

Biology (New Book) - 9th Class Biology Urdu Medium Chapter 5 Preparation

Q1. Difference between the following:

i. Tissue and organ

Ans 1: Tissue:

In multicellular organism. cells make tissue. A tissue is a group of similar cells that work together to perform one or more specific functions.

Example: Muscle tissue, epithelial tissue.

Ans 2: Organ: An organ is a structur emade up of related tissues working together to perform specific function.

Example: Stomach, heart and kidney

Q2. What is tissue level? Give one example.

Ans 1: A group of similar or differente types of cells peforming same function e.g. xylem and phloem in plants, ar ecomposed of different cells while nerous tissues are composed of same type of cells.

Q3. Difference between Root system and Shoot system

Ans 1: Root System: The root system consists of two main structures includig the root cap and the primary root The root system anchors the plant and absorbs water and nutrients.

Ans 2: Shoot system:

The shoot system consists of two portions. the vegetative and reproductive parts of the plant.

The shoot system components stems, leaves and reproductive structures like flowers work together to enable processes like photosynthesis and reproduction.

Q4. A cell works as an open system. Comment on it.

Ans 1: A cell works as a open system i.e. it takes in substance needed for its metabolic activities through its cell membrane. It takes up food. oxygen, water and salts for survival, growth and division, and energy for metabolic process. Products and by-products are eformed in metabolism cell either utilizes the products or transport them to other cells. The by products are either stored or are excreted out of cell.

Q5. What is the role of shoot systme in Plants.

Ans 1: The shoot system consists of two portions. the vegetative parts of the plant. such as the leaves and the stems. and the reproductive parts of the platn, which include flowers and fruits. The shoot system generally grows above ground, where it absorbes the light needed for photosynthesis.

Q6. How do the smooth muscles contribute to the stomach's functin.

Ans 1: The smooth muscle in the stomach is primarity responsible for.

- 1. Churnign and mixing food with stomach acid
- ii. Producing chyme by contracting and relexing in a coordinated manner which helps with digestion and peropels the partially digested food into the small intestine through a process called peristalsis.
- iii. It facilitates the movement and mechanical breakdown of food within the stomach.

Q7. Define Molecule

Ans 1: Atom combine to form moleculs which cna have entirely different properti thant he atoms they contain.

Example:

Water, protein and nucleic acid etc.

Q8. What is organ system? Give examples.

Ans 1: In higher multicellular organisms, particulary in animals, differente organs ,performign related functions are organized together in the form of an organ system for example, digestive sytem carries out proess of digestion. It consists of oral cavity, stomach, small intestine, large intestine, liver and pancreas.

Q9. Define Orgenelle

Ans 1: Molecules combine in specific ways and make the subcellular level i.g. organelle Each organelle is specialized to do a particular function.

Example: Mitochondria are responsible for cellular respiration and ribosomes are speciealized for protein synthesis.

Q10. Define Homeostasis and its importnace.

Ans 1: Introduction:

The organs and organ systems of the body work in coordination to maintain a stable internal environment. It is called homeostasis. Homeostasis is defined as the body's ability to maintain a stable internal environment despite the changes in the external environment

Example:

 $\label{thm:equality:equal} \textbf{Examples of homeostasis include regulating the temperature, blood pressure, bllood sugar, and pH levels.}$