

M.Sc. Environmental Science  
**Semester-III**  
**POLLUTION CONTROL**

**UNIT-I**

**Air pollution:** Definition, Air Quality and Standards: Classification of air pollutants, their sources, criteria pollutants, characteristics and effects, Air quality standards.

Control of Particulates and gaseous pollutants- Characteristics of particulates - Filters, gravitational, centrifugal-multiple type cyclones, wet collectors, Electrostatic Precipitation, bag filter Scrubbers.

**UNIT-II**

**Noise Pollution Control:** Noise control methods, Role of vegetation in noise control, Environmental problems associated with noise pollution.

**UNIT-III**

**Water pollution and control:** Indicators, Hardness and determination of DO, BOD, COD of water, and water pollution due to heavy metals and organic pollutants, bio indicators of water pollution.

**UNIT-IV**

**Soil pollution and control:** Inorganic and Organic-Definition of pollution and contamination, sources of soil pollution, Effects of chemical residues on soil, (pesticides, fertilizers, heavy metals etc.), Soil pollution from nitrogen, phosphorus, sulfur, micronutrients or trace elements, Heavy metal pollution of soils, heavy metal remediation of soil. Methodologies for soil conservation, conservation of arable land, techniques of reclamation and restoration of soil.