

CLASS 9

SCIENCE

EXTRA QUESTIONS

Class 9 Science Chapter 3 Tissues in Action – Extra Questions with Answers

Extra practice questions for Class 9 Science Chapter 3 (Tissues in Action), beyond the textbook. These Class 9 Science Chapter 3 important questions are handy for last-minute exam practice.

Contents

Very Short Answer Questions (1 mark)

Short Answer Questions (2–3 marks)

Higher-Order Thinking / Application Questions

Extra practice questions for Class 9 Science Chapter 3 (Tissues in Action), beyond the textbook. These Class 9 Science Chapter 3 important questions are handy for last-minute exam practice.

Very Short Answer Questions (1 mark)

Q1. Which plant tissue is responsible for growth?

Ans: Meristematic tissue.

Q2. Name the animal tissue that transmits electrical signals.

Ans: Nervous tissue.

Q3. What connects muscle to bone?

Ans: Tendon.

Q4. Give an example of a ball-and-socket joint.

Ans: Shoulder joint (or hip joint).

Q5. Which animal tissue type covers body surfaces and lines organs?

Ans: Epithelial tissue.

Short Answer Questions (2–3 marks)

Q6. Differentiate between a tendon and a ligament, and state the tissue type both belong to.

Ans: A tendon connects muscle to bone, while a ligament connects bone to bone. Both are made of connective tissue.

Q7. Explain why a hinge joint (like the elbow) cannot rotate in all directions the way a ball-and-socket joint (like the shoulder) can.

Ans: A hinge joint's structure only allows back-and-forth movement in a single plane, like a door hinge, while a ball-and-socket joint has a rounded end fitting into a cup-shaped socket, allowing movement in multiple directions and planes.

Q8. Why is a balanced diet with adequate protein, calcium, and vitamin D important for the musculoskeletal system?

Ans: Protein supports muscle repair and growth, calcium is essential for bone strength and density, and vitamin D helps the body absorb calcium effectively — together these keep bones and muscles strong and reduce the risk of weakness or damage.

Higher-Order Thinking / Application Questions

Q9. A gardener notices that cutting off the tip of a plant's main shoot causes the plant to stop growing taller but start growing bushier from the sides. Explain this observation using the concept of meristematic tissue.

Ans: The shoot tip contains the apical meristem, the meristematic tissue responsible for the plant's upward growth. Removing it stops further upward growth from that point, but it activates other meristematic regions (lateral/axillary buds) along the sides of the stem, causing the plant to branch out and grow bushier instead.

Q10. An athlete sprains their ankle during a match, damaging the tissue that connects two of the ankle bones together. Identify the tissue type and structure most likely injured, and explain its function.

Ans: The injured structure is most likely a ligament, made of connective tissue, which connects bone to

bone. Its function is to stabilise and hold joints together while allowing appropriate movement; a sprain occurs when a ligament is stretched or torn beyond its normal range.

See also: [Chapter 1](#) | [Chapter 2](#) | [Chapter 3](#)

Practice more: [Chapter 1](#) | [Chapter 2](#)

Quick revision: [Chapter 1](#) | [Chapter 2](#)

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