

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

Q1. What is the role of shoot system 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 plant, which include flowers and fruits. The shoot system generally grows above ground, where it absorbs the light needed for photosynthesis.

Q2. 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.

Q3. What is a tissue level?

Ans 1: Introduction:
In multicellular organisms, cells make tissues. A tissue is a group of similar cells that work together to perform one or more specific functions.
Example:
In animals:
Epithelial tissue- covers body surfaces and lines cavities e.g. skin
Muscle tissue-enables movement e.g. cardiac muscle in the heart.
In Plant:
Epidermal tissue-Protects the underlying parts e.g. epidermis of leaf
Vascular tissue-Transports water and nutrients e.g. xylem and phloem.

Q4. Define Homeostasis and its importance.

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:
Examples of homeostasis include regulating the temperature, blood pressure, blood sugar, and pH levels.

Q5. Define Organelle

Ans 1: Molecules combine in specific ways and make the subcellular level i.e. organelle. Each organelle is specialized to do a particular function.
Example: Mitochondria are responsible for cellular respiration and ribosomes are specialized for protein synthesis.

Q6. 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 the enzyme pepsinogen for protein digestion and hydrochloric acid for activating pepsinogen to pepsin enzyme.

Q7. Difference between the following:

i. Tissue and organ

Ans 1: Tissue:

In a 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 a specific function.

Example: Stomach, heart and kidney

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. Define Atom

Ans 1: Atoms are the smallest unit of matter that maintain the property of an element.

Example: Carbon, Hydrogen and Oxygen etc.

Q10. 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.
