

Quadrant II – Transcript and Related Materials

Programme	: Bachelor of Science (First Year)
Subject	: Geology
Paper Code	: GEC-101
Paper Title	: Fundamentals of Mineral Science
Unit	: II
Module Name	: Classification of Silicates according to Structure
Module No	: 20
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Glossary of terms/words:

- 1. Silicate tetrahedron** : A silicon–oxygen tetrahedron is the SiO_4 anionic group, or a silicon atom with four surrounding oxygen atoms arranged to define the corners of a tetrahedron. This is a fundamental component of most silicates in the Earth's crust.
- 2 Covalent bonding** : Covalent bond, in chemistry, the interatomic linkage that results from the sharing of an electron pair between two atoms.
- 3. Olivine** : an olive-green, grey-green, or brown mineral occurring widely in basalt, peridotite, and other basic igneous rocks. It is a silicate containing varying proportions of magnesium, iron, and other elements.
- 4. Epidote** : a lustrous yellow-green crystalline mineral, common in metamorphic rocks. It consists of a basic, hydrated silicate of calcium, aluminium, and iron
- 5. Beryl** : a transparent pale green, blue, or yellow mineral consisting of a silicate of beryllium and aluminium, sometimes used as a gemstone.
- 6. Pyroxene** : any of a large class of rock-forming silicate minerals, generally containing calcium, magnesium, and iron and typically occurring as prismatic crystals.

- 7. Amphibole** : any of a class of rock-forming silicate or aluminosilicate minerals typically occurring as fibrous or columnar crystals.
- 8. Mica** : a shiny silicate mineral with a layered structure, found as minute scales in granite and other rocks, or as crystals. It is used as a thermal or electrical insulator.
- 9. Feldspar** : an abundant rock-forming mineral typically occurring as colourless or pale-coloured crystals and consisting of aluminosilicates of potassium, sodium, and calcium.
- 10. Quartz** : a hard mineral consisting of silica, found widely in igneous and metamorphic rocks and typically occurring as colourless or white hexagonal prisms. It is often coloured by impurities (as in amethyst, citrine, and cairngorm).