphic agent and their work or effects on earth crust.
	4th	→ Erosional landform by wind.
2nd	1st	→ work of wind, → Erosion type of wind.
	2nd	→ Depositional landform by wind.

Week	Class	Topics
2nd	3rd	<ul style="list-style-type: none"> <li>→ work of stream</li> <li>→ erosion type by the stream</li> </ul>
	4th	<ul style="list-style-type: none"> <li>→ Different stages of running water.</li> <li>→ Depositional landform by stream.</li> </ul>
3rd	1st	<ul style="list-style-type: none"> <li>→ erosional landform and deposition landform by the agent of ground water.</li> </ul>
	2nd	<ul style="list-style-type: none"> <li>→ work of glacier</li> <li>→ <del>erosion</del> erosion work or causes of erosion by glaciers.</li> </ul>
	3rd	<ul style="list-style-type: none"> <li>→ erosional landform by erosion glacier.</li> <li>→ Depositional landform by glaciers.</li> </ul>
	4th	<ul style="list-style-type: none"> <li>→ Importance of glaciers in environment by climate change and their effect on earth.</li> <li>→ location of formation of glacier or ice sheet.</li> </ul>

week	class	Topic
4th	1st	→ Different type of erosion al landform by glacier.
		→ Distinguish between ice- berg and glacier.
	2nd	→ moraine and different types of moraine.
	3rd	→ Revision class.
	4th	→ Rock and their evolution of different types of rock leaf.
5th	1st	→ what is mineral and the work and uses in metal areas.
	2nd	→ igneous rock, various texture and structural Found in <del>igneous</del> igneous rock.
	3rd	→ The formation and work of igneous rock.
	4th	→ Definition of sedimentary rock.

week	class	Topic
6th	1st	<ul style="list-style-type: none"> <li>→ different type of texture and structural of sedimentary rock.</li> <li>→ importance of sedimentary rock</li> </ul>
	2nd	→ sketch diagram and various texture of sedimentary rock.
	3rd	<ul style="list-style-type: none"> <li>→ metamorphic rock</li> <li>→ evolution and various texture of metamorphic rock.</li> </ul>
	4th	→ production and their formation of metamorphic rock.
7th	1st	→ class test.
	2nd	<ul style="list-style-type: none"> <li>→ various texture found in metamorphic rock</li> <li>→ sketch diagram of metamorphic rock and what the mineral contain in metamorphic rock.</li> </ul>
	3rd	→ sketch diagram of metamorphic rock founds in earth crust.

week	class	TOPIC
7th	4th	<ul style="list-style-type: none"> <li>→ Define Dip</li> <li>→ mining ore deposits in the earth's crust.</li> </ul>
8th	1st	<ul style="list-style-type: none"> <li>→ what is strike.</li> <li>→ measurement of strike and dip geology.</li> </ul>
	2nd	<ul style="list-style-type: none"> <li>→ Distinguish between true dip and apparent dip.</li> <li>→ Definition of folds.</li> </ul>
	3rd	<ul style="list-style-type: none"> <li>→ what is fold and classify them and describe.</li> </ul>
	4th	<ul style="list-style-type: none"> <li>→ Definition of faults</li> <li>→ Describe the various types of faults</li> </ul>
9th	1st	<ul style="list-style-type: none"> <li>→ Define unconformity</li> <li>→ Define various types of unconformity with neat sketches</li> </ul>
	2nd	<ul style="list-style-type: none"> <li>→ Define joints and describe various joints</li> </ul>
	3rd	<ul style="list-style-type: none"> <li>→ Define crystals</li> <li>→ classification of crystals</li> </ul>

week	class	topics
9th	1st	→ Crystal structure of all elements and their unit cell.
10th	1st	→ Structure of metal and nonmetallic element. → What is metal, and their evolution.
	2nd	→ what is alloy and how to produce alloy in earth crust. → work of alloys
	3rd	→ what is crystal and types of crystal defect
	4th	→ Definition of crystal defects. → the technology to find the crystal defect.
11th	1st	→ Types of crystal bond. → Importance of crystal bonding.
	2nd	→ Definition of crystal growth. → growth from the solution
	3rd	→ Electric properties of crystals → conductivity of metal.

week	class	Topic
11th	1H6	<ul style="list-style-type: none"> <li>→ Explain miller's indices</li> <li>→ explaining crystal structure by miller's indices.</li> </ul>
12th	1st	→ Revision class
	2nd	<ul style="list-style-type: none"> <li>→ Crystallographic planes and their directions</li> <li>→ Use of hexagonal &amp; rhombohedral structure.</li> </ul>
	3rd	→ the symmetric and elements and forms present in the normal class of isometric system.
	4th	→ physical properties of mineral, what is mineral.
13th	1st	→ Enumerate and describe the physical properties of minerals
	2nd	<ul style="list-style-type: none"> <li>→ hardness properties of minerals</li> <li>→ various optical properties of minerals.</li> </ul>
	3rd	→ class test

week	class	Topic
13th	4th	→ explain the silicate structure along with diagrams.
14th	1st	→ explain silicate structure along with diagrams.
		→ Different types of mineral of silicate structure.
	2nd	→ Different types of mineral structure and properties of mineral crystal structure.
	3rd	→ Revision class.
	4th	→ practically test of metals by its mechanical properties of the minerals and crystal structure -
15th	1st	→ Doubt clearing class.
	2nd	→ describe mineralogy & physical properties of olivine & quartz.
	3rd	→ physical properties of feldspar & pyroxene.
	4th	→ mineralogy & physical properties of perovskite group.