



Class 11 Biology | Locomotion And Movement

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. The functional contractile unit of a skeletal muscle fibre is the

- A. Osteon B. Nephron C. Neuron D. Sarcomere

2. Thin filaments are mainly composed of

- A. Myosin B. Keratin C. Actin D. Collagen

3. During contraction, which band remains nearly constant in length?

- A. A band B. I band C. Sarcomere D. H zone

4. During contraction, the H zone generally

- A. Narrows
B. Forms a new Z line
C. Widens
D. Becomes the entire sarcomere

5. Calcium initiates skeletal muscle contraction by binding to

- A. Troponin B. Actin's ATP site
C. Collagen D. Acetylcholinesterase

6. Calcium for contraction is released mainly from the

- A. Nucleus
B. Sarcoplasmic reticulum
C. Golgi apparatus
D. Lysosome

7. ATP binding to myosin causes it to

- A. Shorten chemically
B. Permanently bind actin
C. Detach from actin
D. Become calcium

8. The neurotransmitter at a typical neuromuscular junction is

- A. Acetylcholine B. Insulin
C. Thyroxine D. Glucagon

9. Red muscle fibres resist fatigue partly because they contain abundant

- A. Only glycogen with no mitochondria
B. Keratin and chitin
C. Bone salts
D. Myoglobin and mitochondria

10. A ball-and-socket joint occurs at the

- A. Elbow B. Shoulder
C. Atlas-axis joint D. Skull suture

11. The joint between atlas and axis is a

- A. Pivot joint B. Ball-and-socket joint
C. Hinge joint D. Fixed suture

12. Ligaments primarily connect

- A. Bone to bone B. Muscle to bone
C. Neuron to muscle D. Skin to cartilage

13. Tendons primarily connect

- A. Bone to bone B. Muscle to bone
C. Bone to nerve D. Skin to skin

14. Low calcium levels can cause sustained muscle spasms called

- A. Osteoporosis B. Muscular dystrophy
C. Tetany D. Gout

15. Accumulation of uric acid crystals in joints causes

- A. Gout B. Emphysema
C. Rickets D. Myasthenia gravis

ANSWER KEY — check after completing all 15 questions

1.D 2.C 3.A 4.A 5.A 6.B 7.C 8.A 9.D 10.B 11.A 12.A 13.B 14.C 15.A

Original exam-style practice • Reference notes: www.physics.guru/cbse-practice-papers/ • Not an official paper