

Classification of Plants

Chapter 6: Classification of Plants · Topic 1

Key Concept

Plants are broadly classified as non-flowering (like ferns and mosses, reproducing via spores) and flowering (reproducing via seeds in flowers).

Non-vascular plants (like mosses) lack specialised tissues for transporting water, while vascular plants have xylem and phloem for transport.

Flowering plants are further divided into monocots (one seed leaf, like grass) and dicots (two seed leaves, like beans).

This classification system helps botanists study plant relationships, evolution, and characteristics systematically.

Quick Revision Notes

- Plants: non-flowering (spores) or flowering (seeds).
- Non-flowering examples: ferns, mosses.
- Non-vascular: no transport tissues (mosses).
- Vascular: xylem, phloem for transport.
- Flowering plants: monocots or dicots.
- Monocots: one seed leaf (grass).
- Dicots: two seed leaves (beans).
- Classification helps systematic plant study.

Practice Questions

- 1 Classify five plants as flowering or non-flowering.
- 2 Discuss the difference between vascular and non-vascular plants.
- 3 Identify a monocot and dicot plant.
- 4 Research the structure of xylem and phloem.
- 5 Discuss why classification helps botanists.
- 6 Explain plant classification in your own words.