

CURRICULUM CONTENT

1. Biological molecules

- Structure of carbohydrates, lipids and proteins and their roles in living organisms
- Water and living organisms

2. Enzymes

- Mode of action of enzymes
- Factors that affect enzyme action

3. Cell membranes and transport

- Fluid mosaic model of membrane structure
- Movement of substances into and out of cells

4. Cell and nuclear division

- Replication and division of nuclei and cells
- Understanding of chromosome behavior in mitosis

5. Transport

- The need for, and functioning of, a transport system in multi cellular plants
- The need for, and functioning of, a transport system in mammals
- Structure and functioning of the mammalian heart

6. Gas exchange and smoking

- The gas exchange system
- Smoking and smoking-related diseases