

## NSS Biology Curriculum

1. The cell
  - Chemicals of life
  - Discovery of cells
  - The basic structure of a cell
  - Cell activities
  - The cell as a basic unit of life
2. Organisms and their environment
  - Diversity of organisms
  - Classification
  - The ecosystem
  - Energy flow within an ecosystem
  - Cycling of materials
  - Ecological interdependence of organisms
  - Human impacts on the environment
  - Environmental protection
3. Energetics
  - Photosynthesis
  - Respiration
4. Obtaining essential for life
  - Nutrition ,gas exchange ,water relation and transport in plants
  - Nutrition ,gas exchange and transport in humans
5. Coordination and response
  - Detecting environmental conditions
  - Nervous coordination in humans
  - Hormonal coordination in humans
  - Locomotion in humans
  - Growth responses of plants
6. Regulation and defence
  - Concept of homeostasis
  - Osmoregulation and excretion
  - Regulation of body temperature
  - Regulation of glucose level in blood
  - Defence against diseases
7. Reproduction and growth
  - Types of cell division
  - Asexual reproduction
  - Sexual reproduction in flowering plants

- Sexual reproduction in humans
- Growth and development
- 8. Genetics and evolution
  - Genes and inheritance
  - The pattern of inheritance
  - Variations
  - Genetic engineering
  - Evolution
- 9. Elective I : Human physiology
  - Regulation and control
- 10. Elective II : Applied ecology