

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