BIOLOGY

BOOKS - SARAS PUBLICATION

LOCOMOTION AND MOVEMENT

Example

1. Define rigor mortis.

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2. What is actin?

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3. What is adenosine triphosphate (ATP)?

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4. Define cartilage.

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5. Define endoskeleton

Watch Video Solution

6. Define Exoskeleton

Watch Video Solution

7. What is motor neuron?

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8. 1. The plasme membrane of muscle cell is known as sarcolemma.

2. Hydrostatic skeleton is stiff bony stucture present in fishes.

3. The vertebral ribs are not connected to sternum.

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9. What is amoeboid movement?

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10. What is ciliary movement?

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11. What is flagellar movement?

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12. What is muscular movement?

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13. What are glycosomes?

14. What is myology?

15. Define hyoid bone

16. What is hydrostatic skeleton?

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17. What are called true ribs or verterbrosternal ribs?

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18. What ar called false ribs or vertebrochondral ribs?

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19. What is acromion?

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20. What is glenoid cavity?

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21. What is metaphysis?

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22. Write notes on endosteum?

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23. Differentiate thick filaments and thin filaments.

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24. Name the different types of movement.

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25. Name the filaments present in the sarcomere.

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26. Name of the contractile proteins present in the skeletal muscle.

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27. When describing a skeletal muscle, what does "striated" mean?

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28. How does an isotonic contraction take place?

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29. How does an isometric contraction take place?

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30. Which is the only jointless bone in human body?

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31. List the three main parts of the axial skeleton.

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32. Name the bones of the skull.

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33. How is tetany caused?

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34. How does rigor mortis happen?

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35. What are the different types of rib bones that form the rib cage?

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36. What are the bones that make the pelvic girdle?

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37. List the disorders of muscular system.

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38. What are the benefits of regular exercise?

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39. Define sliding filament theory of muscle contraction.

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57. Write short notes on floating ribs?

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58. What is acromion?

Watch Video Solution

59. What is glenoid cavity?

Watch Video Solution

60. Write short notes on olecranon process?

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61. Define phalanges

Watch Video Solution

62. What is metaphysis?

Watch Video Solution

63. Write notes on endosteum?

Watch Video Solution

64. What are the bones included in the foot?

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65. Write notes on endurance.

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66. Define balanc exercises

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67. Suresh collected the following set of bones of a dog from his garden. Construct a forelimb from his collection.

femur, radius, humerus, fibula, ulna, phalangesa, metatarsals, metacarpals, tarsals, carpals,

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68. Explain slow-oxidative fibres?

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69. Explain fast-oxidative fibres?

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70. Explain fast-glycolytic fibres?

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71. Write notes on fibrous joints.

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72. Write short notes on cartilaginous joints.

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73. Write short notes on synovial joints

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74. Name the different types of synovial joints?

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75. Explain CTS.

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76. Define strength exercises

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77. Differentiate thick filaments and thin filaments.

Watch Video Solution

78. Explain skeletal muscle?

Watch Video Solution

79. Write the functions of skeletal system.

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80. Explain the disorders of skeletal system.

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81. Describe the structure of the lower limb of man?

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82. Describe the structure of the skeletal muscle?

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83. Which allows the upper limbs a degree of mobility not seen anywhere else other than hip ?

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84. Which limb is articulated to the glenoid cavity? Explain its structure.

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85. Write the schematic presentation of muscle contraction?

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86. Explain the structure of contractile proteins.

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87. Which is the largest, longest and strongest bone in the human body? Explain its structure.

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Exercise

1. Muscles are derived from

A. Ectoderm

B. Mesoderm

C. Endoderm

D. Neuroectoderm

Answer:

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2. Muscles are formed by

A. Mycocytes

B. Leucocytes

C. Osteocytes

D. Lymphocytes

Answer:

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3. The muscles attached to the bones are called

A. Skeletal muscle

B. Cardiac muscle

C. Involuntary muscle

D. Smooth muscles

Answer:

4. Skeletal muscles are attached to the bones by

A. Tendon

B. Ligament

C. Pectin

D. Fibrin

Answer:

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5. The bundle of muscles fibres is called

A. Myofibrils

B. Fascicle

C. Sarcomere

D. Sarcoplasm

Answer:

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6. The pigment present in the muscle fibre to store oxygen is

A. Myoglobin

B. Troponin

C. Myosin

D. Actin

Answer:

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7. The functional unit of a muscle fibre is

A. Sarcomere

B. Sarcoplasm

C. Myosin

D. Actin

Answer:

Watch Video Solution

8. The protein present in the thick filament is

A. Myosin

B. Actin

C. Pectin

D. Leucine

Answer:

Watch Video Solution

9. The protein present in the thick filament is

A. Myosin

B. Actin

C. Pectin

D. Leucine

Answer:

Watch Video Solution

10. The region between two successive Z-discs is called a

A. Sarcomere

B. Microtubule

C. Myoglobin

D. Actin

Answer:

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11. Each skeletal muscle is covered by

A. Epimysium

B. Perimysium

C. Endomysium

D. Hypomysium

Answer:

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12. Knee joint is an example of ....

A. Saddle joint

B. Hinge joint

C. Pivot joint

D. Gliding joint

Answer:

Watch Video Solution

13. Name of the joint present between the atlas and axis is

A. Synovial joint

B. Pivot joint

C. Saddle joint

D. Hinge joint

Answer:

Watch Video Solution

14. ATPase enzyme needed for muscle contraction is located in

A. Actinin

B. Troponin

C. Myosin

D. Actin

Answer:

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15. Synovial fluid is found in

A. Ventricles of the brain

B. Spinal cord

C. Immovable joint

D. Freely movable joints

Answer:

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16. Inflammation of joints due to accumulation of uric acid crystals is called as

A. Gout

B. Myasthenia gravis

C. Osteoporosis

D. Osteomalacia

Answer:

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17. Acetabulum is located in

A. Collar bone

B. Shoulder bone

C. Hip bone

D. Tigh bone

Answer:

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18. Appendicular skeleton is

A. Girdles and their limbs

B. Vertebrae

C. Skull and vertebral column

D. Ribs and sternum

Answer:

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19. The type of movement exhibits by the macrophages are

A. Flagellar

B. Ciliary

C. Muscular

D. Amoeboid

Answer:

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20. The pointed portion of the elbow is

A. Acromion process

B. Glenoid cavity

C. Olecranon process

D. Symphysis

Answer:

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21. Growth plate is present between

A. Epiphysis and diaphysis

B. Epiphysis and metaphysis

C. Epiphysis and periphysis

D. Epiphysis and periosteum

Answer:

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22. Which sequence is correct

A. Red marrow, periosteum, endosteum, compact bone.

B. Red marrow, endosterum, spongy bone, compact bone, periosteum

C. Red marros, compact bone, periosteum, endosteum, spongy bone

D. Red marrow, Spongy bone, compact bone, periosterum, endosterum

Answer:

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23. Identify the bone destroying component

A. Osteoblast

B. Red marrow

C. Epiphyseal plate

D. Osteoclast

Answer:

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24. Identify the diarthroses joints

A. joints of adjacent vertebrae

B. joints of skull bones

C. knee joints

D. fibrous joints

Answer:

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25. Identify the incorrect pair

A. Vertebral coloumn-Coccynx

B. Skull-Hyoid bone

C. Fore limb-Femur

D. Hind limb -Patella

Answer:

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26. Identify the pectoral girdle bone

A. Clavicle

B. Ilium

C. Ischium

D. Pubis

Answer:

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27. Identify the incorrect pair

A. Hind limb-60

B. Skull-29

C. Pectoral girdle-2

D. Ribs-24

Answer:

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28. Which is a saddle joint

A. Wrist

B. Angle

C. Knee

D. Elbow

Answer:

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29. The joint between atlas and axis

A. Fibrous joint

B. Hinge joint

C. Plane joint

D. Pivot joint

Answer:

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30. Identify the bone of the axial skeleton

A. Fibula

B. Humerus

C. Malleus

D. Scapula

Answer:

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31. Idenfity the incorrect group

A. Carpals,metacarpals,phalanges

B. Tarsals, metatarsals,phalanges

C. Malleus,incus,stapes

D. Ilium,ischium,scapula

Answer:

32. Sarcomere is distance between: .....

A. Z' disc and 'Z' disc

B. H' zone and 'H' zone

C. Dark band and light band

D. A' band and 'I' band

Answer:

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33. The muscles fibre is surrounded by

A. Periosteum

B. Endomysium

C. Endosteum

D. Epimysium

Answer:

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34. The protein present in the thick filament is

A. Actin

B. Propoline

C. Myosin

D. Tropomyosin

Answer:

 Watch Video Solution

35. Each dark band has a lighter region in its middle called

A. Z' disc

B. I' band

C. M' line

D. H' zone

Answer:

 Watch Video Solution

36. Identify the incorrect group

A. Myosin, heavyt meromyosin, light meromyosin

B. Actin, troponin, tropomyosin

C. Ilium,ischium,pubis

D. Myosin,meromyosin,tropomyosin

Answer:

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37. What is nerve impulse?

A. Release of calcium ions from the sarcoplasmic reticulum

B. Active sites are exposed

C. Cross bridge is formed

D. ATP is hydrolysed

Answer:

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38. Macrophages exhibits___movement for engulfing pathogens

A. Ciliary movement

B. Amoeboid movement

C. Flagellar movement

D. Walking movement

Answer:

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39. The contraction and relaxation of the muscle which is termed as____

A. Amoeboid movement

B. Ciliary movement

C. Muscular movement

D. Flagellar movement

Answer:

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40. The covering around each fascicle is the _____

A. Epimysium

B. Perimysium

C. Endomysium

D. Sarcolemma

Answer:

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41. These are the granules of stored glycogen that provide glucose during muscles fibre activity.

A. Sucrose

B. Starch

C. Glycosomes

D. Cellulose

Answer:

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42. The oxidative fibres are called as ..... fibres.

A. White muscles fibre

B. Glycolytic fibres

C. Thick fibres

D. Red muscles fibres

Answer:

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43. ..... is the large opening found at the posterior base of the skull.

A. Foremen magnum

B. Glenoid

C. Acetabulum

D. Foramen of Monro

Answer:

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44. The first vertebra is called_____

A. Axis

B. The atlas

C. Coccyx

D. Sacrum

Answer:

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45. The first seven pairs of ribs are called .....

A. Protein ribs

B. False ribs

C. True ribs

D. Vertebrochondral ribs

Answer:

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46. The region where the diaphysis and epiphysis meet is called.....

A. Metaphysis

B. Epiphyseal plate

C. Sacrum

D. Articular cartilage

Answer:

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47. Internal bone surface of long bone is covered with a delilcate connective tissue membrane called the__

A. Periosteum

B. Episoteum

C. Perimysium

D. Endosteum

Answer:

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48. 1. Exoskeleton - (i) Human being

2. Endoskeleton - (ii) Cockroach

3. Oxidative fibres - (iii) Pale colour fibres

4. Lack of myoglobin - (iv) Red muscle fibres

A. Red muscle fibres

B. White muscle fibres

C. Glycolytic fibres

D. Oxidative fibres

Answer:

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49. The skeleton is present in eathworm is

A. Exoskeleton

B. Hydropstatic skeleton

C. Endoskeleton

D. Axial skeleton

Answer:

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50. The skeleton is cockroach is

A. Exoskeleton

B. Endoskeleton

C. Axial skeleton

D. Hydroskeleton

Answer:

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51. ..... increase the breathing and heart rate.

A. Physical exercise

B. Balance exercise

C. Endurance

D. Flexibility exercise

Answer: A

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52. The progressive degeneration of skeletal muscle leading to death from lung or heart failure

A. Muscular dystrophy

B. Tetany

C. Antophy

D. Muscle faitgue

Answer:

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53. A traumatic pulling of the fibres produces a tear known as .....

A. Atrophy

B. Arthritis

C. Tetany

D. Sprain

Answer:

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54. A neurotransmitter found throughout the nervous system is

A. Thymine

B. Acetylcholine

C. Gasterin

D. HCl

Answer: B

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55. The thin filament of muscle fibre is made up of

A. Myosin

B. Actin

C. Neuromyosin

D. Glycogen

Answer:

Watch Video Solution

56. The principal constituent of thick filament is _____

A. Myosin

B. Actin

C. Tropomyosin

D. Troponin

Answer:

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57. ..... is the functional unit of the skeletal muscle.

A. Sarcoplasm

B. Sacromere

C. Myofibril

D. Fascicle

Answer:

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58. A fibrous connective tissue that connects a bone to a muscle is___

A. Humerus

B. Fascicle

C. Myocytes

D. Tendon

Answer:

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59. Match the following

1. Amoeboid movement	- (i) Contraction and relaxation of the muscle.
2. Ciliary movement	- (ii) Pseudopodia
3. Flagellar movement	- (iii) Ciliated epithelial cell.
4. Muscular movement	- (iv) flagella

A. 1-(iii) 2-(iv) 3-(i) 4-(ii)

B. 1-(ii) 2-(iii) 3-(iv) 4-(i)

C. 1-(ii) 2-(iv) 3-(i) 4-(iii)

D. 1-(iv) 2-(i) 3-(ii) 4-(iii)

Answer:

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60. Match the following

1. Myasthenia gravis	- (i) deficiency of vitamin D
2. Tetany	- (ii) an auto-immune disorder
3. Muscle fatigue	- (iii) deficiency of parathyroid hormone
4. Osteoporosis	- (iv) lack of ATP

A. 1-(ii) 2-(iii) 3-(iv) 4-(i)

B. 1-(ii) 2-(iv) 3-(i) 4-(iii)

C. 1-(iv) 2-(iii) 3-(ii) 4-(i)

D. 1-(iii) 2-(iv) 3-(i) 4-(ii)

Answer:

61. Match the following

1. Endurance	- (i) improve balance
2. Strength exercises	- (ii)Stretch body muscles
3. Balance exercises	- (iii)Circulatory system healthy
4. Flexibility exercises	-(iv)Muscles stronger

A. 1-(iii) 2-(iv) 3-(i) 4-(ii)

B. 1-(iv) 2-(iii) 3-(ii) 4-(i)

C. 1-(iii) 2-(iv) 3-(ii) 4-(i)

D. 1-(ii) 2-(iii) 3-(iv) 4-(i)

Answer:

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62. Identify the correct Assertion and Reason:

Assertion(A): The oxidative fibres are termed as red muscle fibres.

Reason ®: Fibres that contain numerous mitochondria and have a high capacity for oxidative fibres.

A. (R) is correct but (A) is wrong.

B. (A) is correct but (R) is wrong

C. (A) is correct but (R) explains (A)

D. Both (A) and (R) are correct.

Answer:

63. Assertion (A) : Rapid muscle spasms occur in the muscles.

Reason(R): Due to deficiency of parathyroid

hormone resulting in reduced calcium levels in the body

A. (R) is correct but (A) is wrong.

B. (A) is correct but (R) is wrong

C. (A) is correct but (R) explains (A)

D. Both (A) and (R) are correct.

Answer:

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64. Assertion (A): Osteoporosis occurs due to deficiency of vitamin D and hormonal imbalance

Reason (R): Osteoporosis causes rickets in children and osteomalacia in adult females.

A. (R) is correct but (A) is wrong.

B. (A) is correct but (R) is wrong

C. (A) is correct but (R) explains (A)

D. Both (A) and (R) are correct.

Answer:

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65. Choose the incorrect pair:

1. Pivot joint	- between atlas and axis.
2. Saddle joint	- between the carpal and metacarpal.
3. Ball and socket joint	- between humerus and pectoral girdle.
4. Hinge joint	- between radius and carpals.

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66. Choose the incorrect pair:

a) Skull	- Sacral
b) Sternum	- Coccyx
c) Fore limb	- Humerus
d) Ribs	- Phalanges

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67. Skeletal muscles are attached to the bones by

A. Tendon

B. Ligament

C. Pectin

D. Fibrin

Answer:

Watch Video Solution

68. Muscles are formed by

A. Myocytes

B. Osteocytes

C. Leucocytes

D. Lymphocytes

Answer:

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69. Knee joint is an example of ....

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B. Pivot joint

C. Hinge joint

D. Gliding joint

Answer:

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70. The pointed portion of the elbow is

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Answer:

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Answer:

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