1. Number of bones in the human body is

- (a) 205
- (b) 305
- (c) 206
- (d) 306

Locomotion and Movement MCQs

2. Number of bones in an arm is

(a) 40

(b) 35

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(c) 32

(d) 30



3. Skeleton system is a framework of bones and

(a) Muscles

(b) Muscles and nerves

(c) A few cartilages

(d) All of the above.

Locomotion and Movement MCQs



4. Cartilage has a slightly pliable matrix formed of

a. Ossein

b. Chondroitin salts

c. Chromoproteins

d. Sterols Biology

5. Which of the following muscular disorders is inherited? [2019]

- a. Tetany
- b. Muscular dystrophy
- c. Myasthenia gravis
- d. Pelvis

Locomotion and Movement MCQs



6. Ribs are attached to

a. Scapula

b. Sternum

c. Clavicle

d. llium Ease Biology at Ease 7. What is the type of movable joint present between the atlas and axis

- (a) Pivot
- (b) Saddle
- (c) Hinge
- (d) Gliding



8. Glenoid cavity articulates:

- a. Scapula with acromion
- c. Humerus with scapula Biology at Ease
 - d. Clavicle with acromion

9. The functional unit of the contractile system in striated muscle is

a. myofibril

b. sarcomere

c. Z-band

d. cross bridges

Biology at Ease

(1998)



10. The number of floating ribs in the human body is

(1995)

- (a) 6 pairs
- (b) 3 pairs
- (c) 5 pairs
- (d) 2 pairs

11. Parathormone deficiency produces muscle ramps or tetany as a result of (1999)

- (b) enhanced blood Na² 10¹⁰ at Ease
- (c) enhanced blood glucose
- (d) enhanced blood Ca²

Locomotion and Movement MCQs



12. Collar bone is

a. Scapula

b. Clavicle

c. Stapes

d. Malleus

13. Radius is bone of

(a) Arm

(b) Leg

(c) Pelvic girdle

(d) Cranium

14. The functional unit of contractile system striated muscle is

(1998)

(a) myofibril

(b) sarcomere

Biology at Ease

(c) Z- band

(d) cross bridges



15. In the resting muscle fibre, troponin partially covers

- (a) calcium-binding sites on troponin
- (b) actin-binding sites on myosin
- (c) myosin-binding sites on actin
- (d) calcium-binding sites on actin



16. Ends of long bones are covered with

- (a) blood cells
- (b) muscles
- (c) cartilages
- (d) ligaments

17. Passage of ova through the female reproductive tract is facilitated by

(a) ciliary movements

(b) amoeboid movements Biology at Ease

(c) flagellar movements

(d) cyclosis



18. The joints between the carpal bones are

a. gliding joints

b. hinge joints

c. saddle joints

d. pivot joints



19. ATPase of the muscle is located in

- a. actinin
- b. troponin
- c. myosin
- d. actin

20. Intervertebral disc is found in the vertebral column of

- a. birds
- b. reptiles
- c. mammals
- d. amphibians

21. Which of the following is a source of energy for muscle contraction?

(a) Actin

(b) ATP

(c) Myosin

(d) Actomyosin

22. The protein whose removal enables myosin to bind action is smooth muscle is

- (a) troponin
- (b) caldesmon
- Biology at Ease (c) myosin light chain kinase
- (d) calmodulin



23. Which of the following is a non-locomotory movement?

- (a) *Hydra* following its prey
- (c) Deer running on grassland
- (d) Snail crawling on sand



- 24. Which of the following is not the feature of red muscle fibers?
 - a. They have plenty of mitochondria
 - b. They have a high content of myoglobin
 - c. They have a high amount of sarcoplasmic reticulum
 - d. They are called aerobic muscles

25. A neural signal reaching the NMJ releases a neurotransmitter (acetylcholine) which generates an action potential in

- a. Sarcolemma
- b. Sarcoplasmic reticulum
- c. Sarcoplasm
- d. Cross arm

26. Muscle band that remains unchanged during contraction and relaxation of skeleton muscle is

a. I- band

b. H- Band d. Z- line

c. A- band

27. Cyclosis, a characteristic of cells like Amoeba and vertebrate WBCs. This movement is due to

a. Sliding microtubule

b. Cytoplasmic streaming

c. Beating formation

d. Podia formation



- 28. Ciliary movement is found in:
 - a. Macrophages and leucocytes
 - b. Fallopian tube and vasa deferentia
 - c. Fallopian tube and Trachea
 - d. Tongue and Limbs

29. Mechanism of muscle contraction is best explained by

a. Contraction theory

b. Sliding filament theory

c. Microfilaments

d. Actin



30. Which of the following joints would allow no movement?

[2015, C]

a. Cartilaginous joint

b. Synovial joint

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c. Ball and Socket joint

d. Fibrous joint

31. Which of the following is not a function of the skeleton system?

[2015, C]

a. Storage of minerals

b. Production of body heat

c. Locomotion

d. Production or erythrocytes

32. Muscles that are primarily involved in locomotory actions and changes in body postures?

a. Cardiac muscles

b. Smooth muscles

c. Skeleton muscles

d. All of the above



33. Muscles of the body are originated:

a. Ectoderm

b. Mesoderm

c. Endoderm

d. All of above

34. Cardiac muscles are different from that skeleton muscles as the former are

a. Striated but involuntary

b. nonstriated and involuntary

c. smooth or un striated

d. voluntary in action

35. Red muscle fibers are rich in

a. Golgi bodies

b. mitochondria

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c. lysosomes

d. ribosomes

36. Lubrication occurs at hinge joints which need to be able to move without friction. Which one of the following aids lubrication?

a. Cartilage

b. Ligament

c. Synovial fluid

d. Connective tissues

37. Stimulation of muscles fiber by a major neuron occurs at:

(NEET- 2014)

a. The sarcoplasmic reticulum

b. The neuromuscular junction

c. The transverse tubules

d. The myofibril

38. Detachment of myosin from actin requires the attachment of

a. ATP to the myosin head

b. MG++ to the actin filament

c. ATP to the actin molecule

d. Ca ++ to the myosin head



39. Which of the following vertebrae are fused?

a. Cervical

b. Sacral

c. Lumber

d. Thoracic

40. Floating ribs arepairs and attached to Only.

a. 2, Sternum

b. 2, Vertebra

c. 3, Sternum

d. 3, Vertebra

41. Pectoral girdle consists of:

a. 2 bones

b. 4 bones

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c. 8 bones

d. 12 bones

42. Synovial fluid is found in:

a. Cranial cavity

b. Spinal cavity

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c. Immovable joints

d. Freely movable joints

43. Joint between atlas and axis is:

a. Pivot joint

b. Saddle joint

c. Angular joint

d. Hinge joint

44. Which one is the bone of the forelimb?

a. Humerus

b. Femur

c. Tibia

d. Fibula

45. Some voluntary movements that result in a change of place or location are called

a. Translocation

b. Transmutation

c. Transformation

d. Locomotion

46. Locomotory organs in starfishes are:

a. Parapodia

b. Pseudopodia

c. Suckers

d. Tube feet

47. Decrease in bone mass and higher chances of fractures with advancing age leads to

a. Osteoporosis

b. Muscular dystrophy

c. Gout

d. Tetany

48. Gout is caused due to the accumulation of

a. Estrogen

b. Uric acid crystals

c. Calcium ions

d. lodine

49. Number of vertebrae in the human skeleton is

a. 30

b. 32

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c. 33

d. 26

50. Smallest bone in the human body is:

a. Stapes

b. Malleus

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c. Patella

d. Navicular bone

Locomotion and Movement MCQs



<u>Answers</u>

- 1) (c) 206
- 2) (d) 30
- 3) (c) A few cartilages
- 4) b. Chondroitin salts
- 5) b. Muscular dystrophy
- 6) b. Sternum
- 7) (a) Pivot
- 8) c. Humerus with scapula
- 9) b. sarcomere
- 10) (d) 2 pairs
- 11) (a) lowered blood Ca²⁺
- 12) b. Clavicle
- 13) (a) Arm
- 14) (b) sarcomere
- 15) (c) myosin-binding sites on actin
- 16) (c) cartilages
- 17) (a) ciliary movements
- 18) a. gliding joints
- 19) c. myosin
- 20) c. mammals
- 21) (b) ATP
- Biology at Ease

- 22) (a) troponin
- 23) (b) A person bending anteriority
- 24) c. They have a high amount of sarcoplasmic reticulum
- 25) a. Sarcolemma
- 26) c. A- band
- 27) b. Cytoplasmic streaming
- 28) c. Fallopian tube and Trachea
- 29) b. Sliding filament theory
- 30) d. Fibrous joint
- 31) b. Production of body heat
- 32) c. Skeleton muscles
- 33) b. Mesoderm
- 34) a. Striated but involuntary
- 35) b. mitochondria
- 36) c. Synovial fluid
- 37) b. The neuromuscular junction
- 38) a. ATP to the myosin head
- 39) b. Sacral
- 40) b. 2, Vertebra
- 41) b. 4 bones
- 42) d. Freely movable joints
- 43) a. Pivot joint

- 44) a. Humerus
- 45) d. Locomotion
- 46) d. Tube feet
- 47) a. Osteoporosis
- 48) b. Uric acid crystals
- 49) D. 26
- 50) a. Stapes