

Chapter – 17 | Excretory Products and their Elimination

QUIZ-01

1. Which statement is correct about movement and locomotion?
- A. All movements are locomotion
 - B. All locomotions are movements
 - C. Locomotion never changes place
 - D. Movement occurs only in animals (B)

Explanation : Locomotion is a type of movement that causes change in place, so all locomotions are movements but all movements are not locomotions.

2. Amoeboid movement in human body is shown by:
- A. RBCs and platelets
 - B. Macrophages and leucocytes
 - C. Neurons and osteocytes
 - D. Muscle fibres only (B)

Explanation : Macrophages and leucocytes show amoeboid movement with the help of pseudopodia.

3. Skeletal muscles are also called voluntary muscles because they are:
- A. Under conscious control
 - B. Present only in heart
 - C. Non-striated
 - D. Found in visceral organs (A)

Explanation : Skeletal muscles are controlled by the nervous system according to our will, so they are voluntary muscles.

4. The storehouse of calcium ions in muscle fibre is:
- A. Sarcolemma
 - B. Sarcoplasmic reticulum
 - C. Myoglobin
 - D. Z-line (B)

Explanation : Sarcoplasmic reticulum stores calcium ions, which are essential for muscle contraction.

5. The functional unit of muscle contraction is:
- A. Fascicle
 - B. Sarcomere
 - C. Sarcolemma
 - D. Tendon (B)

Explanation : The portion between two successive Z-lines is called a sarcomere and works as the functional unit of contraction.

6. The light I-band of a myofibril mainly contains:
- A. Myosin
 - B. Actin
 - C. Collagen
 - D. Calcium (B)

Explanation : I-band contains thin actin filaments, while A-band contains thick myosin filaments.

7. Muscle contraction is best explained by:
- A. Lock and key theory
 - B. Sliding filament theory
 - C. Cell theory
 - D. Fluid mosaic model (B)

Explanation : Sliding filament theory states that thin actin filaments slide over thick myosin filaments during contraction.

8. During muscle contraction, which band retains its length?
- A. I-band
 - B. A-band
 - C. H-zone
 - D. Z-line (B)

Explanation : During contraction, I-band and H-zone reduce, but the A-band remains the same length.

9. The total number of bones in the adult human skeleton is:
- A. 80
 - B. 126
 - C. 206
 - D. 300 (C)

Explanation : The adult human skeletal system consists of 206 bones.

10. Gout is caused by accumulation of:
- A. Calcium carbonate crystals
 - B. Uric acid crystals
 - C. Glucose crystals
 - D. Sodium chloride crystals (B)

Explanation : Gout is inflammation of joints due to accumulation of uric acid crystals.