

## Ch-13 Our Environment

1. Biodegradable substances can be further broken down by the action of bacteria e.g., paper, vegetables, clothes etc. On the other hand, the substances which cannot be further broken down by the action of bacteria are non-biodegradable substances e.g., plastics, glass etc.
2. All biotic and abiotic components form the ecosystem. The biotic components are all living organisms. The non-biotic components are physical factors like air, water, soil, wind etc.
3. The food chain consists of producers, consumers and decomposers. Green plants and algae that make food by photosynthesis are producers. Organisms that depend upon producers for their food, directly or indirectly are called consumers. And microorganisms like bacteria and fungi that break down the complex organic substances in dead plant and animal into simple inorganic substances are called decomposers.
4. The series of organisms that take part in transferring food energy from producers to consumers to decomposers is called a food chain. Food chain link with each other to form food web.
5. Every step of food chain is called a trophic level. There are four trophic levels –
  - a. 1<sup>st</sup> trophic level – producers / autotrophs.
  - b. 2<sup>nd</sup> trophic level – primary consumers / herbivores.
  - c. 3<sup>rd</sup> trophic level – secondary consumers / small carnivores.
  - d. trophic level – tertiary consumers / large carnivores.
6. Green plants convert 1% of solar energy into food energy. The flow of energy is unidirectional.
7. Ozone is present at a very high level in the atmosphere. It blocks the UV radiation of sun. Ozone is a product of UV radiation.
8. At high level in the atmosphere the UV rays split the oxygen molecules to form oxygen atoms. These combine with oxygen molecules to form ozone. Ozone causes skin cancer, cataract and reduces crop production.