

Chapter – 17 | Locomotion and Movement**QUIZ
PART-03**

1. Each thin actin filament is made of:

- A. Two F-actins helically coiled
- B. Two myosin tails
- C. Calcium ions
- D. Two sarcomeres (A)

Explanation : Thin filament consists of two F-actins coiled around each other.

2. F-actin is a polymer of:

- A. Myosin
- B. G-actin
- C. Troponin
- D. Tropomyosin (B)

Explanation : F-actin is formed by polymerisation of G-actin.

3. Which protein runs close to F-actin throughout its length?

- A. Tropomyosin
- B. Myoglobin
- C. Chondroitin
- D. Collagen (A)

Explanation : Tropomyosin strands run along F-actin.

4. In resting stage, active binding sites for myosin are masked by:

- A. ATP
- B. Troponin
- C. Myoglobin
- D. Sarcolemma (B)

Explanation : Troponin masks active binding sites on actin.

5. Thick filament is mainly made up of:

- A. Actin
- B. Myosin
- C. Tropomyosin
- D. Troponin (B)

Explanation : Thick filament is composed of myosin.

6. Myosin filament is made of many monomeric proteins called:

- A. Meromyosins
- B. G-actins
- C. Tropomyosins
- D. Myoglobins (A)

Explanation : Myosin filament consists of meromyosin molecules.

7. Heavy meromyosin consists of:

- A. Tail only
- B. Head with short arm
- C. Z-line
- D. I-band (B)

Explanation : HMM includes the globular head and short arm.

8. Light meromyosin refers to the:

- A. Tail part
- B. Head part
- C. Actin site
- D. Troponin complex (A)

Explanation : LMM forms the tail part of meromyosin.

9. ATPase activity is present in:

- A. Myosin globular head
- B. Tropomyosin
- C. Actin tail
- D. Sarcoplasm (A)

Explanation : The myosin head acts as an ATPase enzyme.

10. Myosin head has binding sites for:

- A. ATP and actin
- B. Calcium and oxygen
- C. Glucose and protein
- D. DNA and RNA (A)

Explanation : Myosin head has ATP-binding and actin-binding sites.