

**M.Sc. Environmental Science**  
**Semester-II**  
**ENVIRONMENTAL POLLUTION**

**UNIT-I: AIR POLLUTION**

Air pollution – world and Indian scenario, Sources and classification of air pollutants, Air pollutants, effects and consequences. Transport and diffusion of pollutants, gas laws governing the behavior of pollutants in atmosphere, Air quality standards, Acid Rain.

**UNIT-II: WATER POLLUTION**

Sources, types, Causes and consequences of water pollution, water pollutants, Sampling of water and wastewater, collection and storage, physical analysis of water (colour, alkalinity, TDS, conductivity, temperature, odour, turbidity, hardness) chemical analysis of water (carbonates, bicarbonates, sulphate, chloride and fluoride, heavy metals), biological analysis of water (dissolved oxygen, BOD, COD).

**UNIT-III: SOIL POLLUTION**

Soil: soil horizon, soil profiles, composition of soil, Physico-chemical and biological properties of soil, sampling and analysis of soil quality.

Soil Pollution: Definition, sources- point and non-point, routes. Soil pollutants – Types, pesticides, heavy metals, Effects and impacts of soil pollution, Effect of modern agriculture on soil.

**UNIT-IV: NOISE POLLUTION**

Definition, sources, Sound pressure, intensity, decibel, measurement and analysis of sound, Noise Indices, Meteorological effects on Noise propagation, Effects and impacts on human, Noise exposure level and standards.