

## CHAPTER-6 | Tissues

## QUIZ-01

1. Which plant tissue is responsible for growth at the tips of roots and shoots?

- A. Collenchyma                      B. Apical meristem  
C. Phloem                              D. Xylem                      (B)

**Explanation:** Apical meristem is located at the tips of roots and shoots and helps in increasing their length.

2. Which permanent tissue provides flexibility to plants?

- A. Parenchyma                      B. Collenchyma  
C. Sclerenchyma                      D. Xylem                      (B)

**Explanation:** Collenchyma has living cells with irregularly thickened walls, providing flexibility to parts like tendrils and stems.

3. Which plant tissue is made of dead cells with very thick lignified walls?

- A. Parenchyma                      B. Collenchyma  
C. Sclerenchyma                      D. Xylem parenchyma                      (C)

**Explanation:** Sclerenchyma consists of dead cells with very thick lignin-rich walls, making the plant hard and stiff.

4. What is the function of guard cells in leaves?

- A. Transport food  
B. Provide mechanical support  
C. Control opening and closing of stomata  
D. Store starch                      (C)

**Explanation:** Guard cells surround stomata and regulate gas exchange and transpiration by opening and closing them.

5. Which type of connective tissue connects bones to muscles?

- A. Ligament                              B. Areolar tissue  
C. Tendon                                  D. Cartilage                      (C)

**Explanation:** Tendons connect muscles to bones and are strong but have limited flexibility.

6. Which muscle tissue is involuntary and has spindle-shaped cells?

- A. Striated muscle                      B. Cardiac muscle  
C. Smooth muscle                      D. Skeletal muscle                      (C)

**Explanation:** Smooth muscles are involuntary and spindle-shaped, found in internal organs like the digestive tract.

7. Which connective tissue stores fat in the human body?

- A. Cartilage                                  B. Adipose tissue  
C. Areolar tissue                      D. Bone                      (B)

**Explanation:** Adipose tissue contains fat-filled cells and acts as an energy reservoir and insulator.

8. What type of epithelial tissue is found lining blood vessels?

- A. Columnar                                  B. Squamous  
C. Cuboidal  
D. Stratified squamous                      (B)

**Explanation:** Simple squamous epithelium is thin and flat, allowing easy diffusion, suitable for blood vessels.

9. Which connective tissue has a fluid matrix called plasma?

- A. Bone    B. Cartilage  
C. Ligament                                  D. Blood                      (D)

**Explanation:** Blood has a fluid matrix (plasma) and transports substances like oxygen and hormones.

10. What is the function of xylem in plants?

- A. Transport food                      B. Store fats  
C. Transport water and minerals  
D. Photosynthesis                      (C)

**Explanation:** Xylem consists of vessels and tracheids that transport water and minerals from roots to other parts of the plant.