



Attempt questions first; check the separate key afterward. Show all working. Draw accurate figures where required.

A. Very short answers - 1 mark each

1. What is a tissue?
2. Explain why multicellular organisms need specialised tissues.
3. Name the plant tissue responsible for active growth.
4. Compare apical, lateral and intercalary meristems.
5. Which plant tissue stores food and often has thin walls?
6. Distinguish chlorenchyma and aerenchyma.
7. Name the flexible support tissue in young stems.
8. Compare its wall thickening with sclerenchyma.

B. Short answers / practice - 2 marks each

9. Are mature sclerenchyma cells usually living?
10. Explain how their structure gives mechanical support.
11. Which tissue transports water and minerals?
12. List its components and identify living and dead elements.
13. Which tissue transports prepared food?
14. Compare xylem and phloem in function and structure.
15. Name the tissue covering body surfaces and lining organs.
16. Explain why epithelial cells are closely packed.
17. Which epithelium suits rapid diffusion in lung alveoli?

18. Which features make ciliated epithelium useful in air passages?

19. Name the connective tissue that transports gases and nutrients.

20. Explain why blood is classified as connective tissue.

C. Application / reasoning - 3 marks each

21. What joins muscle to bone?
22. What joins bone to bone?
23. Which muscle type is generally voluntary?
24. Compare skeletal, smooth and cardiac muscle.
25. Are cardiac muscles both striated and involuntary?
26. Explain why rhythmic contraction and connected fibres suit the heart.
27. Which meristem mainly increases a stem's girth?
28. Explain why the lining of the small intestine differs from that of lung alveoli.
29. Are tendons generally as elastic as ligaments?
30. Name the tissue forming flexible support at the tip of the nose.
31. Relate the shape and structure of nerve, muscle and epithelial cells to their functions.

D. Extended practice - 5 marks per pair

32. Name the tissue specialised to transmit impulses.
33. Draw a neuron and relate its parts to signal transmission.
34. Which tissue stores fat beneath skin?
35. Compare bone, cartilage, areolar and adipose tissue with locations and functions.

ANSWER KEY - Numerical / closed questions

3) Meristematic tissue. 5) Parenchyma. 7) Collenchyma. 9) No. 11) Xylem. 13) Phloem. 15) Epithelial tissue. 17) Simple squamous. 19) Blood. 21) Tendon. 22) Ligament. 23) Skeletal/striated muscle. 25) Yes. 27) Lateral meristem. 29) No; they are relatively inelastic. 30) Cartilage. 32) Nervous tissue. 34) Adipose tissue.