

Quadrant II – Notes

Programme: Bachelor of Science (First Year)

Subject: Geology

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Paper Title: Minerals and Rocks

Unit: Unit I

Module Name: Mineral habit (imitative form)

Module No: 07

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Notes:

Habit

- The term habit is used to denote the characteristic shapes of the crystals which is dependent on the shapes and sizes of the different crystals.
- Thus the term crystal habit refers to the relative development of individual faces and various forms in the crystal.
- The descriptive terms associated with the habit are: **prismatic, pyramidal and tabular**.
- If a crystal exhibits maximum development of prism forms, then it is said to display a **prismatic habit**.
- Similarly if a crystal exhibits maximum development of pyramids then it is referred to as showing **pyramidal habit**.
- While if the crystal shows maximum development of basal planes then it is said to develop a **tabular habit**.

Imitative forms:

- Minerals assume various indeterminate forms which are not necessarily dependent on the crystal characteristics.
- These forms are referred to as imitative forms and can be described using following terms which have their customary meaning:

Massive and granular: Applied to a mineral specimen totally lacking crystal faces and the mineral grains are approximately of equal size

Acicular/prismatic: Fine slender needle like crystals. E.g. natrolite, actinolite.

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Amygdaloidal: refers to almond shaped mineral masses which occur in cavities of rocks. E.g. zeolite group of minerals

Bladed: refers to platy structures which resemble knife blades

Botryoidal: from the Greek root *botrys*, meaning bunch of grapes. consisting of spheroidal aggregates which are displayed on a smaller scale by mutually interfering spheroidal surfaces.

Columnar: exhibiting a form which resemble slender columns.

Dendritic: branching tree like form normally produced by the deposition of the mineral in narrow planes.

Drusy: refers to the rough surface which is due to large number of closely arranged structures.

Fibrous: consisting of fine thread like strands.

Foliated/Foliateous: consisting of thin and separable lamelle.

Mammilated: from the latin word *mamma*, meaning breast; with an external form made up of rather large, rounded prominences

Pisolitic: consisting of rounded particles.

Radiating: showing crystals or fibers arranged around a central point. E.g. natrolite

Sheaf like: exhibiting aggregates which resemble the sheaves of wheat. E.g. stilbite