Quadrant II – Transcript and Related Materials

Programme	**: Bachelor of Science (Third Year)**
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Paper Title	**: Mineralogy**
Unit	**: I**
Module Name	**: Description of Mineral Group – Mica 2**
Module No	**: 16**
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Glossary of terms/words:

1. Fuchsite	**:** also known as chrome mica, is a chromium (Cr) rich variety of the mineral muscovite, belonging to the mica group of phyllosilicates minerals, with the following formula: $K (Al, Cr)_2(AlSi_3O_{10})(OH)_2$
2. Lepidolite	**:** from the Greek "lepidos"--this means “scale”--because of its scaly appearance caused by flakes of lithium.
3. Zinwaldite	**:** a pale violet, yellow, brown, or dark grey mineral K_2 (Li, Fe, Al)$_6$(Si, Al)$_8O_{20}(OH,F)_4$ that consists of mica containing iron and lithium.
4. Optically negative	**:** Biaxial optical crystals differ in sign as follows: if the optical axis of the crystal forms a smaller angle with the axis Z of the indicatrix, the crystal is positive, and if the smallest angle formed with the axis X, then the crystal is optically negative
5. Refractive Index	**:** the ratio of the velocity of light in a vacuum to its velocity in a specified medium.
6. Volcanic rock	**:** is a rock formed from lava erupted from a volcano.
7. Phyllite	**:** a fine-grained metamorphic rock with a well-developed laminar structure, intermediate between slate and schist

8. Sericite : occurs as the fine mica that gives the sheen to phyllite and schistose metamorphic rocks.

9. Greenschist facies : is one of the major divisions of the mineral facies classification of metamorphic rocks. It refers to the low to medium metamorphic facies corresponding to temperatures of about 300–500°C and pressures of 3–20 kbar (crustal depths of 8–50 km).

10. Amphibolite facies : one of the major divisions of the mineral facies classification of metamorphic rocks, the rocks of which formed under conditions of moderate to high temperatures (500° C, or about 950° F, maximum) and pressures.

11. Schist : a coarse-grained metamorphic rock which consists of layers of different minerals and can be split into thin irregular plates.

12. Gneiss : a metamorphic rock with a banded or foliated structure, typically coarse-grained and consisting mainly of feldspar, quartz, and mica.

13. Lamprophyres : small volume ultrabasic igneous rocks primarily occurring as dikes, Lopolith, laccoliths, stocks and small intrusions.

14. Leucite : a potassium aluminosilicate mineral, crystallizing in the tetrahedral system and typically found as grey or white glassy trapezohedra in volcanic rocks.

15. Regional metamorphism : metamorphism affecting rocks over an extensive area as a result of the large-scale action of heat and pressure.

16. Norite : a coarse-grained plutonic rock similar to gabbro but containing hypersthene.

Possible misconceptions/clarification

Case Studies and Additional Examples/Illustrations