# **Environmental Pollution**

O

Dr. B. Saminathan Assistant Professor Department of Education, CDE Bharathidasan University, Trichy-24

### Pollution

 Environmental Pollution is defined as the undesirable change in physical, chemical and biological characteristics of our air, land and water.

### **Biodegradable Pollutants**

 Biodegradable pollutants are broken down by the activity of micro-organisms and enter into the biogeochemical cycles.



# Non-Biodegradable Pollutants

 Non-biodegradable pollutants are stronger chemical bondage, do not break down into simpler and harmless products.

#### **Classification of Environmental Pollution**

- i. Air Pollution
- ii. Water Pollution
- iii. Soil Pollution
- iv. Noise Pollution
- v. E-waste
- vi. Nuclear waste

# Air Pollution

• Air is mainly a mixture of various gases such as oxygen, carbon dioxide, nitrogen. These are present in a particular ratio. Whenever there is any imbalance in the ratio of these gases, air pollution is caused. The sources of air pollution can be grouped into two: i. Natural air pollution. ii. Man-made air pollution.

### Water Pollution

 Water is said to be polluted when there is any physical, biological or chemical change in water quality that adversely affects living organisms or makes water unsuitable for use.

# Soil Pollution

- Soil pollution is due to i. deforestation and ii. dumping of solid wastes.
- Deforestation increases soil erosion.
- Solid wastes include things from household waste and industrial waste.
- Chemicals discharged into air, such as compounds of sulfur and lead, eventually come to soil and pollute it.

# Noise Pollution

- Noise pollution, is the propagation of noise with harmful impact on the activity of human or animal life.
- Noise pollution affects both health and behavior.
- Noise pollution can cause hypertension, high stress levels, hearing loss, sleep disturbances and other harmful effects.

#### Hazardous Waste

 Hazardous waste may be liquid, solid or gas and all have one thing in common are dangerous and can pose a substantial hazard to human health and environment when not managed properly.

#### E - Waste

 Large household appliances – Refrigerators, Air conditioners, Computers, Stereo systems, Mobile phones, etc., are the major causes for e-waste. People discarded it frequently.

# Nuclear Pollution

 Nuclear hazard effects can be either initial or residual. Initial effects occur in the immediate area of explosion and are hazardous immediately after the explosion where as the residual effects can last for days or years and cause death. The principal initial effects are blast and radiation.

# **Ozone Layer Depletion**

- Reduced ozone levels as a result of ozone depletion. A chemical destruction of the stratospheric ozone layer is beyond natural reactions.
- Stratospheric ozone is constantly being created and destroyed through natural cycles.
- Various ozone-depleting substances accelerate the destruction processes, resulting in lower than normal ozone levels.

