

BIOLOGY

BOOKS - DINESH PUBLICATION ENGLISH

LOCOMOTION AND MOVEMENT

Multiple Choice Question

- 1. Locomotory organs in starfish are
 - A. Tube feet
 - **B.** Tentacles
 - C. Cilia
 - D. Appendagas.

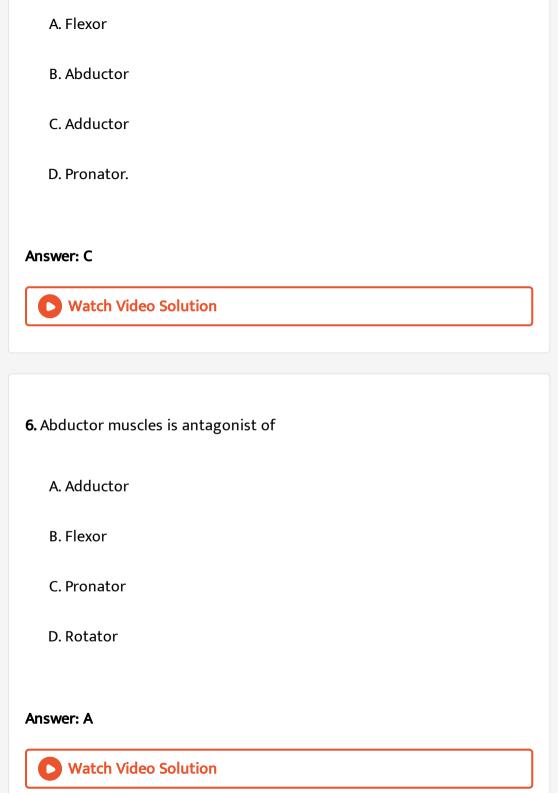
Answer: A



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watch video Solution
2. Muscle that bends one part over another is called
A. Extensor
B. Flexor
C. Abductor
D. Adductor.
Answer: B
Watch Video Solution
3. Coronoid process is a part of
A Upper jaw
A. Upper jaw
A. Upper jaw B. Lower jaw
B. Lower jaw

D. Cranium.
Answer: B
Watch Video Solution
4. Foramen magnum and occipital condyles are found in
A. Fronto parietal bone
B. Occipital bone
C. Prootic bones
D. Squamosal bone.
Answer: B
Watch Video Solution
5. Muscle that brings the limb towards midline is called



7. Bending of ankle joint is brought about by
A. Biceps
B. Triceps
C. Trapezius
D. Gastronemius
Answer: D
Watch Video Solution
8. Acetabulum is located in
A. Hip joint
B. Shoulder joint
C. Knee joint

D. Elbow Joint.
Answer: A
Watch Video Solution
9. The only movable bone in the skull is
A. Maxilla
B. Frontoparietal
C. Mandible
D. Nasal.
Answer: C
Watch Video Solution
10. Elbow joint is an example of

. .

B. Hinge joint C. Suture joint D. Gliding joint. **Answer: B Watch Video Solution** 11. Sutures present between various bones of skull are A. Cartilaganious joints B. Synovial joints C. Hinge joints D. Fibrous joints. **Answer: D Watch Video Solution**

A. Ball and socket joint

12. Cartilaginous joints

- A. Permit slight movements
- B. Are found in symphysis
- C. Are found in the bodies of vertebrae
- D. All the above.

Answer: D



Watch Video Solution

13. Hinge joints

- A. Are synovial joints
- B. Permit movement in one direction
- C. Are found in knee

D. All the above.
Answer: D
Watch Video Solution
14. The joints between the carpal bones are
A. Fibrous joints
B. Cartilagenous joints
C. Angular joints
D. Gliding joint.
Answer: D
Watch Video Solution
15. Immovable joint is

A. Synarthroses B. Amphiarthroses C. Diarthroses D. None of the above. Answer: A **Watch Video Solution** 16. In old age, stiffness of joint is due to the A. Hardening of bones B. Inefficiency of muscles C. Decrease in synovial fluid D. Enlargement of bones. Answer: C **Watch Video Solution**

17. Bone formed by the ossification of a tendon is called
A. Replacing bone
B. Sesamoid bone
C. Investing bone
D. None of the above.
Answer: B
Watch Video Solution
18. Longest bone in lower arm is
A. Ulna
B. Radius
C. Tibia

D. Femur
Answer: A
Watch Video Solution
19. Obturator foramen occurs in
A. Interventricular septum
B. Pectoral girdle
C. Skull
D. Pelvic girdle.
Answer: D
Watch Video Solution
20. Olecranon process is found in

A. Humerus
B. Radius
C. Ulna
D. Tibia.
Answer: C
Allswer: C
Watch Video Solution
21. Collar bone is known as
A. Scapula
B. Coracoid
C. Patalla
D. Clavicle.
Answer: D
Watch Video Solution

22. Nutrient foramen is present in A. Humerus B. Femur C. Tibia - fibula D. All of the above **Answer: D Watch Video Solution** 23. Deltoid ridge of humerus is meant for A. Articulation B. Attachment of muscles

C. Protection

D. None of the above.

Answer: B



Watch Video Solution

- **24.** A simple crack in the bone when the two parts of the bone remain together is called
- (a) Green stick fracture
- (b) Simple fracture
- (c) Comminuted fracture
- (d) Compound fracture
 - A. Green stick fracture
 - B. Simple fracture
 - C. Comminuted fracture
 - D. Compound fracture.

Answer: A



25. A fracture in which a small piece of the bone is broken, but remains attached with the ligament is known as

- A. Green stick fracture
- B. Evulsion fracture
- C. Comminuted fracture
- D. Compound fracture.

Answer: B



Watch Video Solution

- 26. Atlas vertebra of man is characterized by the presence of
- (a) Procoelous centrum
- (b) Acoelous centrum

(c) Amphicoelous centrum (d) Absence of centrum A. Proceolous centrum B. Acoelous centrum C. Amphicoelous centrum D. Absence of centrum. Answer: D **Watch Video Solution** 27. Neural spine of atlas vertebra of man is directed in the A. Upward and backward direction B. Upward and forward direction C. Downward and backward direction D. Absent.

Answer: D **Watch Video Solution** 28. Pelvic girdle of man consists of A. Ileum, ischium and pubis B. Ilium, ischium and clavicle C. Ilium, ischium and pubis D. Coracoid, clavicle and scapula.

Answer: C

Watch Video Solution

A. Glenoid cavity

29. Trochlea of humerus articulates with the

C. Acetabulum D. Carpals. **Answer: B** Watch Video Solution **30.** Centrum is absent in A. Atlas vertebra B. Typical vertebra C. Sacral vertebra D. Ninth vertebra. Answer: A **Watch Video Solution**

B. Sigmoid notch

A. Os-innominatum
B. Ilium
C. Synsacrum
D. Suspensorium.
Answer: A
Watch Video Solution
32. Comminuted fractures are those in which
A. A bone breaks into many pieces are without blood circulation
B. A bone breaks into two parts
C. A bone breaks into many parts
D. A small piece of bone breaks.

31. Half of pelvic girdle is known as

Answer: A



Watch Video Solution

33. A fracture in which one bone breaks into many parts and some of the pieces protrude out of injured skin is known as

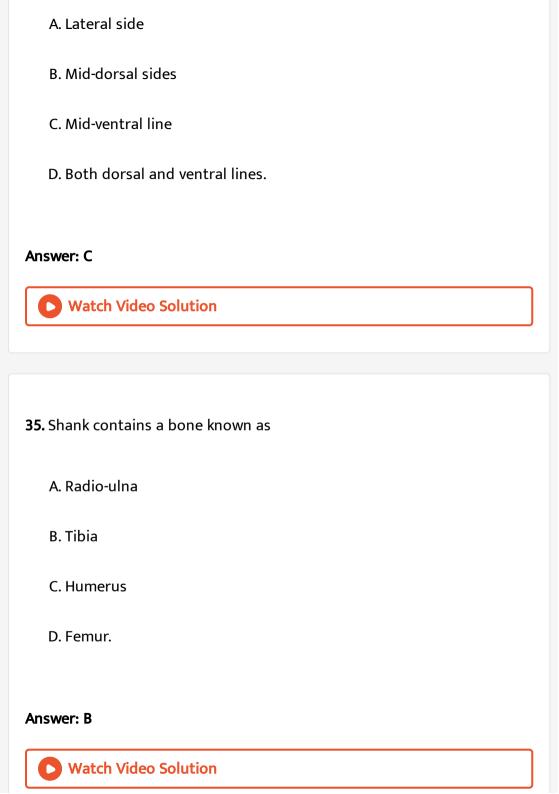
- A. Green stick fracture
- B. Comminuted fracture
- C. Compound fracture
- D. Evulsion fracture.

Answer: C



Watch Video Solution

34. Two halves of pectoral girdle fuse in



36. Neural canal contains

- A. Ear ossicles
- B. Internal ears
- C. Spinal cord
- D. Brain.

Answer: C



Watch Video Solution

37. Human vertebral formula is

- A. $C_4T_8L_4S_8C_8$
- $\mathsf{B.}\, C_7 T_8 L_5 S_6 C_7$
- C. $C_7T_{12}L_5S_4C_5$

D. $C_7T_{12}L_5S_5C_4$.

Answer: D



Watch Video Solution

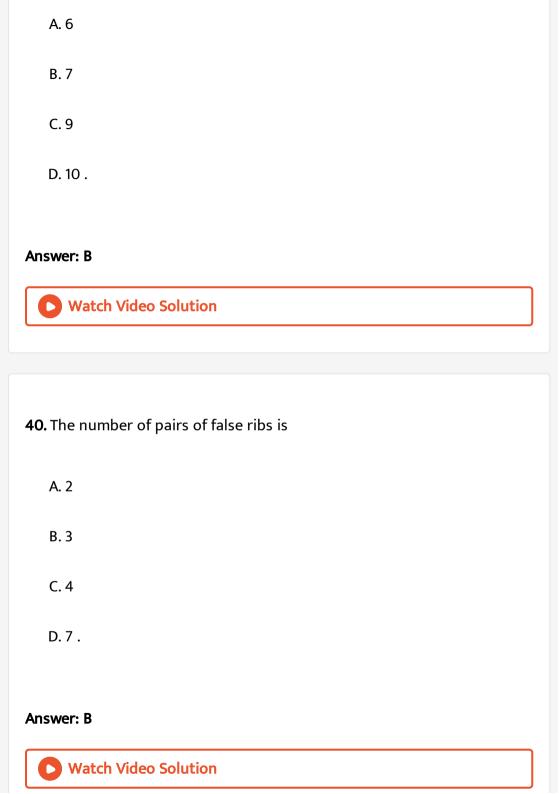
- **38.** Movable joints are called
 - A. Fibrous joints
 - B. Symphyses
 - C. Synovial joints
 - D. Cartilaginous joints.

Answer: C



Watch Video Solution

39. The number of pairs of true ribs is



41. Which of the following ribs are not connected ventrally with the sternum and are called as floating ribs ?

- A. 11 and 12
- B. 9 and 10
- C. 7 and 8
- D. 1 and 2.

Answer: A



Watch Video Solution

- 42. Long neck of Camel of Giraffe has
- (a) Numerous cervical vertebrae
- (b) Development of extra large intervertebral pads
- (c) Longer vertebrae
- (d) Development of extra bony plates between adjacent cervical vertebrae

A. Numerous cervical vertebrae B. Development of extra large intervertebral pads C. Longer vertebrae D. Development of extra bony plates between adjacent cervical vertebrae. Answer: C **Watch Video Solution** 43. Number of bones present in a leg of human being is A. 25 B. 30 C. 35 D. 40. **Answer: B**



- **44.** Phalangeal formula for the hand is
 - A. 0,2,2,3,3
 - B. 0,2,3,3,3
 - C. 2,2,3,3,3

D. 2,3,3,3,3.

Answer: D



- **45.** The number of carpals per limb of human beings is
 - A. 5
 - В. 6
 - C. 7

Answer: D



Watch Video Solution

- 46. The number of tarsals per limb of human beings is
 - A. 5
 - B. 6
 - C. 7
 - D.8.

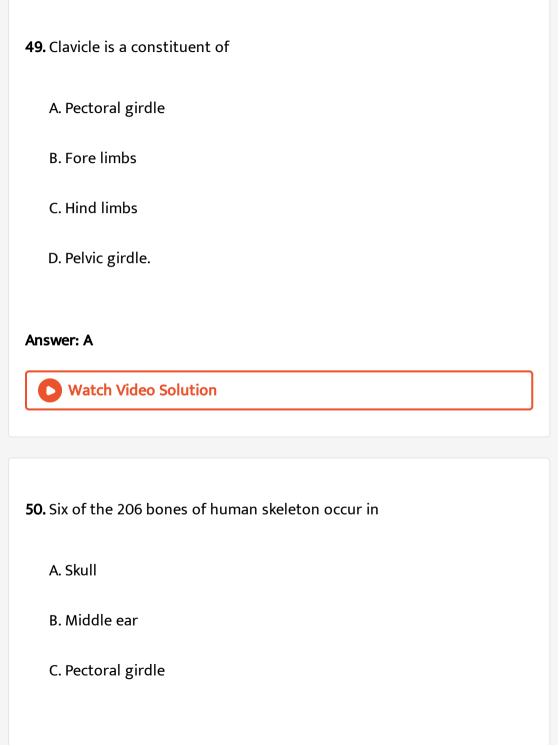
Answer: C



Watch Video Solution

47. The bones common to face and cranium are

A. Parietal
B. Frontal
C. Temporal
D. Palatine.
Answer: B
Watch Video Solution
48. Cheek bones are
A. Lacrimal
B. Zygomatic
C. Parietal
D. Ethmoid.
Answer: B
Watch Video Solution



D. Pelvic girdle.
Answer: B
Watch Video Solution
51. Number of bones in human axial skeleton is
A. 80
B. 100
C. 106
D. 126 .
Answer: A
Watch Video Solution
52. Gorilla rib is

A. Extra floating rib B. Extra false rib C. Extra true rib D. First false rib. Answer: A **Watch Video Solution Revision Questions From Competitive Exams 1.** Skull of Rabbit / Man is : — A. Monocondylic B. Dicondylic C. Tricondylic D. Tetracondylic.

Answer: B Watch Video Solution 2. In mammals the number of cervical vertebrae is always A. 7 B. 9 C. 1 D. 12. Answer: A Watch Video Solution 3. Which one is bone of fore limb? A. Humerus

B. Femur
C. Tibia
D. Fibula.
Answer: A
Watch Video Solution
4. A deltoid ridge occurs in
A. Radius
B. Ulna
C. Femur
D. Humerus.
Answer: D
Watch Video Solution

5. Friction is lessened in ball-and-socket joint by
A. Coelomic fluid
B. Synovial fluid
C. Pericardial
D. Mucin.
Answer: B
Watch Video Solution
6. Axis vertebra is identified by
A. Sigmoid notch
B. Odontoblast
C. Odontoid process
D. Olecranon process.

Answer: C



Watch Video Solution

- 7. Hinge joint is present between
 - A. Humerus and ulna/ratio-ulna
 - B. Femur and pelvic girdle
 - C. Humerus and pectoral girdle
 - D. Skull and atlas.

Answer: A



Watch Video Solution

- 8. Which opening occurs in a pair?
- (a) Obturator foramen
- (b) Foramen magnum

(c) Foramen ovalis
(d) Fenestra rotundus
A. Obturator foramen
B. Foramen magnum
C. Foramen ovalis
D. Fenestra rotundus.
Answer: A
Watch Video Solution
9. The total number of vertebrae in man is
A. 30
B. 32
C. 33
D. 35.

Answer: C Watch Video Solution 10. Number of bones present in human cranium is A. 8 B. 10 C. 12 D. 16. Answer: A Watch Video Solution 11. Number of bones in human body is (a) 206 (b) 205

(c) 306
(d) 305
A. 206
B. 205
C. 306
D. 305.
Answer: A
Watch Video Solution
12. Obturator foramen is found in
12. Obturator foramen is found in A. Pelvic girdle
A. Pelvic girdle
A. Pelvic girdle B. Pectoral girdle

Answer: A Watch Video Solution 13. Number of bones present in an arm is A. 30 B. 32 C. 35 D. 40. Answer: A Watch Video Solution 14. Cervical vertebrae are characterised by A. Transverse processes

B. Neural spines C. Vertebro-arterial canals D. Odontoid process. **Answer: C Watch Video Solution** 15. Sigmoid notch of olecranon process is found in (a) Tibio-fibula (b) Femur (c) Radio-ulna (d) Humerus A. Tibio-fibula B. Femur

C. Ratio-ulna

D. Humerus.

Answer: C Watch Video Solution 16. Greater trochanter occurs in A. Humerus B. Radius C. Ulna D. Femur. **Answer: D** Watch Video Solution 17. Sella turcica is A. Depression of long bone

C. Depression in skull over in the area of pituitary gland D. Ridge in the skull in the area of pituitary gland **Answer: C Watch Video Solution** 18. Ribs are attached to A. Scapula B. Sternum C. Clavicle D. Ilium. Answer: B **Watch Video Solution**

B. Ridge over a bone

19. Number of bones in (one half) of lower jaw in humans is
A. 1
B. 4
C. 6
D. 2.
Answer: A
Watch Video Solution
20. Pelvic girdle is made up of
A. Ischium
B. Ilium
C. Pubis
D. All the above.

Answer: D



- 21. Zygomatic arch of rabbit (mammals) is formed of
 - A. Maxilla, periotic and jugal
 - B. Maxilla, squamosal and jugal
 - C. Maxilla, pre-maxilla and squamosal
 - D. Periotic, jugal and palatine.

Answer: B



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- 22. Vertebro-arterial canal occurs in
 - A. Cervical vertebrae

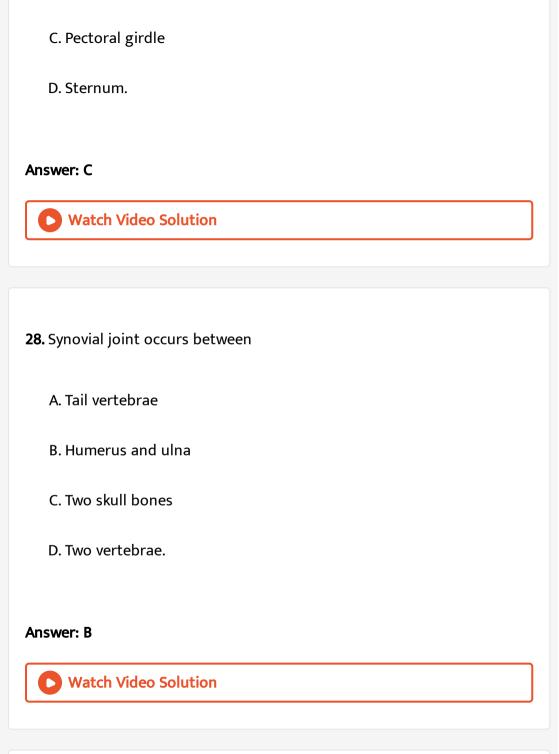
- B. Lumbar vertebrae C. Thoracic vertebrae D. Sacral vertebrae. Answer: A **Watch Video Solution**
- 23. Which vertebra has the odontoid process?
 - A. 7th vertebra of Frog
 - B. Second vertebra of frog
 - C. Second cervical vertebra of mammal
 - D. Second thoracic vertebra of mammal

Answer: C

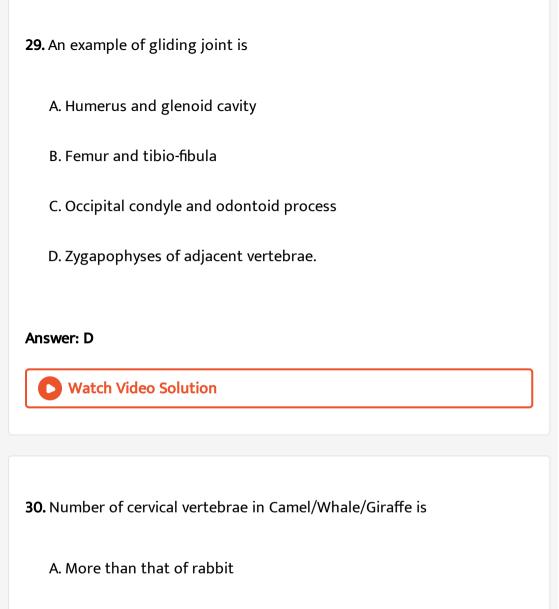


24. Smallest bone in Rabbit and Man is
A. Stapes
B. Patella
C. Nasal
D. Palatine.
Answer: A
Watch Video Solution
25. Extremities of long bones possess which type of cartilage
A. Calcified
B. Fibrous
C. Elastic
D. Hyaline.

Answer: D Watch Video Solution 26. Ilium is part of A. Small intestine B. Pectoral girdle C. Pulmonary track D. Pelvic girdle. **Answer: D** Watch Video Solution 27. Glenoid cavity is found in: A. Pelvic girdle



B. Skull



B. Less than that Rabbit

C. Same as that of Whale

D. More than that of Horse.

Answer: C Watch Video Solution 31. The total number of muscles in the body of man is A. 439 B. 639 C. 539 D. 409. **Answer: B** Watch Video Solution 32. Gastrocnemius muscles are found in A. Fore arm

C. Thigh	
D. Shanks.	
Answer: D	
Watch Video Solution	
33. During muscle contraction	
A. Size of A-bands remains the same	
B. Size of H-zone becomes smaller	
C. Size of I-bands decreases	
D. All the above.	
Answer: D	
Watch Video Solution	

B. Chest

34. Which chemical accumulates in a fatigued muslce?
A. Pyruvic acid
B. Lactic acid
$C.CO_2$
D. A.D.P
Answer: B
Watch Video Solution
35. Major protein in thick filaments of skeletal muscle fibre is
A. Myosin
B. Actin
C. Tropomyosin
D. Troponin.

Answer: A



Watch Video Solution

36. At times ligaments and tendons are overstretched or torn. The phenomenon is

- A. Sprain
- B. Dislocation
- C. Fracture
- D. Tension.

Answer: A



Watch Video Solution

37. Long bones function in

A. Support B. Support, erythrocyte and leucocyte synthesis C. Support and erythrocyte synthesis D. Erythrocyte formation. **Answer: B Watch Video Solution** 38. A vertebra having convexity both in front and behind is A. Acoelous B. Procoelus C. Amphicoelous D. Amphiplatyon. Answer: A **Watch Video Solution**

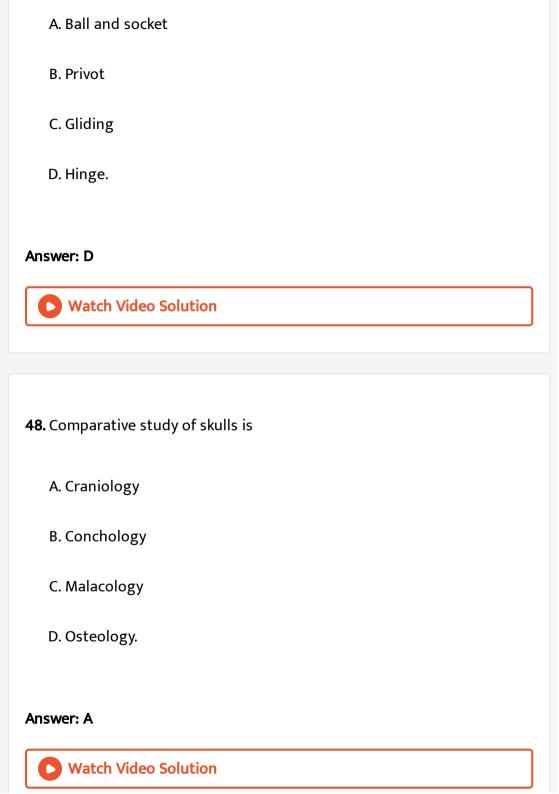
39. Which element is essential for muscle con - traction ?
A. Na
В. К
C. Ca
D. Cl.
Answer: C
Watch Video Solution
40. Haversian system is a diagnostic feature of
A. Avian bones
B. Reptilian bones

D. Bone of all animals.
Answer: C
Watch Video Solution
41. Which of the following components is a part of the pectoral girdle?
A. Glenoid cavity
B. Sternum
C. Ilium
D. Acetabulum.
Answer: A
Watch Video Solution
42. The joint between the human skull bones is :

A. Hinge joint
B. Synovial joint
C. Cartilaginous joint
D. Fibrous joint.
Answer: D
Watch Video Solution
43. Trochanters occur in
A. Humerus
B. Femur
C. Radio-ulna
D. Tibio-fibula.
Answer: B
Watch Video Solution

44. Longest bone in the human body is
A. Humerus
B. Stapes
C. Femur
D. Ratio-ulna.
Answer: C
Watch Video Solution
45. The acromion process is a part of the
A. Vertebral column
B. Pelvic girdle
C. Femur
C. Felliul

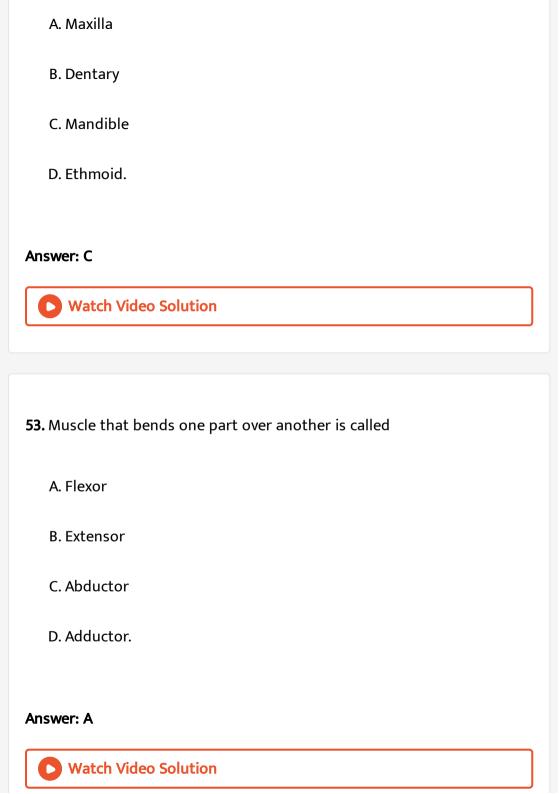
D. Pectoral girdle/Scapula.
Answer: D
Watch Video Solution
46. Part of the body having a single pair of bones is
A. Pelvic girdle
B. External ear
C. Wrist
D. Lower jaw.
Answer: A
Watch Video Solution
47. The joint present between radius and ulna is



49. The number of floating ribs, in the human body, is
A. 6 pairs
B. 5 pairs
C. 3 pairs
D. 2 pairs.
Answer: D Watch Video Solution
50. Head of humerus bones articulates with glenoid cavity of pectoral girdle.
A. Hinge
B. Ball and socket
C. Immovable

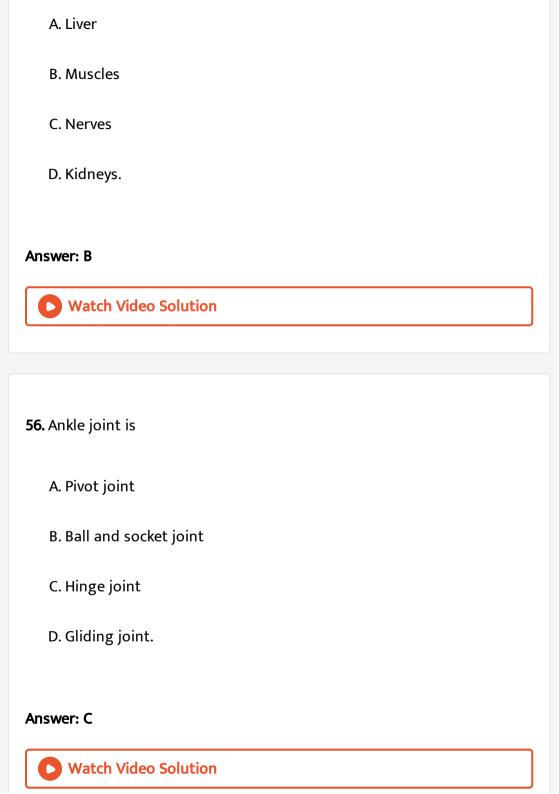
Answer: B
Watch Video Solution
51. Feeling of fatigue after running fast for some time is due to
A. Loss of energy
B. Accumulation of lactic acid in muscles
C. Formation of succinic acid D. Formation of biuret crystals.
Answer: B
Watch Video Solution
52. The lower jaw in mammals is made up of

D. Pivot joint.



54. Sesamoid bone (ossified tendon) is
(a) Cartilage
(b) Areolar tissue
(c) Tendon
(d) Ligament
A. Cartilage
B. Areolar tissue
C. Tendon
D. Ligament.
Answer: C
Watch Video Solution

55. Which one has the maximum glycogen?



57. Tongue bone is

- A. Palatine
- B. Sphenoid
- C. Pterygoid
- D. Hyoid apparatus.

Answer: D



Watch Video Solution

58. Chemical ions responsible for muscle contraction are

- A. Ca^{2+} and Mg^{2+}
- B. Ca^{2+} and Na^{+}
- C. Na^+ and K^+

D. Mg^{2+} and K^+

Answer: A



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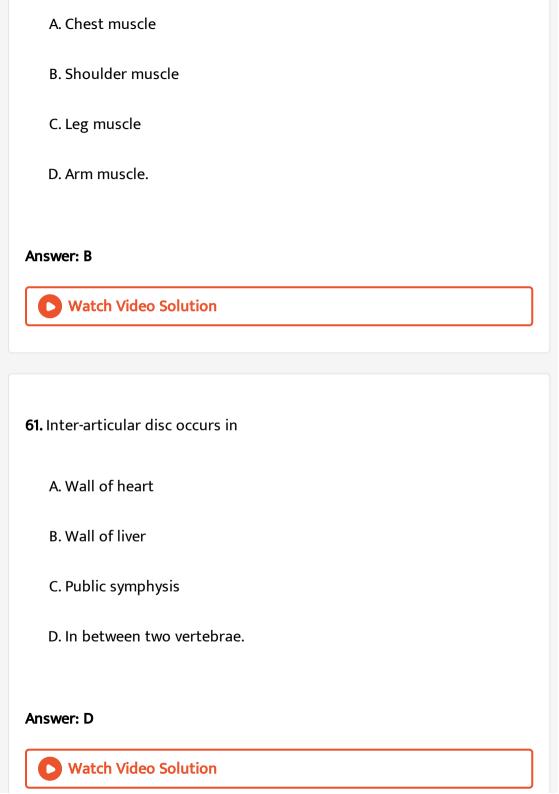
- **59.** Epiphysial plate is involved in
 - A. Formation of bone
 - B. Elongation of bone
 - C. Thickness of bone
 - D. All the above.

Answer: B



Watch Video Solution

60. Latissimus dorsi muscle is



62. Acetabulum is located in
A. Pelvic girdle
B. Pectoral girdle
C. Fore arm
D. Upper arm.
Answer: A
Watch Video Solution
63. Which one is incorporated in muscle fibres?
63. Which one is incorporated in muscle fibres? A. Acetylcholine
A. Acetylcholine

D. Cytochrome.

Answer: B



Watch Video Solution

- 64. Sarcomere is the unit of
- (a) Contraction

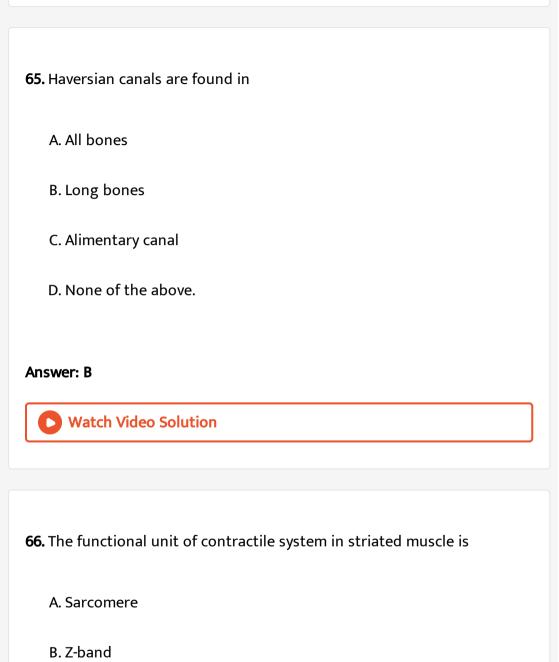
(b) Relaxation

- (c) Contraction and relaxation
- (d) None of the above
- A. Two I-bands
 - B. A and I bands
 - C. Two Z-lines
 - D. Z and A bands.

Answer: C



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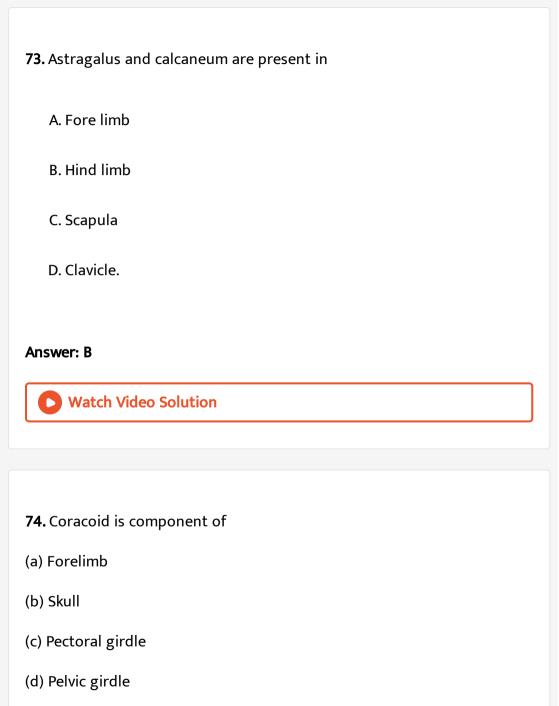
C. Cross bridge

D. Myofibril.
Answer: A
Watch Video Solution
67. Which of the following is not the contractile protein of a muscle?
A. Tubulin
B. Myosin
C. Tropomyosin
D. Actin.
Answer: D
Watch Video Solution
68. The total number of bones in the hindlimb of a man is

A. 21 B. 24 C. 30 D. 14. **Answer: C** Watch Video Solution 69. Sharpey's perforating fibres are related with (a) Collagen (b) Muscles (c) Bone (d) Skin A. Collagen B. Muscles C. Bone

D. Skin.
Answer: C Watch Video Solution
70. Biceps is attached with
A. Radius
B. ulna
C. Femur
D. Both A and B.
Answer: D
Watch Video Solution
71. Pelvic girdle of man consists of

A. Ilium B. Ilium and ischium C. Ilium,ischium and pubis D. Ischium and pubis. **Answer: C Watch Video Solution** 72. The pivot joint between atlas and axis is a type of A. Pivot joint B. Saddle joint C. Angular joints D. Hinge joint. Answer: A **Watch Video Solution**



A. Fore limb
B. Skull
C. Pectoral girdle
D. Pelvic girdle.
Answer: C
Watch Video Solution
75. Olecranon fossa is found in
A. Femur
B. Radius
C. Humerus
D. Ulna.
Answer: D
Watch Video Solution

76. Two halves of pelvic girdle are joined together by

- A. Pubic symphysis
- B. Ischiac symphysis
- C. Ischiopubic symphysis
- D. By fusion.

Answer: A



Watch Video Solution

77. Sutural joints are found between

- A. Thumb and metatarsal
- B. Humerus and ratio-ulna
- C. Parietals of skull

D. Glenoid cavity and pectoral girdle.
Answer: C
Watch Video Solution
78. Which one is a bone of skull?
A. Atlas
B. Femur
C. Tibia
D. Pterygoid.
Answer: D
Watch Video Solution
79. What is the joint between sternum and ribs in humans

A. Cartilaginous B. Fibrous joint C. Angular joint D. Hinge joint. Answer: A **Watch Video Solution** 80. The slow twitch muscle fibre which are rich in myoglobin and have abundant mitochondria are A. White muscle fibres B. Red muscle fibres C. Involuntary muscles D. All the above. **Answer: B**



81. Coccygeal bone occurs in

A. Skull

B. Pectoral girdle

C. Vertebral column

D. Pelvic girdle.

Answer: C



82. During strenuous exercise, glucose is converted into

A. Glycogen

B. Pyruvic acid

C. Starch

Answer: D
Watch Video Solution
3. We move our hands while walking for
A. Faster movement
B. Balancing
C. Increasing blood cicrulation
D. Relieving tension.
nswer: B
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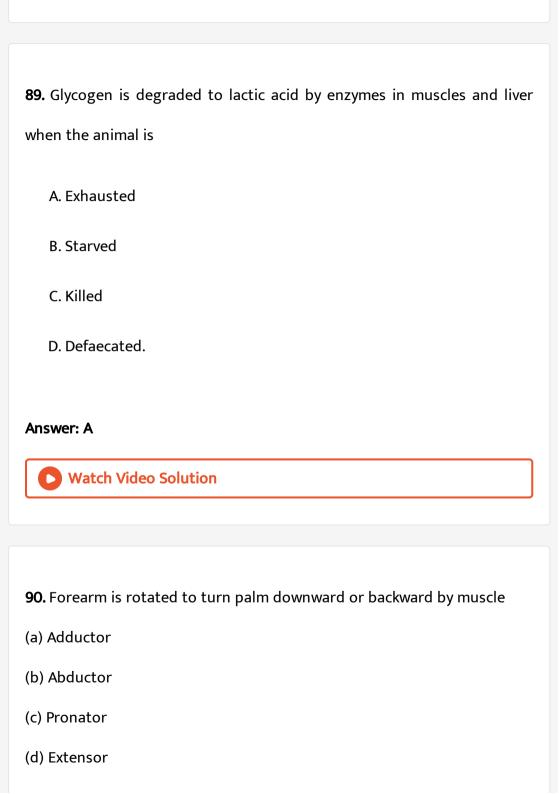
84. Which of the following is a source of energy for muscle contraction ?

D. Lactic acid.

A. Glucose B. GTP C. Creatine phosphate D. ATP. **Answer: D** Watch Video Solution 85. Which one yields ATP required for muscle contraction? (a) Myoglobin (b) Creatine phosphate (c) Creatinine phosphate (d) Myosin A. Myoglobin B. Creatine phosphate C. Creatinine phosphate

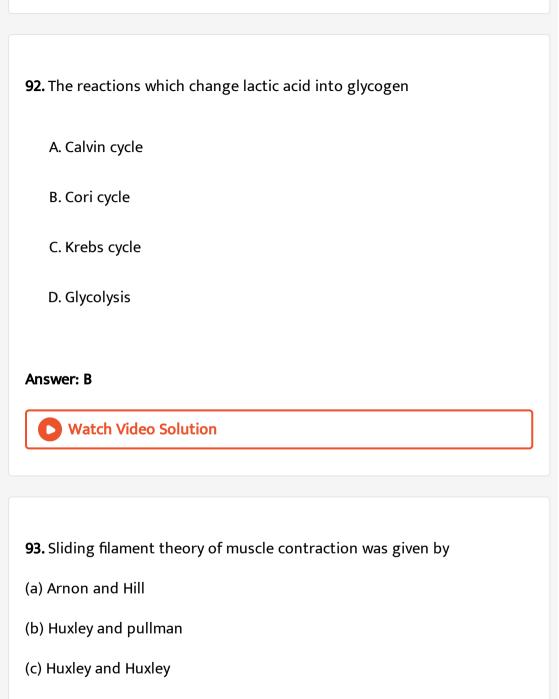
D. Myosin.
Answer: B
Watch Video Solution
86. Synovial fluid is present in
A. Spinal cavity
B. Cranial cavity
C. Freely movable joints.
D. Fixed joints.
Answer: C
Watch Video Solution
87. EDTA injected into muscles combines with Ca^{2+} and

A. Stops contraction
B. Causes contraction
C. Slow down contraction
D. None of the above.
Answer: A
Watch Video Solution
88. Sesamoid bone (ossified tendon) is
A. Patella
B. Femur
C. Tarsal
D. Tibia.
Answer: A
Watch Video Solution



B. Abductor C. Pronator D. Extensor **Answer: C** Watch Video Solution 91. Red muscles have abundant A. Lactic acid and acetic acid B. Glucose and haemoglobin C. Relaxin and myosin D. Myoglobin and cytochrome **Answer: D** Watch Video Solution

A. Adductor



(d) Pullman and pullman

A. Arnon and Hill B. Huxley and pullman C. Huxley and Huxley D. Pullman and pullman. **Answer: C Watch Video Solution** 94. If a stimulus, several times greater than the threshold stimulus, is provided to a musclw fibre, it will A. Contract with same force B. Contract forcefully C. Contract slightly D. Undergo tetany. Answer: A



- 95. The type of joint between the human skull bones is
 - A. Synarthrous
 - B. Amphiarthrous
 - C. Hemiarthrous
 - D. Diarthrous.

Answer: A



- **96.** Which of the following vertebrae are fused
 - A. Cervical
 - B. Sacrum
 - C. Lumbar

D. Thoracic.
Answer: B Watch Video Solution
97. Which one is a ball and socket joint
A. Knee joint
B. Elbow joint
C. Humerus and pectoral girdle
D. Skull and atlas.
Answer: C
Watch Video Solution
98. Tail vertebrae of birds form

- A. Wish bone
- B. Chevron bone
- C. Urostyle
- D. Pygostyle.

Answer: D



Watch Video Solution

- - B. $1 \cdot 0 2 \cdot 0$ minutes

A. $0 \cdot 2 - 2 \cdot 3$ millisecond

99. Actin filaments depolymerise and repolymerise in motile cells with

- D. 2-3 days.

C. 1-2 hours

Answer: A



Watch Video Solution

100. Which is true of muscle contraction?

- A. (a) Sarcolemma becomes permeable to $Ca^{2\,+}$ ion
- B. (b) Sarcolemma becomes permeable to $Na^{\,+}\,$ ions
- C. (c) Sarcolemma becomes nonpermeable to $Na^{\,+}$ ions
- D. (d) Concentration of Ca^{2+} ions is reduced in myoplasm

Answer: B



Watch Video Solution

101. Which is not the function of bones

- A. Protection of vital organs
- B. Haemopoiesis
- C. Muscle attachment

D. Secretion of hormones.
Answer: D
Watch Video Solution
102. The total number of bones in the human skull is
A. 22
B. 29
C. 35
D. 72 .
D. 72 .
Answer: B
Watch Video Solution
103. Anisotropic band consists of :
Teen and a spic band consists of t

A. Myosin filaments B. Actin filaments C. Elastin filaments D. Both A and B. **Answer: D Watch Video Solution** 104. Socket in pelvic girdle in which head of femur articulates is formed by fusion of A. Ischium and pubis B. Ilium and pubis C. Ilium and ischium D. Ileum, ischium and pubis. Answer: D

105. All or none law is associated with

- A. Muscle fibre
- B. Neuron
- C. Uriniferous tubule
- D. Both A and B.

Answer: D



106. Muscular and nervous excitability is reduced by

- A. Na^+
- B. K^+
- $\mathsf{C.}\,Ca^{2\,+}$

D. $Mg^{2\,+}$.

Answer: B



Watch Video Solution

- 107. Largest synovial joint is
- (a) Hip joint
- (b) Knee joint
- (c) Shoulder joint
- (d) Ankle joint
 - A. Hip joint
 - B. Knee joint
 - C. Shoulder joint
 - D. Ankle joint.

Answer: B



Watch Video Solution

108. The movable skull bone is A. Maxilla B. Vomer C. Mandible D. All the above. **Answer: C Watch Video Solution** 109. Joint pains in old people are mostly due to A. Reduced synovial fluid

B. Overproduction of synovial fluid

C. Formation of extra osteocytes

D. All the above.

Answer: A



Watch Video Solution

110. Pick up the correct match

(a)Sternum (i)14

(b)Ribs (ii)1

(c)Pelvis (iii)24

(d)Face (iv)3

A. (a)-ii, (b)-iii, (c)-iv, (d)-i

B. (a)-ii, (b)-iv, (c)-i, (d)-iii

C. (a)-ii, (b)-iii, (c)-i, (d)-iv

D. (a)-ii, (b)-i, (c)-iii, (d)-iv.

Answer: A



Watch Video Solution

111. Bone formed by the ossification of tendon is called
A. Dermal bone
B. Cartilage
C. Sesamoid bone
D. Membrane bone.
Answer: C
Watch Video Solution
112. Fabellae bones are associated with
(a) Elbow joint
(b) Knee joint
(c) Neck joint
(d) Angular joint
A. Elbow joint

- B. Knee joint
- C. Neck joint
- D. Angular joint.

Answer: B



Watch Video Solution

113. [A]: Jaws suspensorium in Mammals is craniostylic.

[R]: Articulation of lower jaw is at the mandibular tossa of the squamous

- region of the temporal bone rather than at the quadrate.
 - A. Amphistylic
 - B. Autodiastylic
 - C. Hyostylic
 - D. Craniostylic.

Answer: D



114. Ginglymoid/hinge joint occurs in

A. Elbow and shoulder

B. Elbow and knee

C. Atlas and odontoid process

D. Knee and ankle.

Answer: B



Watch Video Solution

115. Hilton's muscle is

A. aryepiglottic muscle

B. Quadriceps muscle

C. Gracillis muscle

D. Trapezius muscle.
Answer: A
Watch Video Solution
116. Red muscle fibres are rich in
A. Golgi bodies
B. Mitochondria
C. Lysosomes
D. Ribosomes.
Answer: B
Watch Video Solution
117. Joints of hip and shoulder are

B. Ellipsoid joints C. Hinge joints D. Ball and socket joints. **Answer: D Watch Video Solution** 118. Which vertebra has the odontoid process? A. Atlas B. Sacral C. Axis D. None of the above. **Answer: C Watch Video Solution**

A. Pivot joints

119. The spinal cord passes through which of the following vertebral structures? A. Foramen of Monro B. Iter C. Obturator foramen D. Foramen magnum. **Answer: D Watch Video Solution**

120. Shape of human skeleton is

A. J-shaped

B. M-shaped

C. L-shaped

D. S-shaped.
Answer: D
Watch Video Solution
121. The type of joint between metacarpals and phalanges of fingers is
A. Ball and socket
B. Pivot
C. Saddle
D. Hinge.
Answer: D
Watch Video Solution
122. Involuntary muscular contraction is called

B. Muscle fatigue C. Muscle spasm D. Muscle twitch. **Answer: C Watch Video Solution** 123. Rigor mortis is caused due to A. Depletion of ATP B. Excess ATP C. Excess availability of Calcium D. Release of Magnesium. Answer: A **Watch Video Solution**

A. Muscle sprain

124. Number of ball and socket joints present in human body is
A. 2
B. 4
C. 6
D. 8.
Answer: B
Watch Video Solution
125. Muscle activity of our body
A. Increases body temperature
B. Decreases BMR
C. Decreases venous return

D. Rsduces blood and lymph flow.

Answer: A

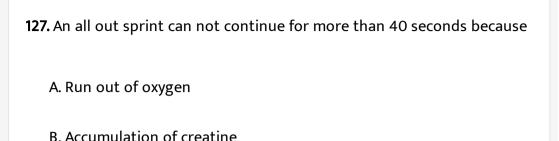


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- 126. Component of actin filament of a sarcomere is
- (a) Myosin and troponin
- (b) Troponin and actin
- (c) Actin and myosin
- (d) Actin, troponin and tropomyosin
 - A. Myosin and troponin
 - B. Troponin and actin
 - C. Actin and myosin
 - D. Actin, troponin and tropomyosin.

Answer: D





- C. Muscle collapse
- D. All the above.

Answer: A



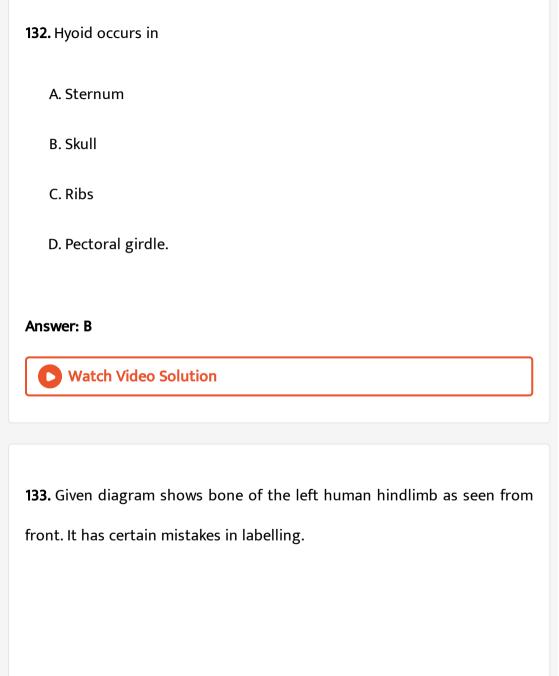
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128. Synovial joint is exemplified by

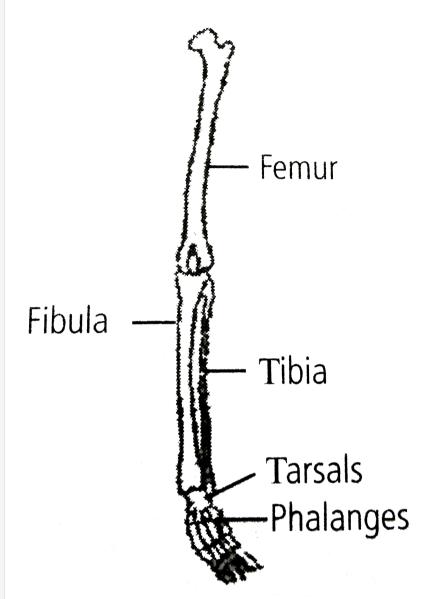
- A. Ball and socket joint
- B. Pivot joint
- C. Hinge joint

D. All the above.
Answer: D
Watch Video Solution
129. ATPase enzyme needed for muscle contraction is located in
A. Actinin
B. Troponin
C. Myosin
D. Actin.
Answer: C
Watch Video Solution
130. Nucleus pulposus is present in

A. Brain
B. Liver
C. Kidney
D. Intervertebral disc.
Answer: D
Watch Video Solution
131. Sprain is due to pulling of
A. Muscles
B. Tendons
C. Ligaments
D. Nerves.
Answer: C
Watch Video Solution



Which of the following pairs contain both wrongly labelled bones?



A. (a) Tibia and tarsals

B. (b) Femur and fibula

- C. (c) Fibula and phalanges
 D. (d) Tarsals and femur.
- **Answer: C**

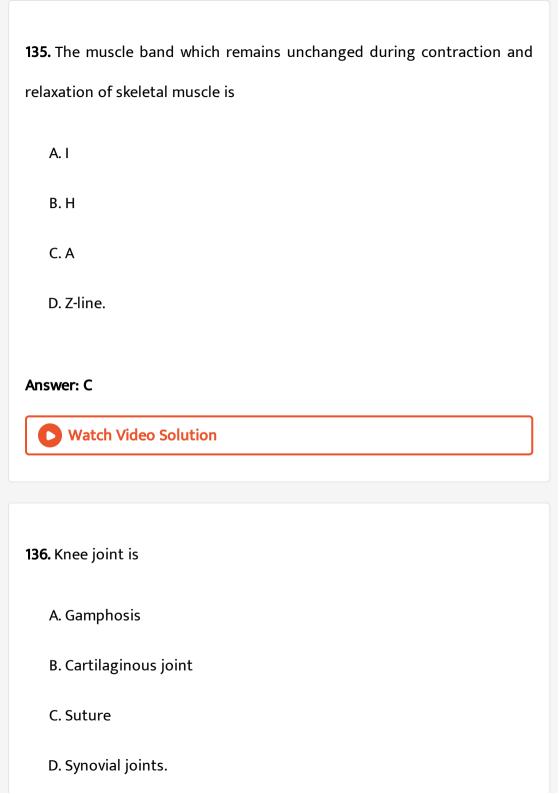


134. Which is correctly matched?

- A. Gliding joint-Between zygopophyses of successive vertebrae
- B. Hinge joint-Between vertebrae
- C. Cartilaginous joint-Skull bones
- D. Fibrous joint-Between phalanges.

Answer: A





Answer: D



Watch Video Solution

137. Joint where synovial capsule and synovial fluid are lacking is

- A. Carpal-carpal
- B. Public symphysis in females
- C. Finger and toes males
- D. Femur and pelvis in females.

Answer: B



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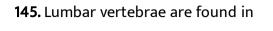
138. Lactic acid generated during muscle contraction is elaborated to form glycogen in

A. Liver
B. Pancreas
C. Kidney
D. Muscle.
Answer: A
Watch Video Solution
139. Cervical vertebrae are located in
A. Thoracic region
B. Abdominal region
C. Neck region
D. Lumbar region.
Answer: C
Watch Video Solution

140. Number of lumbar vertebrae in human skeleton is
A. 12
B. 7
C. 5
D. 2.
Answer: C
Watch Video Solution
141. How many ribs are present in human beings
A. 6 pairs
B. 9 pairs
C. 15 pairs

D. 12 pairs.
Answer: D
Watch Video Solution
142. Which of the following is an example of appendicular skelton?
A. Bones of skull
B. Bones of vertebral column
C. Ribs
D. Bones of fore and hind limb.
Answer: D
Watch Video Solution
143. Lactic acid deposition leads to

A. Tetany B. Muscle fatigue C. Muscle strain D. Symphyses **Answer: B** Watch Video Solution 144. True joints are A. Synovial joints B. Synchondrosis C. Syndesmoses D. Symphyses **Answer: A Watch Video Solution**



- A. Abdominal
- B. Thorax
- C. Neck region
- D. Hip region.

Answer: A



Watch Video Solution

146. Gout is a disease that affects the joints and leads to arthritis. It is associated with an abnormality of

- A. Pyrimidine metabolism
- B. Purine metabolism
- C. Fat metabolism

D. Protein metabolism.

Answer: B



Watch Video Solution

147. A cricket player is fast chasing ball in the field. Which one of the following group of bones is directly contributing in this movement?

A. Femur, Malleus, Tibia, Metatarsals

B. Pelvis, Ulan, Patella, Tarsals

C. Sternum, Femur, Tibia, Fibula

D. Tarsals, Femur, Metatarsals, Tibia.

Answer: D



148. The number of vertebrae present in cervical, theoracic, lumbar, sacral and coccyx regions are respectively

- A. 12,7,5,1,1
 - B. 1,7,5,12,1
 - C. 7,12,5,1,1
- D. 5,12,7,1,1

Answer: C



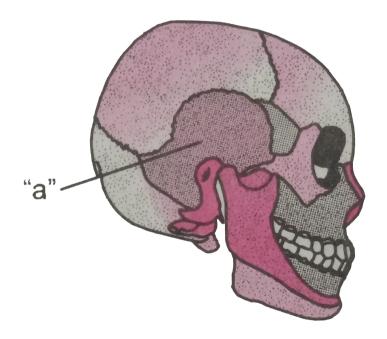
- 149. The first cervical vertebra is
 - A. Axis
 - B. Atlas
 - C. Lumbar
 - D. Sacral.

Answer: B



Watch Video Solution

150. In the diagram of skull, what does "a" represent



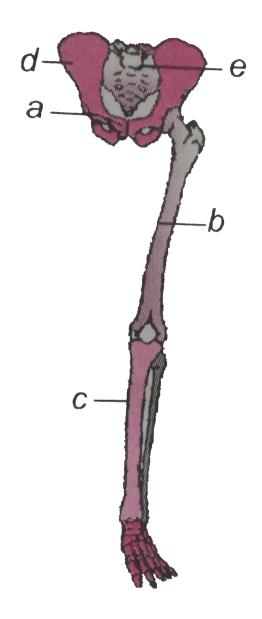
- A. Occipital bone
- B. Frontal bone
- C. Parietal bone
- D. Temporal bone,

Answer: D



Watch Video Solution

151. Consider the parts labelled as a, b, c, d and e respectively in the diagram and find out the correct sequence



A. Pubis, Femur, Tibia, Ilium and Sacrum

B. Ilium, Femur, Tibia, Pubis and Sacrum

C. Pubis, Tibia, Femur, Ilium and Sacrum

D. Ilium, Femur, Tibia, Pubis and Sacrum.
Answer: A
Watch Video Solution
152. Heat muscle is sensitive to
A. Electrical stimuli
B. Chemical stimuli
C. Mechanical stimuli
D. All the above.
Answer: D
Watch Video Solution
153. Hensen's disc occurs in

A. Myofibril of striated muscle B. Myofibril of unstriated muscle C. Myofibril of heart muscle D. None of the above. Answer: A **Watch Video Solution** 154. A bone is connected to another by A. Tendon B. Ligament C. Cartilage D. Muscle. Answer: B Watch Video Solution

155. The long protein mulecule, which masks the active sites on the f-actin is

- A. Troponin
- B. Tropomyosin
- C. Myosin
- D. Light meromyosin.

Answer: A



Watch Video Solution

156. Number of bones in cranium, face, hyoid and middle ear are respectively

- A. 14, 8, 1, and 3
- B. 8, 14, 1 and 3

- C. 3, 8, 14, and 1
- D. 14, 8, 3 and 1.

Answer: B



Watch Video Solution

157. Statements

A-bands of the muscle are dark and contain myosin

I-band are the light bands and contain action

During muscle contration the A-band contracts

The part between the two Z-lines is called as saromere

The central part of thin filament, not over-lapped by thick filament is called H-zone of the above statements.

- - A. 1,2 and 3 are correct, 2 and 4 incorrect
 - B. 1,3 and 5 correct, 2 and 4 incorrect
 - C. 1,2 and 4 correct, 3 and 5 incorrect

D. 1 and 2 correct, 3,4 and 5 incorrect.

Answer: C



Watch Video Solution

- 158. Consider the following statements
- A. In man, vertebral column has 33 verte brae organized as 28 bones.
- B. Pelvic gridle is made up of two fused bones only.
- C. Osteoporisis is characterized by microar chitectural deteriration of the bone.
 - A. I alone is correct
 - B. II alone is correct
 - C. III alone is correct
 - D. I alone is incorrect.

Answer: D



159. /	٩j	oint	made	for	power	is
--------	----	------	------	-----	-------	----

- A. Knee joint
- B. Suture in cranium
- C. Joint between vertebrae
- D. Mandibular joint.

Answer: D



Watch Video Solution

160. Number of wrist bones is

- A. 8
- B. 9
- C. 7

Answer: A
Watch Video Solution
161. Cartilaginous joints
A. Synchondrosis
B. Symphyses
C. Diarthrosis
D. Both A and B.
Answer: D
Watch Video Solution
162. Symphysis consists of

D. 6.

A. Hyaline cartilage
B. Elastic cartilage
C. Fibrocartilage
D. Synovial fluid.
Answer: C
Watch Video Solution
163. Bones become fragile in:
A. Arthritis
B. Osteoporosis
C. Gout
D. None of the above.
Answer: B
Watch Video Solution

164. In human body, which one of the following is anatomically correct?
A. Collar bones - 3 pairs
B. Salivary glands - one pair
C. Cranial nerves - 10 pairs
D. Foating ribs - 2 pairs.
Answer: D Watch Video Solution
165. Which one of the following is a skull bone?
A. Atlas
B. Pterygoid
C. Arytenoid

D. Coracoid.
Answer: B Watch Video Solution
166. For the elbow joint, triceps is
A. Flexor
B. Extensor
C. Abductor
D. Adductor.
Answer: B
Watch Video Solution
167. During contraction of skeletal muscle Ca^{2+} bind to

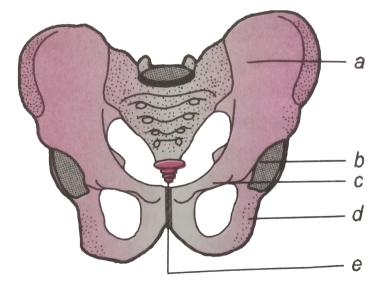
- A. Troponin-C
- B. Troponin-A
- C. Calmodulin
- D. Cal bindin.

Answer: A



Watch Video Solution

168. Identify the labelling a, b, c, d, and e of pelvic girdle



- A. a-pubis, b-acetabulum, c-ilium, d-ischium, e-pubis symphysis
- B. a-ilium, b-acetabulum, c-pubis, d-ischium, e-pubic symphysis
- C. a-ischium, b-acetabulum, c-pubis, d-ilium, e-pubic symphysis
- D. a-ilium, b-pubis, c-acetablum, d-ubic symphysis, e-ischium

Answer: B



Watch Video Solution

169. Which is correct about

Assertion a. Knee joint is hinge joint. Reason r. Femur, patella and fibula are associated with knee joint.

- A. a is correct but r is wrong.
- B. Both correct with r being explanation of a
- C. a is wrong but r is correct
- D. Both a and r are correct but r is not correct explanation of a.

Answer: D



170. In mammals, secondary palate is formed by union of

- A. Premaxilla, pterygoid and squamosal
- B. Maxilla, quadrate and palatine
- C. Premaxilla, maxilla and palatine
- D. Premaxilla, quadrate and squamosal.

Answer: C



Watch Video Solution

171. Glenoid cavity articulates

A. Scapula



C. Femur

D. Both A and B.

Answer: D



Watch Video Solution

172. Which one is required for muscle contraction and nerve impulse transmission?

- A. Ca^{2+}
- B. $Mg^{2\,+}$
- $\operatorname{C.}Fe^{2\,+}$
- D. Both A and B.

Answer: A



173. What are correct about synovial joint?
1. Ball and socket
2.Pivot joint
3.Hinge joint
4. Cartilaginous joint
A. 1,2,3 correct
B. 1,2 correct
C. 2,4 correct
D. 1,3 correct.
Answer: A
Watch Video Solution

174. Achilles tendon is associated with

A. Hamstring muscle B. Gluteus muscle C. Quadriceps muscle D. Gastrocnemius muscle. **Answer: D Watch Video Solution** 175. In hurdle race, what is major source of energy to leg muscle A. Preformed ATP B. Oxidative metabolism C. Pyruvate and lactate D. Glycolysis. Answer: B **Watch Video Solution**

176. Centrum of 8th vertebra of frog is
A. Procoelous
B. Acoelous
C. Amphiplatyan
D. Amphicoelous.
Answer: D
Answer: D Watch Video Solution
Watch Video Solution

C. Extension

D. Retraction.
Answer: A
Watch Video Solution
178. The wall of the internal organs such as blood vessels, stomach and
ntestine contains which type of muscle tissue?
A. Striped
B. Cardiac
C. Smooth
D. None of the above.

Answer: C

179. Which is correctly paired? A. Heart-Involuntary, unstriated muscle B. Iris-Involuntary, smooth muscle C. Biceps-Smooth muscle D. Abdominal Wall-smooth muscle. **Answer: B Watch Video Solution** 180. Upon stimulation of skeletal muscles calcium is immediately made avaiable for binding to troponin from A. Blood B. Lymph C. Bone D. Sarcoplasmic reticulum.

Watch Video Solution 181. This facial bone is unpaired A. Lacrimal B. Vomer C. Nasal D. Palatine. **Answer: B** Watch Video Solution 182. The generation of excitation - contraction coupling involves all the following events excepts

Answer: D

- A. Generation of end plate potential

 B. Release of calcium form troponin

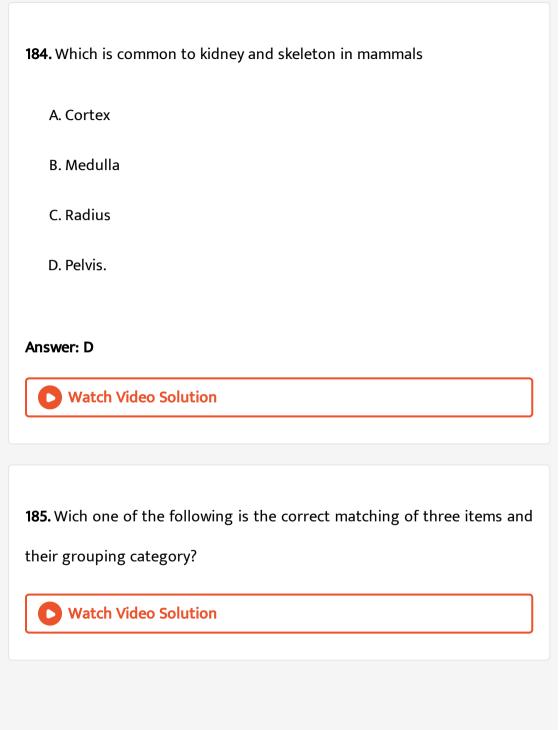
 C. Hydrolysis of ATP to ADP

 D. Formation of cross-linkages between actin and myosin.

 Answer: B

 Watch Video Solution
- **183.** Which is wrongly matched?
 - A. Red muscle-myoglobin
 - B. Tendon-connective tissue
 - C. Troponin-fibrous protein
 - D. Smooth muscle-involuntary muscle.

Answer: C



A. A nerve
B. An artery
C. A vein
D. Part of skeleton and an artery.
Answer: D
Watch Video Solution
187. End plate junction is present between
A. Neuron and striated muscle
A. Nedron and Strated master
B. Neuron and muscle

186. Innominate is

Answer: A



Watch Video Solution

188. In a resting muscle fibre, tropomyosin partially covers

- A. Ca-binding sites on actin
- B. Ca-binding sites on troponin
- C. Actin binding sites on myosin
- D. Myosin binding sites on actin.

Answer: D



Watch Video Solution

189. In human beings the carnium is formed by

A. Eight bones of which two are paired

- B. Ten bones in which two are paired
- C. Twelve bones of which two are paired
- D. Fourteen bones of which six are paired.

Answer: A



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- 190. The type of muscle fibres present in the wall of alimentary canal is
 - A. Smooth muscle fibres
 - B. Striped muscle fibres
 - C. Cardiac muscle fibres
 - D. Both A and B.

Answer: A



191. Bucket-handle movement is seen in A. Ribs 1-2 B. Ribs 3-5 C. Ribs 6-10 D. Ribs 11-12. **Answer: C Watch Video Solution** 192. Progressive degeneration of skeletal muscle, mostly due to genetic disorder occurs in A. Myasthenia gravis B. Muscular dystrophy C. Arthritis D. Tetany.

Answer: B



Watch Video Solution

193. Match the following and choose the correct option

Types of synovial joints B

s Bones involved

A. Ball and socked

1. carpal and metacarpal of thumb

B. Hinge

2. Atlas and axis

C. Pivot

3. Frontal & parietal

D. Saddle

4. knee

5. Hunger adn pectoral girdle

A. a-5, b-4, c-2, d-1

B. a-2, b-5, c-4, d-1

C. a-1, b-2, c-5, d-4

D. a-5, b-4, c-3, d-1

Answer: A



194. Which of the following statements are correct regarding muscle proteins?

- (i) Actin is a thin filament and is mde up to two F-actin
- (ii) The complex protein, tropomyosin is distributed at regular intervals on the troponin
- (iii) Myosin is a thick filament which is also a polymerised protein.(iv) The globular head of meromyosin consists of light meromyosin

(LMM).

- A. i , iii and iv are correct
- C. i , ii and iii are correct

B. i and iii are correct

- D. i , ii and iv are correct

Answer: D



B. Hip joint C. Radioulnar joint D. Metacarpophalangial joint. **Answer: C Watch Video Solution** 196. The major function of the intervertebral disc is to A. Prevent injury B. Absorb shock C. String the vertebrae D. Prevent hyper-extension. **Answer: B Watch Video Solution**

A. Ankle joint

197. Which type of joint is charactersied by the presence of a fluid filled cavity and play a significant role in locomotion?

- A. Fibrous joint
- B. Cartilaginous joint
- C. Synovial joint
- D. All of the above.

Answer: C



Watch Video Solution

198. How many bones forms pectoral girdle in human?

- A. Two innominates
- B. Two clavicles and two scapulae
- C. One clevicle and one scapula

D. Two clevicles and one scapula.

Answer: B



Watch Video Solution

199. Which one is correctly matched

A. Tibia and fibula-Both form part of knee joint

B. Cartilage and Cornea-No blood supply but do require ${\cal O}_2$ for respiratory needs

C. Shoulder Joint and elbow joint-Ball and socket joint

D. Premolars and molar-20 in all and 3-rooted.

Answer: B



200. Which one of the following is the correct description of a certain part of a normal human skeleton?

A. First vertebra is axis which articulates with occipital condyles

B. Perietal bone and temporal bone of skull are jointed by fibrous joint

C. 9th and 10th pairs of ribs are called floating ribs

D. Glenoid cavity is depression to which thigh bone articulates.

Answer: B



201. The ankle, knee and elbow joints are all joints.

A. Pivot joints

B. Ellipsoid joints

C. Hinge joints

D. Synovial joints.

Answer: D



Watch Video Solution

202. What is the location of troponin in the process of muscle contraction

- A. Attached to myosin filament
- B. Attached to tropomyosin
- C. Attached to myosin cross-bridges
- D. Attached to T-tubule.

Answer: B



Watch Video Solution

203. Correct order of stages of muscle contraction is

A. Stimuli o Neurotransmitter secretion o Relase of calcium o Cross-bridges formation o Excitation of T-system o Sliding of

actin filament

B. Stimuli $\,\,
ightarrow\,\,$ Neurotransmitter secretion $\,\,
ightarrow\,\,$ Excitation of T-system

ightarrow Release of $Ca^{2+}
ightarrow$ Cross-bridges formation ightarrow Sliding of actin filamemts ightarrow 'H' band diminishes

C. Stimuli $\,\,
ightarrow\,\,$ Excitation of T-system $\,\,
ightarrow\,\,$ Neurotransmitter secretion

 $\rightarrow~$ Cross-bridges $~\rightarrow~$ 'H' band diminishes

D. $Sti\mu li$ to Excitation of T-systemto $Neurotranmier\sec retion$ to

 $Cross-Neurotransmier\sec{retion}$ to

 $Slid \in gofact \in filaments$ to` 'H' band diminishes.

Answer: B



A. Myoglobin
B. Myosin
C. Actin
D. Fibrin.
Answer: A
Watch Video Solution
205. Which is not true for red fibres
A. Muscles contain a red coloured oxygen storing pigment
B. Muscles contain plenty of mitochondria
C. They are also called aerobic muscles
D. Amount of sarcoplasmic reticulum is high.

204. Name the following having oxygen storing capacity

Answer: D



Watch Video Solution

206. Dark colour of breast muscles of birds of flight is due to high concentration of

- A. Mitochondria
- B. Haemoglobin
- C. Myoglobin
- D. Both myoglobin and mitochondria.

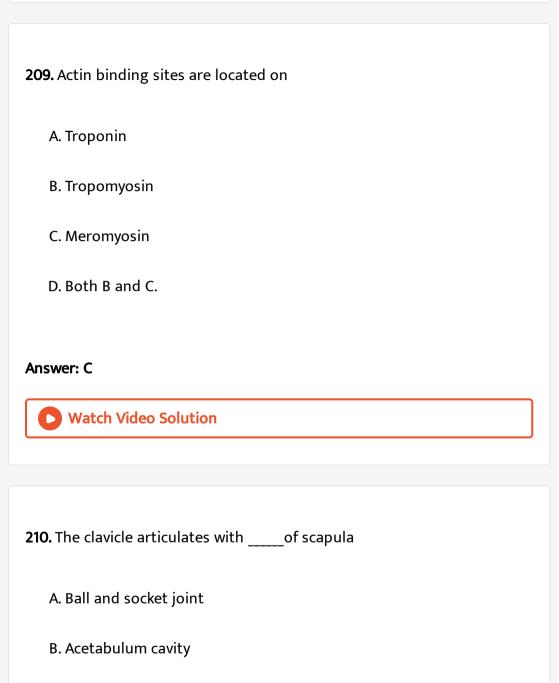
Answer: C



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207. The coxal bone of the pelvic girdle is formed by the fusion of

A. Ilium, ischium and pubis B. Scapula and clavicle C. Ilium and scapula D. Ilium, scapula and ischium. Answer: A **Watch Video Solution** 208. The scapula extends on the backside of the thorax between A. Second and fifth ribs B. Second and seventh ribs C. Third and sixth ribs D. Third and eighth ribs Answer: B **Watch Video Solution**



C. Acromian process

D. Glenoid cavity.
Answer: C
Watch Video Solution
211. Which one is a mismatch
A. Sternum and ribs - Axial skeleton
B. Clavicle and glenoid cavity - Pelvic girdle
C. Humerus and ulna - Appendicular skeleton
D. Malleus and stapes - Ear ossicles.
Answer: B
Watch Video Solution
212. Type of muscle present in our

- A. Upper arm is smooth muscle and fusiform in shape
- B. Heart is voluntary and unstriated smooth muscle
- C. Intestine is striated and involuntary
- D. Thigh is striated and voluntary.

Answer: D



Watch Video Solution

213. Skeletal muscles fibre has light and dark bands. Which is correct match of protein with its light refractive property and colour

- Colour Protein Property
- (A)Myosin Light Anisotropic Protein Colour **Property**
- Actin Dark Anisotropic
- Protein Colour **Property** Myosin Dark Isotropic
- Protein Colour **Property**

Actin Isotropic. Light

Answer: D

214. Select the correct statement about disorder of muscular or skeletal system

- A. Muscular dystrophy-Autoimmune disortening of muscles
- B. Myasthenia gravis -Autoimmune disorder which inhibits sliding of myosin filaments
- C. Gout Inflammation if joints due to extra deposition of calcium
- D. Osteoporosis Decrease in bone mass and higher chances of fractures with advancing age.

Answer: D



- A. Single skeletal muscle fibre
- B. Whole skeletal muscle
- C. Single smooth muscle fibre
- D. Whole cardiac muscle.

Answer: B



Watch Video Solution

216. Which is correctly categorised

- A. Troponin and Myosin-Complex proteins in striated muscles
- B. Calcitonin and Thymosin-Thyroid hormones
- C. Pepsin and Prolactin-Digestive enzymes secreted in stomach
- D. Secretin and Rhodopsin-Polypeptide hormones.

Answer: A



217. Two motor boats A and B move from same point along a circle of radius 10 m in still water. The boats are so designed that they can move only with constant speeds. The boats A and B take 16 and 8 sec respectively to complete one circle in stationary water. Now water starts flowing at t=0 with a speed $4\frac{m}{s}$ in a fixed direction. Find the distance between the boats after t=8 sec.

- A. Actin and myosin
- B. Troponin
- C. Tropomyosin
- D. All the above.

Answer: D



218. In the resting state, binding sites for myosin on actin filaments are masked by

A. Troponin

B. Light meromyosin

C. Heavy meromyosin

D. Calcium ions.

Answer: A



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219. ATPase activity in the muscle fibre lies with

A. Light meromyosin

B. Head of heavy meromyosin

C. Troponin

D. Short arm of heavy meromyosin.

Answer: B



Watch Video Solution

220. The thick filament in muscles is polymerised protein of

- A. Meromyosins
- B. Actins
- C. Troponin
- D. Tropomyosins

Answer: A



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221. Study the statements about human skeleton (i) Skull is dicondylic (ii)

Metacarpals are five in number (iii) Petella is cup-shaped bone covering

the knee dorsally (iv) Scapula is a large triangullar flat bone, situated on the ventral side of thorax (v) The pelvic girdle has two coxal bones.

- A. i ,v are wrong
- B. i , ii are wrong
- $\mathsf{C}.\ ii$,v are wrong
- D. iii ,iv are wrong.

Answer: D



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222. The functional unit of contractile system in the striped muscle is sarcomere.

- A. Protion of myofibril between two succesive 'Z' lines
- B. I band
- C. A band

D. I band with Z line.

Answer: A



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- 223. During muscular contraction, which of the following events occur?
- (i)H-zone disappears
- (ii) A-band widens
- (iii) I-band reduces in width
- (iv) Width of A-is unaffected
- (v) M-line and Z-line come closer
 - A. *i*, ii, v
 - B. i ,ii,iii
 - C. i ,iii,iv, v
 - D. *ii*, iv, v.

Answer: C



224. The disease caused by accumulation of uric acid crystals outside the joints is called

A. Uric acid

B. Calcium carbonate

C. Oxalic acid

D. Lactic acid.

Answer: A



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225. Human vertebral formula is

A. Procoelous

B. Amphicoelous

C. Acoelous
D. Heterocoelous.
Answer: C
Watch Video Solution
226. Human vertebral column of 33 vertebrae and bones
A. 33
B. 29
C. 27
D. 26.
Answer: D
Watch Video Solution

227. The protien whose removal enables myosin to bind actin in smooth muscle is A. Tropomyosin B. Caldesmon C. Myosin light chain kinase D. Calmodulin. **Answer: B Watch Video Solution** 228. Collar bone is known as A. Scapula **B. Stapes** C. Coracoid

D. Clavicle.



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229. Match the lists and the correct option

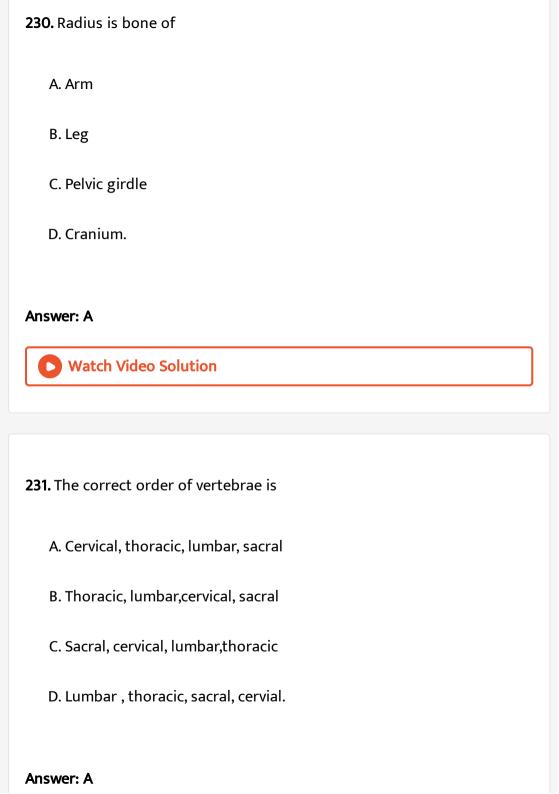
Ι

П

- (a) Mastoid process
- 1. Premaxilla
- (b) Acromion process
- 2. Axis
- (c) Olecranon process
- 3. Scapula
- (d) Odontoid process
- 4. Ulna
- 5. Periotic bone

Answer: C









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

Answer: D



233. Which is correct

- A. Joint between adjacent vertebrae is a fibrous joint
- B. Decreased level of Progesterone causes osteoporosis in old people
- C. Accumulation of uric acid crystals in joints causes inflammation

D. vertebrae is made up of cartilage only

Answer: C



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- 234. The H-zone in the skeletal muscle fibre is due to
 - A. Extension of myosin filaments in central portion of A-band
 - B. Absence of myofibrils in the central portion of A-band
 - C. Central gap between filaments in A-band
 - D. Central gap between actin filments extending through myosin filaments in A-band.

Answer: D



- 235. Select the correct statement about muscular disorder
 - A. Accumution of urea and creatine in joints.
 - B. An overdoes of vitamin D causes osteoporosis
 - C. Rapid contraction of skeletal muscles causes dystrophy
 - D. Failure of neuromuscular transmission in myasthenia gravis can prevent normal swallowing.

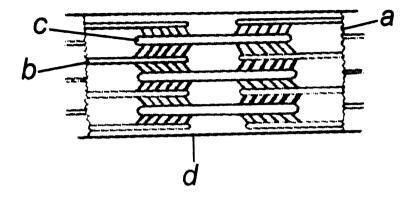
Answer: D



- 236. Which is correct statement for white muscle fibre
 - A. It contains low amount of haemoglobin and mitochondria
 - B. It contains higher amount of myoglobin
 - C. It contains low amount of myoglobin and mitochondria

D. It possesses only actin type of protein.
Answer: C
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237. Which of the following type of muscles are not fatigued soon
A. Cardiac muscle
B. Smooth muscle
C. Both A and B
D. Voluntary muscle.
Answer: C
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238. Which is true for labelled parts in the figure



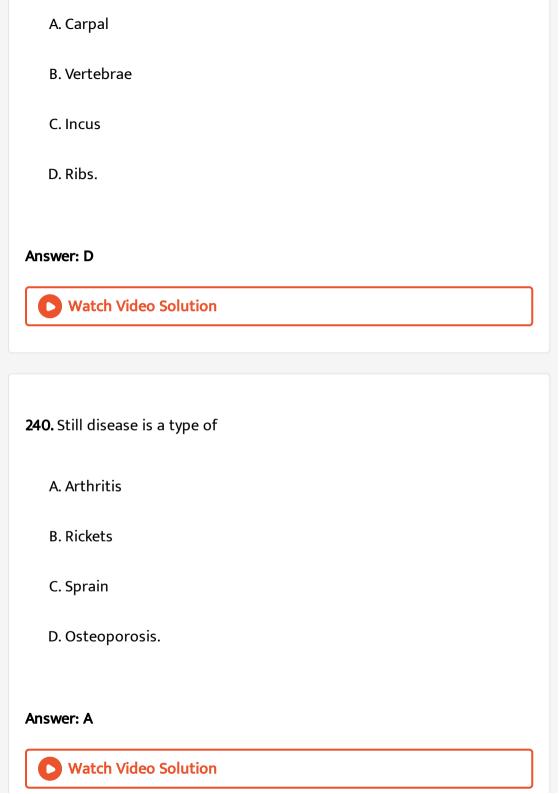
- A. a-Z-line-located at centre of I-band
- B. b-thin filament-occurs in A-band only
- C. c-thin filament-confined to I-band
- D. d-H-zone-located at centre of M-line.

Answer: A



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239. Which of the following is a flat bone?



241. Name the bone that doesn't articulate with any other bone in the body.

- A. Hyoid
- B. Femur
- C. Sacrum
- D. Tarsus.

Answer: A



- **242.** Read the statement regarding myofibril and choose the correct option
- 1. Each myofibril has alternate dark and light bands.
- 2. In the centre of each 'A' band is an elastic fibre called 'Z' -line 3. 'A' and 'I' bands are arranged alternately throughout the length of myofibril

- 4. Sarcomere is the functional unit of contraction
- 5. Central part of thick filament not overlapped by a thin filament is the

'M' line

- A. 1,3 and 5 alone are correct
- B. 2 and 5 alone are correct
- C. 2 and 3 alone are correct
- D. 1,3 and 2 alone are correct.

Answer: A



- 243. Myasthenia gravis is an example of
 - A. Viral disease
 - B. Immunological disease
 - C. Autoimmune disease

Answer: C
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244. Excitatory neurotransmitter involved in transmission of impulse at neuromuscular junction is
A. Epinephrine
B. Serotonin
C. Acetylcholine
D. Glycine.
Answer: C
Watch Video Solution

D. Allergic reactions.

245. Which of the following is not involved in muscle contraction?
A. Ca
B. Troponin
C. Actin
D. Mg.
Answer: D
Watch Video Solution
246. Intervertebral discs are composed of
A. Costal cartilage
B. Hyaline cartilage
C. White fibrous cartilage
D. Yellow-elastic cratilage.

Answer: C **Watch Video Solution** 247. Sarcoplasmic reticulum of muscle fibres is the store house of A. Calcium B. Sodium C. Chloride D. Potassium. Answer: A **Watch Video Solution** 248. A single U - shaped bone at the base of the buckle cavity is called: A. Hyoid

- B. Maxilla
- C. Mandible
- D. Zygomatic.

Answer: A



Ι

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249. Match the lists and find the correct match

II

- (a) Zygomatic bone I. Keystone bone of cranium
- (b) Lacrimal bones II. Cheek bone of cranium
- (c) Parietal bones III. Smallest bone of face
- (d) Sphenoid bone IV. Roof of cranium

V. Floor of cranium

- A. a-I, b-III, c-V, d-II
- B. a-II, b-III, c-IV, d-I
- C. a-II, b-IV, c-I, d-III
- D. a-II, b-III, c-IV, d-V.

Answer: B Watch Video Solution 250. Globular head of myosin contains A. Ca ions in large quantities B. Troponin C. ATPase enzyme

D. ATP.

Answer: C

Watch Video Solution

A. Ball and socket joint

251. Which one of the following is not a synovial joint

C. Structures forming the cranium D. Hinge joint. **Answer: C Watch Video Solution** 252. The central hollow portion of vertebra is A. Neural canal B. Central canal C. Auditory canal D. Vertebro-arterial canal. Answer: A **Watch Video Solution**

B. Pivot joint

253. Identify the vertebrochondral ribs from the following

- A. All twelve
- B. 10th and 11th pairs of ribs
- C. 8th, 9th and 10th pairs of ribs
- D. 11th and 12th pairs of ribs.

Answer: C



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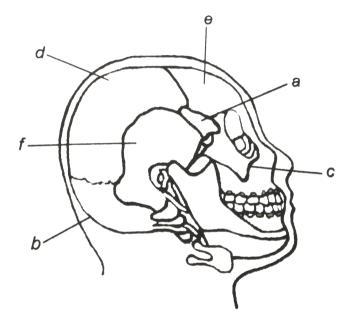
254. The striated appearance of a myofibril is due to distribution pattern of

- A. Actin and myosin
- B. Fascicles
- C. Troponin
- D. Meromyosin.



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255. Select the correct option of labels in human skull



A. a-temporal bone, b-parietal bone,

c-sphenoid bone, d-frontal bone

e-zygomatic bone, f-occipital

B. a-frontal bone, f-occipital bone,
c-occipital bone, d-sphenoid bone,
e-pariental bone, f-temporal bone
C. a-sphenoid bone, b-occipital bone,
c-zygomatic bone, d-parietal bone,
e-frontal bone, f-temporal bone

D. a-sphenoid bone, b-zygomatic bone, c-occipital bone, d-frontal bone,

e-temporal bone, d-frontal bone.

Answer: C



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256. Choose the wrong matched pair

A. Isotropic band-Actin

- B. Anisotropic band-Myosin
- C. Central part of A band -H-zone
- D. Central part of A-band -M-line.

Answer: D



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257. Select the correct match

- A. Pivot joint-Between third and fourth cervical vertebrae
- B. Hinge joint -Between humerus and pectoral girdle
- C. Gliding joint-Between carpals
- D. Cartilaginous joint-Between frontal and parietal.

Answer: C



258. Stimulation of muscle fibre by a motor neuron occurs at

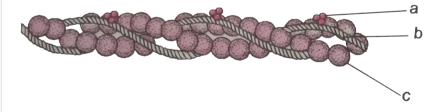
- A. Transverse tubules
- B. Neuromuscular junction
- C. Myofibril
- D. Sarcoplasmic reticulum.

Answer: B



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259. Select the correct option regarding a, b and c



A. a-tropomyosin-runs close to F-actin throughout its length

B. b-troponin-complex protein distributed at regular intervals of tropomysin

C. c- F-actin - polymer of monomeric G- actin helically bound to each other

D. None of these.

Answer: C



260. The pivot joint between atlas and axis is a type of

A. Both assertion and reason are true with being correct explanation

B. both true but reason is not correct explanation

C. assertion true but reason incorrect

D. both incorrect

Answer: C



261. Type of joint present between carpel and metacarpal of thumb is

A. Hinge joint

B. Saddle joint

C. Gliding joint

D. Pivot joint.

Answer: B



262. Monomeric actin is called

A. F-actin

B. M-actin

C. G-actin

Answer: C
Watch Video Solution
263. Name the bone that doesn't articulate with any other bone in the body.
A. Humerus
B. Malleus
C. Phalanges
D. Hyoid.
Answer: D
Watch Video Solution

D. N-actin.

264. In amoeboid movement, according to Goldacre and Lorsch, cytoplasm solates due to

A. Action of Cytoplasm and Actin

B. Coordinated beats of cilia

C. Whip-like action of flagella

D. Action by the mitotic spindle, similar to what happens during mitosis and meiosis.

Answer: A



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265. At full muscle contraction the Z-lines attached to thin filaments are almost touching

A. A-band

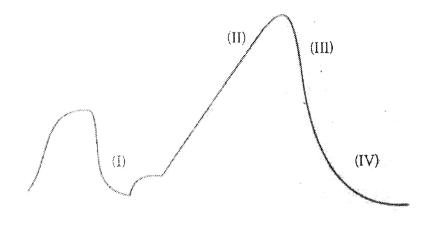
B. I-band

D. H-zone.
Answer: A
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266. An auto-immune disorder in which there is inflammation of synovial
membrane, secreting abnormal granules and causing erosion of articular
cartilage is
A. Gout
B. Rheumatoid arthritis
C. Dislocation
D. Osteoarthritis.
Answer: B
Watch Video Solution

C. Actin fibres

267. Contraction cycle of muscle showing parts of muscle twitch is given.

Find out the correct sequence.



- A. 1-latent period, ii-relaxation period, iii-refraction period, iv-
- B. i-contraction, ii-latent period, iii-relaxation period, iv-refractory period
- C. i-latent period, ii-contraction, iii-relaxation period, iv-refractory period

D. i-refractory period, ii-relaxation period, iii-latent period, iv-contraction.

Answer: C



268. Most of the cartilages in vertebrate embryo are replaced in adult by

A. Blood

B. Bones

C. Tendons

D. Ligaments.

Answer: B



269. Gliding joint is present between A. Carpals B. Humerus and pectoral girdle C. Knee D. Atla and axis. Answer: A **Watch Video Solution** 270. Which one of the following secretes a watery fluid for lubricating and cushioning the joint A. Ligament B. Cartilage C. Tendon

D. Synovial membrane.

Answer: D



271. The flight muscles in an eagle has more of aerobic muscles. These muscles are also called "red muscles" because they are rich in

- A. Haemoglobin
- B. Sarcoplasmic reticulum
- C. Myoglobin
- D. Globin.

Answer: C



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272. Which of the following joints would allow to movement?

A. Fibrous joint B. Cartilaginous joint C. Synovial joint D. Ball and socket joints. Answer: A **Watch Video Solution** 273. Which of the following is not a function of the skeletal system A. Production of eythrocytes B. Storage of minerals C. Production of body heat D. Locomotion. Answer: C **Watch Video Solution**

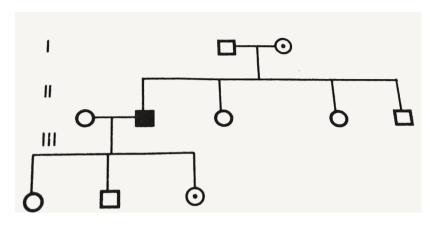
274. Which of the following bones is not a cranial bone?

- A. Frontal
- B. Temporal
- C. Zygomatic
- D. Sphenoid.

Answer: C



275. Predict from the following chart



- A. Resting potential
- **B.** Contraction
- C. Maximally contracted
- D. None.

Answer: C



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276. The contractile regulatory proteins that mask and unmask active sites in the sarcomere are

A. Troponin and tropomysin B. Troponin and myosin

C. Actin and myosin

D. Troponin 1 and troponin C.

Answer: C



- **277.** Choose the wrong match with reference to joits
 - A. Gomposes Intercarpal joints
 - B. Synsedmoses-Joint between tibia and fibula
 - C. Symphysis Joint between vertebrae
 - D. Synchondrosis Epiphyseal plate.

Answer: A



278. Osteoid refers to

- A. The smallest bone of the body
- B. The largest bone of the body
- C. Young hyaline matrix of true bone in which calcium salts are deposited
- D. Membranous ossification of cranium.

Answer: C



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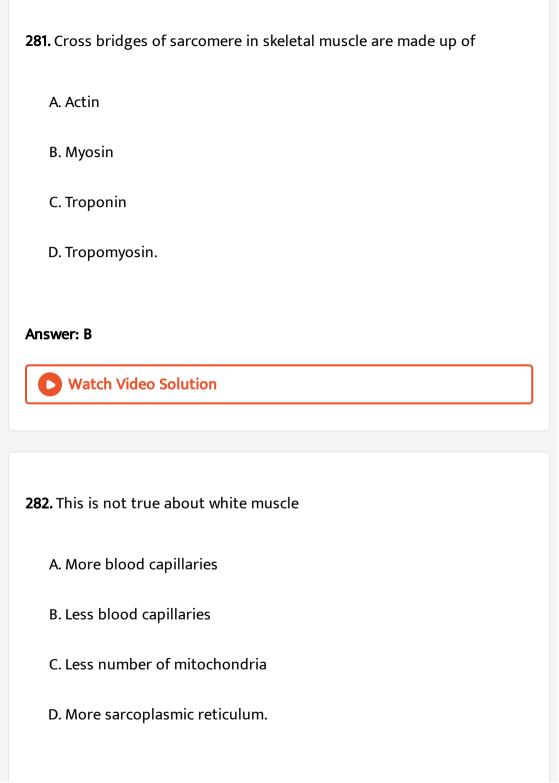
279. How many type of synovial joints are there.

A. 4

B. 3

C. 5
D. 6
Answer: D
Watch Video Solution
280. The ball and socket type of joint is also called
A. Shindylesis
B. Rotataria
C. Enarthrose
D. Ginglymus.

Answer: C





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283. On the basis of development, odontoid process of axis of mammals is

- A. Ribs of axis vertebra
- B. Centrum of atlas
- C. Neural spine of atlas
- D. Centrum of axis.

Answer: B



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284. Sarcomere is the functional unit of contraction in a muscle fibre.

Indentify the portion of myofibril that constitutes a sarcomere

- A. Portion of myofibril between two successive Z-lines
- B. Portion of myofibril between two successive I-band
- C. Portion of myofibril between two successive A-bands
- D. Portion of myofibril between two successive M-lines.



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- 285. Identify the pair having amphicoelous vertabrae
 - A. Ornithorhyncus and Macropus
 - B. Ophiophagus and Tropidonotus
 - C. Scoliodon and Ichthyophis
 - D. Crocodylus and Hemidactylus.

Answer: C



286. Match the columns and find the correct option

Ι

Π

- (a) Replacing bones
- (i) Os cordis
- (b) Dermal bones
- (ii) Pisciform bone of wrist
- (c) Sesamoid bones
- (iii) Girdle bones
- (d) Visceral bone
- (iv) Bones of cranium
- A. a-i, b-iii, c-ii, d-iv
- B. a-ii, b-i, c-iii, d-iv
- C. a-ii, b-iii, c-i, d-iv
- D. a-iii, b-iv, c-ii, d-i.

Answer: D



287. Match the lists and find the correct option					
	I		II		
(a)	Muscluar dystrophy	(i)	Inflammation of joints due to accumulat		
(b)	Tetany	(ii)	Progressive degeneration of sketelal mus		

degeneration of sketelal mus (c) Mysthenia gravis (iii)An autonomous disorder, affecting neuro

(*d*) Gout (iv)A state of prologed contraction of muscle

A. a-iii, b-ii, c-i, d-iv

B. a-ii, b-iii, c-i, d-iv C. a-ii, b-iii, c-iv, d-i

D. a-ii, b-iv, c-iii, d-i.

Answer: D



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- 288. Choose two correctly paired sets
- (a) Sphenoid bone-Keystone-Cranium (b) Acromion process-collar bone-

scapula (c) Xiphoid process-breast bone-thorax (d) Odontoid process-

atlas-cervical vertebra

A. a,d B. b,d C.b,c D. a,c. Answer: D

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289. Find the correct match

Ι

- (a) Pisiform bone (i)Ruminants
- (b) Fibrous cartilage (ii)Wrist bone
- (c)Hyaline cartilage (iii) Intervertebral disc
- Os cordis (*d*) Larynx (iv)
 - (v)Pinna

II

- A. a-ii, b-iii, c-iv, d-i
- B. a-v, b-ii, c-i, d-iv
- C. a-iv, b-iii, c-ii, d-i

D. a-v, b-ii, c-iii, d-iv.

Answer: A



- 290. Study the following and identify the incorrect statements
- (i) Muscles of iris and ciliary body are smooth muscles of mesodermal origin
- (ii) Slow and sustained involuntary contraction of smooth muscles are called spasms
- (iii) Quiescent mononucleate myogenic cells of skeletal muscles are called pericytes
- (iv) Skeletal muscles fibre is multinucleate and is a syncytium
- A. I, ii
 - B. ii, iv
 - C. iii, iv
 - D. I, iii.

Answer: D



291. Anaerobic breakdown of glycogen due to repeated activation of muscles leads to accumulation of

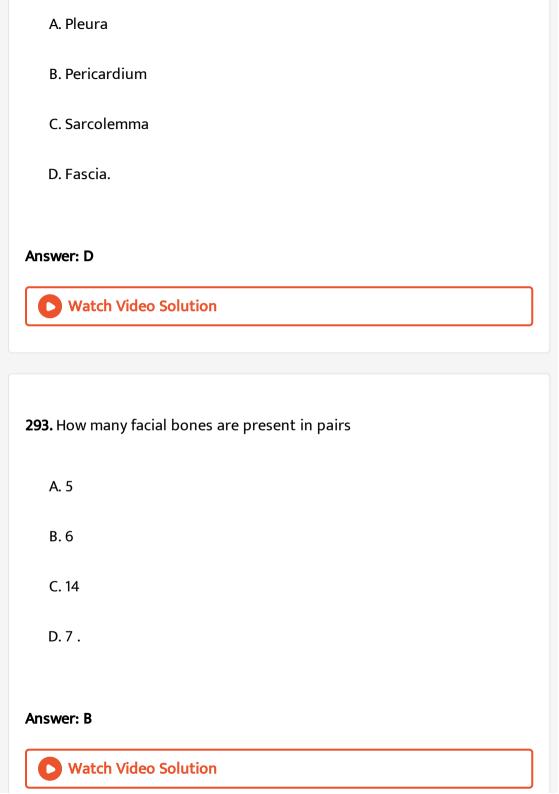
- A. Uric acid
- B. Phenylalanine
- C. Lactic acid
- D. Glutamic acid.

Answer: C



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292. A collagenous connective tissue layer hold the muscle bundles together.



294. Prolonged activation of striated muscle causes it to fatigue. What is the reason ?

A. Breakdown of glycogen into lactic acid in muscle during aerobic respiration

B. Breakdown of lactic acid in muscle during anaerobic respiration

C. Breakdown of lactic acid into glycogen during anaerobic respiration

D. Produce ethanol in muscle.

Answer: B



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295. Which part of ulna is called elbow?

A. Long and curved bone

B. Small slender bone

- C. Very small bone
- D. Very long bone.



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296. In anaerobic reaction of muscle, lactic acid is produced which causes painful tiredness. Where and by which mechanism lactic acid is catabolised

- A. In muscle by monokinase action
- B. In muscle by Lohman's reaction
- C. In liver by Cori cycle
- D. In liver by phosphogen reaction.

Answer: C



297. Which one of the following is not related to bone disorder
A. Arthiritis
B. Osteoporosis
C. Atherosclerosis
D. Ricket.
Answer: C
Watch Video Solution
298. Lack of relaxation between successive stimuli in sustained muscle
contraction is known as
A. Tonus
B. Spasm
C. Fatigue

Watch Video Solution	
99. Name the ion responsible for unmasking of active sites for	r myosin
or cross bridge bridge activity during muscle contraction.	
A. Potassium	
B. Calcium,	
C. Magnesium	
D. Sodium.	
Answer: B	
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D. Tetanus.

300. The H-zone in the skeletal muscle fibre is due to

A. Central gap between actin filaments extending through myosin filaments in A-band

- B. Extension of myosin filaments in the central portion of A-band
- C. Absence of myofibrils in the central portion of A-band
- D. Central gap between myosin filaments in of A-band.

Answer: A



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301. Assertion: on stimulation, a muscle cell releases calcium ions $\left(Ca^{2+}
ight)$ from sarcoplasmic reticulum.

Reason: By reacting with a protien complex, $Ca^{2\,+}$ uncover active sites on the actin filaments.

A. Given below are assertion and reason. Point out if both are true

with reason being correct explanation

B. both true but reason is not correct explanation

C. assertion true but reason is wrong

D. both are wrong

Answer: B



302. Out of 'X' pairs of ribs in humans only 'Y' pairs are true ribs. Select the option that correctly represents values of X and Y and provides their explanation.

A. X=12, Y=7. True ribs are attached dorsally to vertebral column and ventrally to sternum

B. X=12, Y=5. True ribs are dorsally attached to vertebral column and sternum on the two ends

C. X=24, Y=7. True ribs are dorsally attached to vertebral column but

are free on the ventral side

D. X=24, Y=12. True ribs are dorsally attached to vertebral column but are free on the ventral side.

Answer: A



303. The pivot joint between atlas and axis is a type of

A. Fibrous joint

B. Cartilaginous joint

C. Synovial joint

D. Saddle joint.

Answer: C



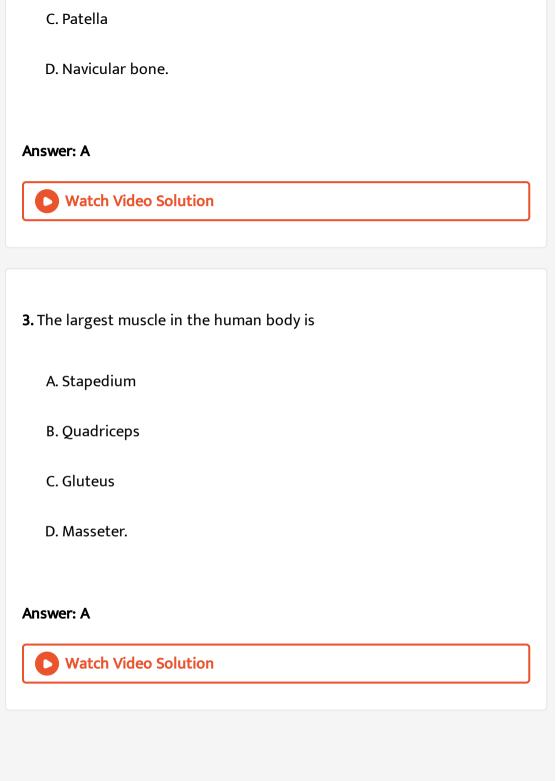
Check Your Grasp

- 1. Skull bones are
 - A. Replacing bones
 - B. Investing bones
 - C. Sesamoid bones
 - D. Irregular bones.

Answer: A



- **2.** Smallest bone in the body of human is
 - A. Stapes
 - B. Malleus



A. Prominence between metacarpal and proximal phalange
B. Knee prominence
C. Prominence of femur
D. Prominence at end of tibia and fibula.
Answer: A
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5. Exoskeleton is mesodermal in
A. Mammals
B. Birds
C. Fishes
D. Fishes, crocodiles and chelones.

4. Malleolus is

Answer: A Watch Video Solution

6. What is sprain

- A. Overstretching of ligament
- B. Overstretching of tendon
- C. Both A and B
- D. Dislodging of bone.

Answer: A



- 7. Contraction period for a skeletal muscle is
 - A. 4 sec

- B. 0 · 04 sec

 C. 0 · 02 sec

 D. 20 sec.

 Answer: A

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- **8.** Lactic acid causes fatigue in muscles due to
 - A. Sensitivity of neuromuscular junction
 - **B.** Acidity
 - C. Binding of muscle calcium
 - D. Causing expulsion of cations.



9. Calcium ions bring about muscle contraction through A. Activation of myosin ATP-ase B. Exposing active sites of actin filaments C. Both A and B D. Mobilisation of food reserve. Answer: A **Watch Video Solution** 10. Compound fracture is characterised by A. Breaking and cracking of bone at different places

B. Breaking bone into more than two fragments

D. Protrusion of broken end of bone.

C. Appearance of a number of cracks in the same bone

