

Class test

1. A patient has suffered a ligament tear. Which of the following statements correctly explains why recovery is slow?
 - A. Ligaments have a good blood supply.
 - B. Ligaments have poor blood supply.
 - C. Ligaments have no nerve supply.
 - D. Ligaments are made of non-living material.

2. When you exercise regularly, your muscles become stronger and increase in size. Which process is mainly responsible for this?
 - A. Increase in number of muscle cells
 - B. Increase in size of muscle cells
 - C. Conversion of fat into muscle
 - D. Regeneration of nerve cells

3. If the epithelium of alveoli becomes thicker due to disease, what will be the immediate effect?
 - A. Faster gas exchange
 - B. Slower gas exchange
 - C. No effect on gas exchange
 - D. Increase in blood oxygen level

4. A person has a disease where bones become brittle and lose density. Which component of bone matrix is most affected?
 - A. Collagen fibres
 - B. Calcium and phosphorus salts
 - C. Bone marrow
 - D. Cartilage

5. In an accident, a person's spinal cord is injured. Which type of tissue is primarily affected?
 - A. Muscular tissue
 - B. Nervous tissue
 - C. Epithelial tissue
 - D. Connective tissue

6. Which type of connective tissue will increase in amount if a person gains a lot of weight?
 - A. Cartilage
 - B. Areolar tissue
 - C. Adipose tissue
 - D. Ligament

7. Smooth muscles are also called involuntary muscles. Which of the following best describes them?
 - A. Striated, multinucleated, involuntary
 - B. Non-striated, uninucleated, involuntary
 - C. Striated, uninucleated, voluntary
 - D. Non-striated, multinucleated, voluntary

8. Why do red blood cells have a biconcave shape?
 - A. To increase surface area for gas exchange
 - B. To store more hemoglobin

- C. To pass easily through narrow capillaries
D. All of the above
9. The presence of cilia in respiratory epithelium helps in:
- A. Gas exchange
B. Absorption of nutrients
C. Removal of dust and microbes
D. Secretion of mucus only
10. Which of the following tissues helps in repair of body after injury?
- A. Nervous tissue
B. Muscle tissue
C. Connective tissue
D. Epithelial tissue
11. Which of the following correctly matches tissue with its function?
- A. Cartilage – joins bones to muscles
B. Ligament – joins muscles to bones
C. Tendon – joins muscles to bones
D. Areolar tissue – stores fat
12. A person who has been bedridden for a long time starts losing muscle mass. Which statement explains this best?
- A. Muscle cells die and new ones are not formed.
B. Fat replaces the muscle tissue.
C. Muscles shrink due to less activity and protein breakdown.
D. The number of muscle cells decreases permanently.
13. The flexibility of cartilage is due to the presence of:
- A. Calcium phosphate
B. Collagen fibres and chondrin matrix
C. Adipose cells
D. Tendon fibres
14. The epithelial tissue which helps in absorption in the intestine is:
- A. Ciliated epithelium
B. Columnar epithelium with microvilli
C. Squamous epithelium
D. Cuboidal epithelium
15. Which tissue provides insulation against cold in animals such as whales and polar bears?
- A. Areolar tissue
B. Cartilage
C. Adipose tissue
D. Epithelial tissue
16. Which of the following statements about cardiac muscles is incorrect?
- A. They are involuntary.
B. They have intercalated discs.

- C. They get tired easily.
- D. They are striated.

17. During vigorous exercise, muscles start paining because:

- A. Oxygen supply increases
- B. Carbon dioxide decreases
- C. Lactic acid accumulates due to anaerobic respiration
- D. Muscles break down

18. Which connective tissue helps in repair of body after injury and also joins different tissues?

- A. Areolar tissue
- B. Adipose tissue
- C. Ligament
- D. Tendon

19. The bone matrix is hard because of:

- A. Collagen
- B. Calcium and phosphorus
- C. Fat
- D. Blood cells

20. In case of blood loss, which component of blood is immediately required to stop bleeding?

- A. Plasma
- B. RBCs
- C. WBCs
- D. Platelets

21. Which of the following is an example of voluntary muscle?

- A. Muscles of stomach
- B. Muscles of leg
- C. Heart muscles
- D. Muscles of intestine

22. If a piece of bone is treated with dilute hydrochloric acid, it becomes soft and flexible. Why?

- A. Calcium salts are removed, leaving collagen fibres.
- B. Collagen fibres are removed, leaving calcium salts.
- C. Water is removed from bone matrix.
- D. Bone cells are destroyed.

23. Which connective tissue acts as a “packing material” and fills the space between organs?

- A. Adipose tissue
- B. Areolar tissue
- C. Ligament
- D. Cartilage

24. A tissue has living cells, no intercellular spaces, and a free surface. What type of tissue is it?

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

25. What will happen if smooth muscles in your stomach stop working?

- A. Digestion will speed up.
- B. Food will not mix properly and move forward.
- C. Heartbeat will stop.
- D. Absorption of nutrients will increase.