

## Chapter – 18

### Pollution of Air and Water

- **Pollution:** An undesirable change in the physical, chemical or biological characteristics of air, water and land that may be harmful to human life and other animals, living conditions, industrial processes and cultural assets.
  - **Pollutants:** The agents that pollute our environment are called pollutants. Pollutants are the substances which contaminate air and water.
  - Air pollution is the contamination of air by impurities which may have a harmful impact on the living organisms and the non-living components.
  - **Source of Air Pollution:**
    - Natural Sources:** Smoke and dust arising from forest fires or volcanic eruptions. Methane gas arising from decaying organic matter.
    - Man-made Sources:** Exhaust gases from factories, power plants and automobiles.
  - Carbon monoxide, nitrogen oxides, carbon dioxide, methane and sulphur dioxide are the major pollutants of air.
  - Increasing levels of greenhouse gases like  $CO_2$  are leading to global warming.
  - Water pollution is the contamination of water by substances harmful to life.
  - Sewage, agricultural chemicals and industrial waste are some of the major contaminants of water.
  - Water which is purified and fit for drinking is known as potable water.
  - Water is a precious natural resource. We must learn to conserve it.
  - **Greenhouse Effect:**
    - Earth absorbs a part of Sun's radiation and reflects back the other.
    - Reflected radiation traps in atmosphere.
    - This warms the Earth.
    - Process enhanced by the increased amount of  $CO_2$  in atmosphere.
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