

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

Q1. Define Cell

Ans 1: When organelles assemble and interact with each other, they make cell-the smallest unit with characteristics of life. They can carry out life activities and can also reproduce.

Example: Unicellular organisms are made of only one cell while multicellular organisms are made of many cells.

Q2. What are the major roles of the epithelial tissue present in the stomach.

Ans 1: The inner wall is made up of epithelial tissue. It is glandular in nature and secretes mucus. The mucus lines the inner wall and protects it from acids. This tissue also secretes gastric juice that contains enzyme pepsinogen for protein digestion and hydrochloric acid for activating pepsinogen to pepsin enzyme.

Q3. What is the function of the palisade mesophyll in the leaf.

Ans 1: Palisade mesophyll in a leaf is responsible for photosynthesis. It consists of tightly packed elongated cells with large number of chloroplasts to absorb light and produce food for plants.

Q4. How different tissues form stomach.

Ans 1: i. Stomach is an organ specialized for the digestion of proteins and storing food

ii. Stomach has:

a) Epithelial tissues which secrete the gastric juice.

b) Muscular tissue which performs contractions of stomach walls for grinding of food, mixing enzyme with food and moving food to posterior end.

Q5. 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 structure made up of related tissues working together to perform specific function.

Example: Stomach, heart and kidney

Q6. Define organelles with example

Ans 1: An enormous number of biomolecules become associated in a particular way and form organelles. The organelles are actually sub cellular structures. e.g. mitochondria, ribosomes etc.

Q7. What is tissue level? Give one example.

Ans 1: A group of similar or different types of cells performing same function e.g. xylem and phloem in plants, are composed of different cells while nervous tissues are composed of same type of cells.

Q8. Palisade and spongy mesophyll

Ans 1: Palisade Mesophyll:

It is located just beneath the upper epidermis

It consists of tightly packed elongated cells.

Their cells are rich with chloroplasts and have a major role in photosynthesis

Ans 2: Spongy Mesophyll:

It is present below the palisade mesophyll

It is composed of loosely arranged cells with air spaces between them.

These air spaces facilitate the diffusion of gases throughout the leaf.

Q9. Enlist the level of organization from cells to organ systems.

Ans 1: The levels of organization from cells to organ system are as follows.

1. Cell
2. Tissue
3. Organ
4. Organ system.

Q10. Difference between Root system and Shoot system

Ans 1: Root System: The root system consists of two main structures including 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.
