



Brain International School

Vikas Puri, New Delhi

REVISION SHEET

SUBJECT: BIOLOGY

CLASS-IX

TERM II

Chapter 5: The Fundamental Unit Of Life.

1. Multiple choice questions:

- i. Chromosomes present in the nucleus are made up of
(a) DNA (b) protein (c) both the above option (d) none of these
- ii. Name the cell organelle which is called as the powerhouse of the cell :
(a) lysosomes (b) mitochondria (c) chloroplast (d) leucoplast
- iii. Lysosomes are also called :
(a) suicidal bag (b) digestive bag (c) demolition squad (d) All of the above

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:** RBC burst when placed in hypotonic solution.

Reason: RBCs burst due to exosmosis.

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

Take a small piece of an onion bulb. With the help of a pair of forceps we can peel off the skin called epidermis from the concave side that is inner layer of the onion. This layer can be put immediately in a watch glass containing water. This will prevent the peel from getting folded or getting dry. Put a drop of water on it and transfer a small piece of peel from the watch glass to the slide. Make sure that the field is perfectly flat on the slide. Add a Drop of safranin solution from this piece followed via cover slip. Take care of air bubbles while putting the cover sleeve with the help of a mounting needle. Observe the slide under the microscope.

Answer the following questions :

- i. Name the cell organelles which is observed :
 - a. Cell wall, nucleus, cytoplasm
 - b. Plasma membrane, nucleus, cytoplasm
 - c. Cell wall, nucleus, protoplasm

d. Plasma membrane, nucleus, cell membrane

ii. Why we put the peel of onion immediately into watch glass containing water?

iii. Write the name and explain the role of the darkly coloured spherical or oval structure seen in the slide?

4. Answer the following questions :

1. Draw the structure of a plant and animal cell and label it.

2. From your surroundings find out the different plant parts in which chromoplast, chloroplast and leucoplast are present ?

3. What would happen if the cell has no nuclear membrane?

CHAPTER 6: TISSUES

1. Multiple choice questions:

- i. Bone cells are embedded in a hard matrix that is composed of
 - (a) Calcium and sulfuric compounds
 - (b) Calcium and phosphorous compounds
 - (c) Calcium and oxygen compounds
 - (d) Calcium and chlorine compound
- ii. Raju has hurt his leg during a football match. His doctor gives him some pain killer. Which tissue is likely to be affected by the pain killer?
 - (a) Muscular Tissues
 - (b) Nervous Tissues
 - (c) The bone
 - (d) Epithelial tissue
- iii. If we want our potted plant to be dense and not grow very tall, what should he do?
 - (a) cut the branches
 - (b) put more fertilizers
 - (c) put it in a dark place
 - (d) cut the growing tip
- iv. Which of the following is not made of epithelial tissues:
 - (a) skin
 - (b) lining of the mouth
 - (c) kidney tubules
 - (d) bone

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.

i. **Assertion (A):** Permanent tissue is composed of mature cells.

Reason (R): Meristematic tissue is a group of actively dividing cells.

ii. **Assertion (A):** Cork cells are impervious to water and gases.

Reason (R): Cork has suberin deposits that are water proof.

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

Blood is a type of connective tissue. The cells of connective tissue are loosely spaced and embedded in an intercellular matrix. The matrix may be jelly like, fluid, dense or rigid.

The nature of matrix differs in concordance with the function of the particular connective tissue.

Blood has a fluid (liquid) matrix called plasma, in which red blood corpuscles (RBCs), white blood corpuscles (WBCs) and platelets are suspended. The plasma contains proteins, salts and hormones. Blood flows and transports gases, digested food, hormones and waste materials to different parts of the body. Bone is another example of a connective tissue. It forms the framework that supports the body. It also anchors the muscles and supports the main organs of the body. It is a strong and nonflexible tissue. Bone cells are embedded in a hard matrix that is composed of calcium and phosphorus compounds. Two bones can be connected to each other by

another type of connective tissue called the ligament. This tissue is very elastic. Another type of connective tissue, cartilage, has widely spaced cells. The solid matrix is composed of proteins and sugars. Cartilage smoothens bone surfaces at joints and is also present in the nose, ear, trachea and larynx

- Identify the connective tissue by which two bones are connected to each other .
- Give four examples of connective tissue .
- What are the function of connective tissue?

4. Answer the following questions :

- A nail is inserted in the trunk of a tree at a height of 1 metre from the ground level. After 3 years, where will the nail be present? Give reason.
- Tissue A and tissue B constitute tissue C. A carries water while B carries food for the plants. Identify A, B, C .Draw and identify different elements of A and B .
- An organism—plant or animal, require different types of cells in the body. Justify.
- Why are xylem and phloem called complex tissues? How are they different from one other ?

CHAPTER 12: IMPROVEMENT IN FOOD RESOURCES

1. Multiple choice questions:

- Which of the following plants can be grown for as a source of protein?
(i)Lentil (ii) Sunflower (iii) Cauliflower (iv) Hibiscus
(a)(i) and (ii) (b) (ii) and (iii) (c) (i) and (iv) (d) (ii) and (iv)
- Identify the source of protein from given choices.
(i) Rice (ii) Millets (iii) Sorghum (iv) Gram
(a) (i) and (ii) (b) (ii) and (iii) (c) (i) and (iv) (d) only (iv)
- Which of the following can help in solving the food problem of India?
(i) Increase in population (ii) increasing land area for cultivation
(iii) giving free food to all (iv) employing scientific methods and advanced technology.
(a)(i) and (ii) (b) (ii) and (iii) (c) (ii) and (iv) (d) only (iv)

2. Assertion-Reason question:

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

- Both A and R are true and R is correct explanation of the assertion.
- Both A and R are true but R is not the correct explanation of the assertion.
- A is true but R is false.
- A is false but R is true.

Assertion (A): Wheat, rice and maize are energy yielding crops.

Reason (R): Wheat, rice and maize are staple foods for the majority of people in India.

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

Beekeeping has been practiced for centuries and honey has been considered as a valuable and precious commodity that is used as medicine for traditional rituals, or as food. Beekeeping can be practiced effortlessly as an additional source of income for farmers in rural areas and has been successfully implemented in poverty- alleviating projects.

- Scientific name of rock bee is _____
- Why is pasturage important?
- List any two desirable characteristics of bee varieties which make them suitable for Honey Production?

4. Answer the following questions :

- Suresh wants to follow composite fish farming in his pond. What things should he keep in mind while selecting fish varieties for his farm? List any two advantages of composite fish farming.
- Explain different cropping patterns by evaluating their advantages.
- What is Weeding ? Mention any two methods to perform weeding.
- List the desirable agronomic characteristics favoring Crop Improvement?