



PHARMACOLEARN

It's Important to Know!

BP206T — Environmental Sciences

B.Pharm Semester 2 · Unit 1 — Multidisciplinary Environmental Studies and Natural Resources

Unit I: Multidisciplinary Environmental Studies and Natural Resources

Environmental studies combines natural science, social science, economics, public health, law and ethics. It examines relationships among organisms, physical surroundings and human activity. Environmental problems often involve trade-offs among food, housing, energy, transport, industry and conservation.

Forest and water resources

Forests provide habitat, soil protection, carbon storage, material resources and cultural value. Deforestation can cause habitat loss, erosion, altered water flow and reduced biodiversity. Conservation includes protection, restoration, sustainable use and participation of local communities.

Water resources include surface water, groundwater, glaciers, wetlands and oceans. Demand comes from drinking, agriculture, industry and sanitation. Overuse can lower groundwater, while pollution can make water unsafe. Conservation includes reducing waste, protecting catchments, reusing suitable water and preventing contamination.

Mineral, food and energy resources

Minerals are non-renewable on a human time scale. Mining can disturb land, generate waste and affect water quality. Food resources depend on soil, water, biodiversity, farming systems and distribution. Unsustainable practices can reduce soil fertility and increase erosion.

Renewable energy is replenished naturally, although its availability is variable. Non-renewable fuels are finite and produce environmental impacts through extraction and combustion. Energy conservation reduces demand regardless of the energy source.

Land resources and individual responsibility

Land supports settlements, agriculture, forests and industry. Land degradation includes erosion, salinisation, contamination and loss of organic matter. Individuals can reduce waste, use resources carefully, protect vegetation, avoid littering and support evidence-based conservation.

Unit I: Frequently asked questions

Q: Why is environmental studies multidisciplinary?

A: Environmental problems involve ecological, technological, social, economic, legal and ethical factors, so no single discipline is sufficient.

Q: What is the difference between renewable and non-renewable resources?

A: Renewable resources can be replenished on a human time scale, while non-renewable resources are finite or replenish too slowly for current use.

Q: How can individuals conserve resources?

A: They can reduce consumption, prevent waste, protect water and soil, conserve energy and support responsible community action.

Unit I: Key takeaways

- Environmental studies links natural and human systems.
- Forests, water, minerals, food, energy and land are interconnected resources.
- Resource use can create pollution, erosion, habitat loss and scarcity.
- Conservation combines prevention, efficient use, restoration and social participation.
- Individual behaviour contributes to resource protection.

Unit I: Practical correlation

Practical correlation: pharmaceutical waste segregation. A pharmacy or laboratory can conserve resources by ordering appropriately, separating recyclable and hazardous waste and preventing chemicals from entering drains.