



ASSIGNMENT NO. 2

SUBJECT: BIOLOGY

CLASS-IX

JULY '2026

Chapter-: Tissues.

1. What is a tissue? Name the types of simple tissues.
2. Name the two types of vascular tissues and their main function.
3. Write about the functions of the following:
 - (i) Stomata
 - (ii) Cork
 - (iii) Epidermis
4. Differentiate between parenchyma and collenchyma.
5. Draw a well labelled diagram of Meristematic tissue.
6. What is the location and function of companion cells?
7. Give reasons for the following:
 - (i) Intercellular spaces are absent in sclerenchymatous tissues.
 - (ii) We get a crunchy and granular feeling when we chew peer fruit.
 - (iii) It is difficult to pull out the husk of a coconut tree.
8. Draw and identify different elements of phloem.
9. Which plant tissue provides buoyancy to aquatic plants and how?
10. If the tip of a sugarcane plant is removed from the field even then it keeps growing in length. Why?

Case Based Questions :

11. Rohan takes gymnastics classes where he easily performs cartwheels, splits and full shoulder rotations. His friend Aman, who fractured his elbow last month, can only bend his arm back and forth in one direction.
 - (a) Identify the type of joint present at Rohan's hip and shoulder that allows movement in almost all directions.
 - (b) Identify the type of joint present at Aman's elbow. How does its structure differ from the joint identified in (a)?
 - (c) Name one more joint in the human body that works on the same principle as Aman's elbow joint.

12. Assertion–Reason Question: Read the Assertion (A) and Reason (R) given below and choose the correct option.

Assertion (A): Cartilage is more flexible than bone, whereas bone is harder and more rigid than cartilage.

Reason (R): The matrix of bone is hardened by deposition of calcium salts, while the matrix of cartilage is comparatively soft and pliable.

- (a) Both A and R are true, and R is the correct explanation of A
- (b) Both A and R are true, but R is not the correct explanation of A
- (c) A is true, but R is false
- (d) A is false, but R is true

13. Real-Life Application: Mrs. Sharma, aged 60, has been told by her doctor that her bones have become weak and brittle. She has been advised to include more calcium and vitamin D in her diet and to do regular weight-bearing exercise.

- (a) Name the condition that Mrs. Sharma is most likely experiencing.
- (b) In your own words, explain why calcium and vitamin D are important for the musculoskeletal system.
- (c) Suggest one more lifestyle habit that could help strengthen her bones and joints.

14. HOTS: You can turn your head from side to side, but you cannot twist your knee in the same way. Name the joints present at the neck and at the knee, and explain this difference on the basis of joint structure.

15. Read the passage given below and answer the questions that follow:

“The human skeletal system performs several important functions in the body. Besides giving shape and support, it protects delicate internal organs, allows movement by providing points of attachment for muscles, and certain bones are also responsible for producing blood cells.”

- (a) Name any two organs protected by bones of the skeletal system, along with the bones that protect them.
- (b) Which part of the bone is responsible for producing blood cells?
- (c) Name the tissue that connects muscles to bones and enables movement at a joint.