



## REVISION SHEET

**SUBJECT: BIOLOGY**

**CLASS-IX**

**TERM 1**

### Chapter 5: The Fundamental Unit Of Life.

#### 1. Multiple choice questions:

- i. Colourless plastids are known as :  
(a) Chromoplasts      (b) chloroplasts      (c) leucoplasts      (d)protoplast
- ii. Which of the following are examples of prokaryotes?  
(a) Bacteria      (b)Fungi      (c) Algae      (d) Protozoa
- iii. Amoeba acquires its food through a process, termed:  
(a) Exocytosis      (b) Endocytosis      (c) Plasmolysis      (d) Both a & b.
- iv. The cell organelle in which materials such as starch, oils and protein granules are stored in:  
(a) Golgi apparatus      (b) Chloroplasts      (c) Chromoplasts      (d) Leucoplasts
- v. Organelle other than nucleus , containing DNA is :  
(a) Endoplasmic reticulum      (b) Golgi apparatus      (c) Mitochondria      (d) Lysosome

#### 2. Assertion-Reason question:

Select the correct answer to these questions from the codes (i), (ii), (iii) and (iv) as given below

- (i) Both A and R are true and R is correct explanation of the assertion.
- (ii) Both A and R are true but R is not the correct explanation of the assertion.
- (iii) A is true but R is false.
- (iv) A is false but R is true.

- (a) **Assertion:** When the cell gets damaged, lysosomes may burst and the enzymes digest their own cell.

**Reason:** Therefore, lysosomes are also known as the 'suicide bags' of a cell.

#### 3. Read the passage and answer the questions that follow:

The fundamental organisational unit of life is the cell. Cells are enclosed by a plasma membrane composed of lipids and proteins. The cell membrane is an active part of the cell. It regulates the movement of materials between the ordered interior of the cell and the outer environment. In plant cells, a cell wall composed mainly of cellulose is located outside the cell membrane. The presence of the cell wall enables the cells of plants fungi and bacteria to exist in hypotonic media without bursting. The nucleus in eukaryotes is separated from the cytoplasm by double-layered membrane and it directs the life processes of the cell. Prokaryotic cells have no membrane-bound organelles, their chromosomes are composed of only nucleic acid, and they have only very small ribosomes as organelles. Cells in organisms divide for growth of body, for replacing dead cells, and for forming gametes for reproduction.

1. If the organisation of a cell is destroyed due to some physical or chemical influence, what will happen?
2. Where are proteins synthesised inside the cell?
3. Write two functions of cell wall .

**4. Answer the following questions :**

1. Draw the structure of a plant Cell and label it.
2. What is the main function of Leucoplasts?
3. If a cell is kept in hypertonic or hypotonic solution ,does water move only in one direction or both? Clarify.

## **CHAPTER 6: TISSUES**

- i. Write the name of permanent tissue has chlorophyll?  
(a) Sclerenchyma      (b) Chlorenchyma      (c) Aerenchyma      (d)None of these
- ii. Which cell does not have perforated cell wall ?  
(a) Tracheids      (b) Companion cells      (c) Sieve tubes      (d) Vessels
- iii. Cork cells are made impervious to water and gases by the presence of :  
(a) Cellulose      (b) Lipids      (c) Suberin      (d) Lignin
- iv. A long tree has several branches. The tissue that helps in the sideways conduction of water in the branches is :  
(a) Collenchyma      (b) Xylem parenchyma      (c) Xylem vessels      (d) Parenchyma

**2. Assertion-Reason question:**

Select the correct answer to these questions from the codes (i), (ii), (iii) and (iv) as given below

- (v) Both A and R are true and R is correct explanation of the assertion.
- (vi) Both A and R are true but R is not the correct explanation of the assertion.
- (vii) A is true but R is false.
- (viii) A is false but R is true.

**Assertion (A):**Flexibility in plants is due to sclerenchyma .

**Reason (R):** It provides mechanical support and does not allow bending .

**3. Read the passage and answer the questions that follow:**

The growth of plants occurs only in certain specific regions . This is because the dividing tissue, also known as meristematic tissue, is located only at these points. Depending on the region where they are present ,meristematic tissues are classified as apical, lateral and intercalary. New cells produced by meristem are initially like those of meristem itself, but as they grow and mature ,their characteristics slowly change and they become differentiated as components of other tissues.



Apical meristem is present at the growing tips of stems and roots and increases the length of the stem and the root. The girth of the stem or root increases due to lateral meristem (cambium). Intercalary meristem seen in some plants is located near the node. Cells of meristem are very active, they have dense cytoplasm, thin cellulose wall and prominent nuclei. They lack vacuoles.

1. Which meristem helps in increasing the girth of a plant ?
2. The meristem present at the base of the internode is called as \_\_\_\_ .
3. What is differentiation ?

**4. Answer the following questions :**

1. Give reasons for the following :
  - (a) cells of sclerenchyma tissue have narrow lumen .
  - (b) It is difficult to pull out the husk of coconut.
2. What happens to the cells formed by meristematic tissue ?
3. What are conducting tissues and write their functions.
4. What are the constituents of phloem ?