

CLASS 9 SCIENCE

CHAPTER 3 • TISSUES IN ACTION

MCQs • Multiple-Choice Practice

1. What is a tissue?

- A. A single organ
- B. A group of similar cells performing specific functions
- C. A complete organism
- D. A group of organs

2. Plant tissues are broadly classified based on their ability to divide into:

- A. Epithelial and connective
- B. Meristematic and permanent
- C. Muscular and nervous
- D. Simple and complex only

3. Which tissue is made up of actively dividing cells?

- A. Permanent tissue
- B. Meristematic tissue
- C. Sclerenchyma
- D. Phloem

4. Apical meristem mainly helps a plant to:

- A. Increase in length
- B. Increase in girth only
- C. Transport food
- D. Protect the seed

5. Lateral meristem is mainly associated with increase in:

- A. Leaf colour
- B. Girth or diameter
- C. Root hair number
- D. Flower size

6. Intercalary meristem is especially useful in grasses because it helps them:

- A. Produce seeds
- B. Regenerate after cutting
- C. Absorb minerals
- D. Make chlorophyll

CLASS 9 SCIENCE

CHAPTER 3 • TISSUES IN ACTION

MCQs • Multiple-Choice Practice

7. Meristematic cells generally have:

- A. Large vacuoles and much intercellular space
- B. Thin cell walls and dense cytoplasm
- C. Thick lignified walls only
- D. No nucleus

8. The process by which meristematic cells become specialised permanent cells is called:

- A. Diffusion
- B. Differentiation
- C. Transpiration
- D. Fertilisation

9. Which is a simple permanent tissue?

- A. Xylem
- B. Phloem
- C. Parenchyma
- D. Blood

10. Which set contains only simple permanent tissues?

- A. Parenchyma, collenchyma, sclerenchyma
- B. Xylem, phloem, parenchyma
- C. Xylem, phloem, blood
- D. Epidermis, xylem, phloem

11. Which tissue mainly stores food and may contain large intercellular spaces?

- A. Parenchyma
- B. Sclerenchyma
- C. Xylem
- D. Nervous tissue

12. Collenchyma mainly provides:

- A. Flexibility and support
- B. Water transport only
- C. Food transport only
- D. Nerve impulses

CLASS 9 SCIENCE

CHAPTER 3 • TISSUES IN ACTION

MCQs • Multiple-Choice Practice

13. Sclerenchyma cells are generally:

- A. Living and actively dividing
- B. Dead at maturity with thickened walls
- C. Without cell walls
- D. Filled with chlorophyll only

14. Xylem mainly transports:

- A. Food
- B. Water and minerals
- C. Nerve impulses
- D. Hormones only

15. Phloem mainly transports:

- A. Food
- B. Water only
- C. Oxygen
- D. Bone minerals

16. Xylem and phloem are examples of:

- A. Simple permanent tissues
- B. Complex permanent tissues
- C. Meristematic tissues
- D. Animal tissues

17. Which tissue forms the outer covering of the plant body?

- A. Epidermis
- B. Phloem
- C. Xylem
- D. Sclerenchyma

18. Stomata are mainly involved in:

- A. Gas exchange and regulation of water loss
- B. Food transport
- C. Cell division
- D. Bone movement

CLASS 9 SCIENCE

CHAPTER 3 • TISSUES IN ACTION

MCQs • Multiple-Choice Practice

19. Which animal tissue forms protective coverings and linings?

- A. Epithelial
- B. Muscular
- C. Nervous
- D. Connective

21. Which epithelial tissue is adapted for rapid diffusion in lungs and blood vessels?

- A. Single layer of thin, flat cells
- B. Many layers of thick cells
- C. Hair-like muscle cells
- D. Bone cells

23. Connective tissue mainly:

- A. Connects and supports tissues and organs
- B. Carries nerve impulses only
- C. Produces movement only
- D. Forms only the skin

20. Epithelial cells are generally:

- A. Loosely arranged with large spaces
- B. Closely packed with little space between them
- C. Always dead
- D. Without cell membranes

22. Which epithelial tissue is associated with absorption in the small intestine?

- A. Tall, pillar-like cells
- B. Flat cells only
- C. Bone tissue
- D. Nervous tissue

24. Which is a connective tissue?

- A. Blood
- B. Epidermis
- C. Neuron
- D. Muscle fibre

CLASS 9 SCIENCE

CHAPTER 3 • TISSUES IN ACTION

MCQs • Multiple-Choice Practice

25. The hard and rigid matrix of bone provides:

- A. Support and protection
- B. Digestion
- C. Gas exchange
- D. Food transport

26. Muscular tissue is specialised for:

- A. Contraction and movement
- B. Photosynthesis
- C. Water absorption
- D. Storage of DNA

27. Which muscle tissue is generally under voluntary control and attached to bones?

- A. Skeletal muscle
- B. Smooth muscle
- C. Cardiac muscle
- D. Nervous tissue

28. Which muscle tissue is found in organs such as the intestine and is generally involuntary?

- A. Smooth muscle
- B. Skeletal muscle
- C. Cardiac muscle
- D. Sclerenchyma

29. Cardiac muscle is found in the:

- A. Heart
- B. Stomach
- C. Skin
- D. Bone marrow only

30. Nervous tissue mainly consists of neurons that:

- A. Receive and transmit impulses
- B. Transport water in plants
- C. Store starch
- D. Form bone matrix

ANSWER KEY

Chapter 3 • Tissues in Action

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	B	2	B	3	B	4	A	5	B
6	B	7	B	8	B	9	C	10	A
11	A	12	A	13	B	14	B	15	A
16	B	17	A	18	A	19	A	20	B
21	A	22	A	23	A	24	A	25	A
26	A	27	A	28	A	29	A	30	A

Quick Revision: Meristematic tissues • Permanent tissues • Parenchyma • Collenchyma • Sclerenchyma • Xylem • Phloem • Epidermis • Epithelial • Connective • Muscular • Nervous tissues • Bones and joints