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## BIOLOGY

# BOOKS - UNIVERSAL BOOK DEPOT 1960 BIOLOGY <br> (HINGLISH) 

## LOCOMOTION AND MOVEMENT

Locomotion And Movement

1. Bone marrow is largely composed of
A. Periosteum and osteoblast
B. Adipose tissue and blood vessels
C. Yellow and elastic tissue
D. Cartilage and elastic tissue
2. Collar bone is known as
A. Scapula
B. Coracoid
C. Stapes
D. Clavicle

## Answer: D

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3. The bony socktes of the jaws in which the teeth are implanted, are known as
A. Alveolus
B. Fossae
C. Dentaries
D. Thecae

## Answer: A

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4. The type of vertebrae in sub-order ophidia is
A. Amphicoeous
B. Acoelous
C. Heterocoelous
D. Procoelous

## Answer: D

5. Number of cranial nerves in mammal are
A. 10 pairs
B. 8 pairs
C. 12 pairs
D. 16 pairs

## Answer: C

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6. Nucleus pulposus is
A. A type of special cell found in myelin sheath of a nerve cell of vertebrate
B. A depression for pituitary is found in mammalian skull
C. A large nucleus found in Schwann cells of nerve fibre
D. A remain of embryonic notochord found in the central portion of inter-vertebral discs of vertebrae of mammals

## Answer: D

## D Watch Video Solution

7. The first vertebra, the atlas by its articulation with axis vertebra facilitates a
A. Noding movement
B. Sideway movement
C. Rotatory movement
D. Backward movement

## Answer: C

8. The vertebrae in which centrum is absent and transverse process are present is known as
A. Lumber vertebrae
B. Anterior thoracic
C. Axis vertebrae
D. Atlas vertebrae

## Answer: D

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9. The number of vertebrae present in cervical, thoracic, lumber, sacral and coccyx regions respectively are
A. $12,7,5,1,1$
B. 1, 7, 5, 12, 1
C. $7,5,1,12,1$

## D. $7,12,5,1,1$

## Answer: D

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10. Which one of the following items gives its correct total number
A. Types of diabetes-3
B. Cervical vertebrae in humans-8
C. Floating ribs in humans-4
D. Amino acids found in proteins-16

## Answer: C

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11. Find out the correct order of number of bones in the parts of skull such as cranial bone, facial bone, hyoid bone and middle ear bone respectively
A. 14, 8, 1 and 6
B. $6,8,14$ and 1
C. 14, 8, 6 and 1
D. $8,14,1$ and 6

## Answer: D

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12. The number of vertebrae in rabbit is
A. 40
B. 33
C. 44
D. 46

## Answer: B

## - Watch Video Solution

13. Lumbar vertebrae are found in
A. Neck region
B. Abdominal region
C. Hip region
D. Thorax

## Answer: B

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14. The skull of a bird is
A. Dicondylic
B. Monocondylic
C. Amphicondylic
D. None of these

## Answer: B

## D Watch Video Solution

15. The opening at the base of the skull for the spinal cord is called
A. Foramen Magnum
B. Foramen of Monro
C. Obturator foramen
D. Foramen of Magendie

## Answer: A

16. The 8th and 9th ribs are known as false are known as false ribs because their external portions are attached to
A. Xiphisternum
B. Costa of $7^{\text {th }}$ rib
C. They have no costa
D. They are not true ribs

## Answer: B

## - Watch Video Solution

17. Which one is not cranial bone
A. Frontal
B. Zygometic
C. Temporal
D. Sphenoid

## Answer: B

## - Watch Video Solution

18. Thoracic cage in rabbit is made up of
A. Ribs, vertebral column and diaphragm
B. Ribs, diaphragm and steernum
C. Vertebral column, diaphragm and sternum
D. Ribs, vertebral column \& sternum

## Answer: D

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19. In the pelvic girdle of man $A, B, C, D$ and $E$ respectively represents

A. A-pubis, B-acetabulum, C-ilium, D-ischium, E-pubic 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- acetabulum, D-pubic symphysis, E-ischium

## Answer: B

## - Watch Video Solution

20. The vertebrae in birds are mostly
A. Procoelous
B. Amphicoelous
C. Opisthocoelous
D. Heterocoelous

## Answer: D

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21. Vertebral formula for human beings is
A. $C_{5} T_{12} L_{7} S_{5} C_{3-5}=33-35$
B. $C_{7} T_{12} L_{5} S_{5} C_{3-5}=33-35$
C. $C_{5} T_{10} L_{5} S_{5} C_{3-5}=33$
D. $C_{7} T_{10} L_{5} S_{5} C_{3-5}=33$

## - Watch Video Solution

22. Centrum of man is
A. Procoelus
B. Amphicoelus
C. Amphiplateus
D. Ophisthocoelous

## Answer: C

Watch Video Solution
23. Long neck of camel is due to
A. Increase in length of cervical vertebra
B. Due to bony plate between two vertebra
C. Due to muscle in between two vertebra
D. None of the above

## Answer: B

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24. Sella turcica is a
A. Covering of kidney
B. Covering of testis
C. Depression in brain
D. Depression in skull which lodges the pituitary body

## Answer: D

25. In which bone the chondrocytes are replaced by osteocytes
A. Maxilla
B. Nasal
C. Dentary
D. Vomer

## Answer: C

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26. Which one of the following is the correct description of a certain part of a normal human skeletion
A. Parietal bone and the temporal bone of the skull are joined by fibrous joint
B. First vertebra is axis which articulates with the occipital condyles
C. The $9^{\text {th }}$ and $10^{\text {th }}$ pairs of ribs are called the floating ribs
D. Glenoid cavity is a depression to which the thigh bone articulates

## Answer: A

## - Watch Video Solution

27. The number of floating ribs in human body is
A. 6 pairs
B. 3 pairs
C. 5 pairs
D. 2 pairs

## Answer: D

## - Watch Video Solution

28. Centrum of $8^{t h}$ vertebra of frog is
A. Amphiplatyon
B. Procoelous
C. Amphicoelous
D. Opisthocoelous

## Answer: C

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29. In the first two or three lumbar vertebrae there is a small median process below the centrum, this is called
A. Pre-zygapohysis
B. Post-zygapohysis
C. Hypapophysis
D. Neural spine

## Answer: C

## (D) Watch Video Solution

30. In the diagram of section of Hyaline cartilage, the different parts have been indicated by alphabets, choose the answer in which these alphabets correctly match with parts they indicate

A. $A=$ perichondrium,$B=$ Chondrocyte

C=Lacuna , D=Capsular matrix

E=Chondrin
B. $A=$ Capsular matrix , $B=$ Chondrocyte
$C=$ Lacuna, $D=$ Perichondrium

## $\mathrm{E}=$ Chondrin

C. $\mathrm{A}=$ Chondrin , $\mathrm{B}=$ Chondrocyte

C=Lacuna, $D=$ Capsular matrix
$\mathrm{E}=$ Perichondrium
D. $A=$ Chondrin , $B=$ Lacuna

C=Chondrocyte, D=Capsular matrix

D=Perichondrium

## Answer: C

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31. Bone related to skull is
A. Atlas
B. Caracoid
C. Artenoid
D. Pterygoid

## Answer: D

## - Watch Video Solution

32. What is correct about human body
A. There are 5 vertebra in the neck
B. Brain box is made up of 4 bones
C. There are 15 pairs of ribs
D. There are 12 thoracic vertebra

## Answer: D

33. In mammals (rabbit), the zygomatic arch is formed by
A. Maxilla,premaxilla and squamosal
B. Periotic, jugal and palatine
C. Maxilla, squamosal and jugal
D. Jugal, maxilla and periodtic

## Answer: C

## - View Text Solution

34. A vertebra has a convexity both in front and behind it. It is called
A. Procoelous
B. Amphicoelous
C. Acoelous
D. Amphiplatyon

## Answer: C

## - Watch Video Solution

35. The last two pairs of ribs are named floating ribs because
A. Their sternal parts are attached to the sternum directly
B. Their sternal parts are attached on the $7^{\text {th }}$ pair of ribs
C. Their sternal parts remain free and do not even reach he sternum
D. They float in the body cavity

## Answer: C

## - Watch Video Solution

36. Special fibrous joint occuring exclusively in skull which is the tightest type of joint is
A. Suspensorium
B. Suspensory ligament
C. Suture
D. Occipital

## Answer: C

## - Watch Video Solution

37. The vetebrae which bears the whole weight of the skull is
A. Axis
B. Sacral
C. Cervical
D. Atlas

## Answer: D

38. The parasphenoid bone in frog forms
A. Base of cranium
B. Floor of cranium
C. Dorsal side of cranium
D. Dorsolateral side of cranium

## Answer: B

## - Watch Video Solution

39. How many ribs are present in human beings
A. 6 pairs
B. 9 pairs
C. 12 pairs
D. 15 pairs

## Answer: C

## - Watch Video Solution

40. Axis vertebra of a mammal differs from atlas in
A. Absence of centrum
B. Presence of centrum
C. Prsence of central canal
D. Presence of odontoid process

## Answer: D

## - Watch Video Solution

41. Number of bones in skull is
A. 26
B. 28
C. 107
D. 29

## Answer: B

## D Watch Video Solution

42. In human beings the cranium is formed by
A. Eight bones of which two are paired
B. Fourteen bones of which six are paired
C. Ten bones of which two are paired
D. Twelve bones of which four are paired

## Answer: A

43. Which of the following is unpaired bone
A. Premaxilla
B. Pro-otics
C. Sphenethmoid
D. Pterygoid

## Answer: C

## - Watch Video Solution

44. In man the axial skeleton is made up of
A. 80 bones
B. 100 bones
C. 103 bones
D. 106 bones

## Answer: A

## - Watch Video Solution

45. The number of bones in half of the lower jaw of man is
A. 1
B. 4
C. 6
D. 8

## Answer: A

## - Watch Video Solution

46. In man the thoracic basket is composed of
A. Ribs and thoracic vertebrae
B. Ribs and stemum
C. Ribs, sternum and vertebrae
D. Ribs, sternum and thoracic vertebrae

## Answer: D

## D Watch Video Solution

47. Innominate is a
A. Nerve
B. Muscle
C. Animal
D. A part of skeleton and anartcry

## Answer: D

48. Tongue bone is
A. Hyoid bone
B. Maxillary
C. Dentary
D. Quadrato-jugal

## Answer: A

## - Watch Video Solution

49. Human vertebral column of 33 vertebrae and $\qquad$ bones
A. 33
B. 26
C. 27
D. 29

## Answer: B

## - Watch Video Solution

50. Cervical vertebrae are located in
A. Thoracic region
B. Abdominal region
C. Neck region
D. Lumbar region

## Answer: C

## - Watch Video Solution

51. The number of cervical vertebrae in camels is
A. Same as that in rabbit
B. Same as that in frog
C. Less than that in giraffe
D. More than that in horse

## Answer: A

## - Watch Video Solution

52. The major function of the intervertebral discs is to
A. Absorb shock
B. String the vertebrae together
C. Prevent injuries
D. Prevent hyperextension

## Answer: A

53. 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. $\mathrm{X}=12, \mathrm{Y}=7$, The ribs are attached dorsally to vertebral column and ventrally to the sternum
B. $\mathrm{X}=12, \mathrm{Y}=5$, True ribs are attached dorsally to vertebral column and
sternum on the two ends
C. $\mathrm{X}=24, \mathrm{Y}=7$, True ribs are dorsally attached to vertebral column but are free on ventral side
D. $\mathrm{X}=24, \mathrm{Y}=12$, True ribs are dorsally attached to vertebral column but are free on ventral side

## Answer: A

54. In rabbit radius and ulna are
A. Completely fused together
B. Completely separated
C. Fused in middle and separated at both the ends
D. Separated but united at both the ends

## Answer: D

## - Watch Video Solution

55. A shallow depression in the scapula which receives the head of the upper arm bone is known as the
Or

Which one of the following coomponent is the part of pectoral girdle
A. Acetabulum
B. Neural arch
C. Glenoid cavity
D. None of the above

## Answer: C

## - Watch Video Solution

56. Patella, the knee cap is the example of
A. Cartilage gland
B. Replacing bone
C. Sesamoid bone
D. None of the above

## Answer: C

57. The protein present in the bones is known as
A. Chondrin
B. Ossein
C. Sclero protein
D. Globulin

## Answer: B

## - Watch Video Solution

58. Humerus bone is situated in
A. Thigh
B. Lower arm
C. Upper arm
D. Shank

Answer: C

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59. Consider the diagram given below


Parts labelled as ' A ', ' B ', 'C' , 'D' and ' E ' respectively indicate
A. Femur, Ilium, Tibia, Pubis and Sacrum
B. Pubis, Tibia, Femur,Ilium and Sacrum
C. Ilium, Femur, Tibia, Pubis and Sacrum
D. Pubis, Femur,Tibia, Ilium and Sacrum

## Answer: D

## - Watch Video Solution

60. Symphysis contains
A. Hyaline cartilage
B. Fibrous cartilage
C. Calcified cartilage
D. None of these

## - Watch Video Solution

61. Outer covering of cartilage is
A. Perichondrium
B. Periosteum
C. Endo-osteium
D. Peritonium

## Answer: A

Watch Video Solution
62. Which option is correct for the region labelled as $a, b, c$ and $d$ in the given diagram

A. A-Clavicle, B-Scapula, C-Humerus, D-Ulna
B. A-Scapula, B-Clavicle, C-Humerus, D-Ulna
C. A-Clavicle, B-Ulna, C-Radius, D-Humerus
D. A-Clavicle, B-Glenoid cavity, C-Radius, D-Ulna

## Answer: A

## D Watch Video Solution

63. The longest bone of the human body is
A. Humerus
B. Tibia
C. Vertebra
D. Femur

## Answer: D

64. Olecranon fossa is present over
A. Scapula
B. Ulna
C. Radius
D. Humerus

## Answer: D

## - Watch Video Solution

65. Synsacrum of fowl is consist of about
A. 29 vertebrae
B. 3 vertebrae
C. 16 vertebrae
D. Single vertebrae

## Answer: C

## - Watch Video Solution

66. The pelvic girdle of birds is attached to a complex structure formed by the fusion of last thoracic, all lumbar and first five caudal vertebra. This structure is called

Or In birds, some of the vertebrae are fused to form
A. Synsacrum
B. Symphysis
C. Synkaryon
D. Sympelvis

## Answer: A

67. Given diagram shows bone of the left human hindlimb as seen from front. It has certain mistakes in labelling.

Which of the following pairs contain both wrongly labelled bones ?

A. Tibia and tarsals
B. Femur and fibula
C. Fibula and phalanges
D. Tarsals and femur

## Answer: C

## - Watch Video Solution

68. Consider the following diagram. Identify $A, B, C$ and $D$

A. A-Ilium, B-Pubis, C-Ischium, D-Patella
B. A-llium, B-Pubis, C-Patella, D-Ischium
C. A-Ischium, B-Pubis, C-Ilium, D-Patella
D. A-Pubis, B-Ilium, C-Ischium, D-Patella

## Answer: A

## - View Text Solution

69. Choose the correct option regarding a normal human
A. The skull is dicondylic
B. Metacarpals are five in numbers
C. Patella is a cup-shpaed bone covering the knee dorsally
D. Scapula is a large triangular flat bone, situated on the ventral side of the thorax
A. A and D alone are wrong
B. $A$ and $B$ alone are wrong
C. B and D alone are wrong
D. C and D alone are wrong

## Answer: D

## D Watch Video Solution

70. The pectoral and pelvic girdles and the bones of limb form
A. Axial skeleton
B. Appendicular skeleton
C. Visceral skeleton
D. Outer skeleton

## Answer: B

## - Watch Video Solution

71. What will happen if a bone is kept in $10 \% \mathrm{KOH}$ solution for 3 days
A. Remain uchanged
B. Dissolved
C. Become soft and elastic
D. Break

## Answer: A

## D Watch Video Solution

72. The canal seen in the bone of mammals are
A. Haversian canals only
B. Volkmann's canals only
C. Haversian and Volkmann's canals
D. Canal of Schlemm

## Answer: C

73. Number of bones in human body is
A. 260
B. 206
C. 306
D. 203

## Answer: B

## - Watch Video Solution

74. The total number of bones in your right arm is
" " Or
Total number of bones in the hind limb of a man is
A. 30
B. 32
C. 35
D. 40

## Answer: A

## - Watch Video Solution

75. The scapula is a large triangular flat bone situated in the dorsal part of the thorax between
A. The second and fifth ribs
B. the second and seventh ribs
C. The third and sixth ribs
D. The third and eighth ribs

## Answer: B

## - Watch Video Solution

76. Acromion process is characteristacally found in the $\qquad$ of mammals.
A. Pevic girdle
B. Pectoral girdle
C. Skull
D. Sternum

## Answer: B

## - Watch Video Solution

77. The matrix of bone and cartilage can be distinguished by the presence of
A. Haversian canal
B. Lacuna
C. Chromatophores
D. Adipose cells

## Answer: A

## - Watch Video Solution

78. What is the differnce between the bone of rabbit and that of frog
A. In the bone of rabbit haversian canal is found
B. Yellow marrow is found
C. Osteocytes are of different types
D. Bone of frog is spongy

## Answer: A

## - Watch Video Solution

79. Acetabulum is present in
A. Pelvic girdle of rabbit
B. Pectoral girdle of rabbit
C. Both (a) and (b)
D. None of these

## Answer: A

## D Watch Video Solution

80. Ends of long bones are covered with
A. Cartilage gland
B. Muscles
C. Ligaments
D. Blood cells

## Answer: A

81. Olecranon process is found in
A. Proximal end of ulna
B. Distal end of ulna
C. Proximal end of tibia
D. Proximal end humerus

## Answer: A

## - Watch Video Solution

82. Which of the following is absent in the segment of cockroach's leg
A. Fibula
B. Coxa
C. Tibia
D. Femur

## Answer: A

## - Watch Video Solution

83. Three of the following pairs of the human skeletal parts are correctly matched with their respective inclusive skeletal category and one pair is not matched. Identify the non-matching pair

Pairs of skeletal parts Category<br>A.<br>Humerus and ulna Appendicular skeleton<br>B.<br>Pairs of skeletal parts Category<br>Malleus and stapes Ear ossicles<br>Pairs of skeletal parts Category<br>C.<br>Sternum and Ribs Axial skeleton<br>D.<br>Pairs of skeletal parts<br>Clavicle and Glenoid cavity Pelvic girdle

## Answer: D

## - Watch Video Solution

84. Astragalus and calcaneum are present in
A. Fore limb
B. Hind limb
C. Scapula
D. Clavicle

## Answer: B

- Watch Video Solution

85. Deltoid ridge is found in which one of the following bones
A. Radius
B. Tibia
C. Femur
D. Humerus

## Answer: D

## - Watch Video Solution

86. Pelvic girdle of rabbit consist of
" " Or

IN mammals, each half of pelvic girdle or obturator foramen in pelvic girdle is formed by
A. Ilium, ischium and pubis
B. Ilium, ischium and coracoid
C. Coracoid, scapula and clavicle
D. Ilium, coracoid and scapula

## Answer: A

87. Pectoral girdle constitute
A. Scapula and Clavicle
B. Radius and Ulna
C. Ilium and Ischium
D. Maxilla and mandible

## Answer: A

## - Watch Video Solution

88. The sigmoid notch is present in
A. Femur
B. Tibio-fibula
C. Humerus
D. Ulna

## - Watch Video Solution

89. Presence of furcula is a characteristic feature of
A. Frogs
B. Reptiles
C. Birds
D. Mammals

## Answer: C

## - Watch Video Solution

90. In children the bones are more flexible and brittle because their bones
have
A. Large quantity of salts and little organic substances
B. Large quantity of organic substances and little salts
C. Well developed Haversian system
D. Large number of osteoblasts

## Answer: B

## - Watch Video Solution

91. Ankle bones have 6 tarsals and arranged in three rows then 1st row have
A. Astragalus and calcaneum
B. Pterygoid and astragalus
C. Pterygoid and calcaneum
D. None of these
92. Trceps muscle joins ulna with
A. Radius
B. Humerus
C. Phallanges
D. Suprascapula

Answer: B

## - Watch Video Solution

93. In mammals each half of pectoral girdle consists of
A. Supra scapula
B. Scapula
C. Coracoid
D. All the above

## Answer: D

## - Watch Video Solution

94. Innominate or hip bone is formed by the fusion of how many bones
A. 2
B. 3
C. 4
D. 5

## Answer: B

## - Watch Video Solution

95. Haversian canals are found in
A. Spinal cord
B. Brain
C. Long bones
D. Sponge

## Answer: C

## - Watch Video Solution

96. Phallangeal formula of hand of man is
A. 1, 2, 2, 2, 2
B. $2,1,1,1,1$
C. $2,3,3,3,3$
D. $2,3,3,2,2$

## Answer: C

97. Structure responsible for formation of sigmoid notch is
A. Olecranon process of humerus
B. Olecranon process of femur
C. Olecranon process of radius ulna
D. Olecranon process of tibia fibula

## Answer: C

## - Watch Video Solution

98. Old people are, more liable to fracture of their bones because
A. Bones become soft and elastic
B. Bones become hard and brittle
C. Bones contain large quantity of organic matter
D. None of the above

## Answer: B

## - Watch Video Solution

99. The gliding joints are important for gliding movements. One example of such a joint is between the
A. Zygapophysis of adjacent vertebrae
B. Humerus and the glenoid cavity
C. Occipital condyle and odontoid process
D. Femur and tibio-fibula

## Answer: A

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100. An example of synovial joint is found between
A. Two vertebrae
B. Two skull bones
C. Humerus and ulna
D. Tail vertebrae

## Answer: C

## - Watch Video Solution

101. The example of pivot joint is
A. Hip joints
B. Metacarpophalangeal joints
C. Ankle joints
D. Radioulnar joints

## - Watch Video Solution

102. Elbow joint is an example of
A. Pivot joint
B. Hinge joint
C. Gliding joint
D. Ball and socket joint

## Answer: B

## - Watch Video Solution

103. Hinge joint is present between
A. Humerus and pectoral girdle
B. Femur and acetabulum
C. Humerus and radio-ulna
D. Femur and pelvic girdle

## Answer: C

## D Watch Video Solution

104. Match the following and choose the correct option

Types of synovial joints Bones involved

Ball and socket
Hinge
Pivot
Saddle

1. Carpal and metacarpal of thumb
2. Atlas and axis
3. Frontal and parietal
4. Knee
5. Humerus and pectoral girdle
A. $A-5, B-4, C-2, D-1$
B. $A-1, B-3, C-4, D-5$
C. $A-5, B-4, C-3, D-1$
D. $A-1, B-2, C-5, D-4$

## - Watch Video Solution

105. The joint between the lower jaw and the skull is
A. Gliding
B. Hinge
C. Perfect joint
D. Saddle joint

## Answer: D

## - Watch Video Solution

106. Ball and socket joints can be seen in
A. Wrist
B. Fingers
C. Neck
D. Shoulders

## Answer: D

## - Watch Video Solution

107. The type of joint between the human skull bones is
A. Synarthrodial joint
B. Synovial joint
C. Cartilaginous joint
D. Fibrous joint

## Answer: A

108. Ends of long bones are covered with
A. Calcified
B. Hyaline
C. Elastic
D. Fibrous

## Answer: B

## - Watch Video Solution

109. Which one of the following pairs of structures is correctly matched with their correct description

| A. | Structures <br> Tibia and fibula |
| :--- | :--- |
| Description <br> Soth form parts of knee joint |  |
| B. | Description |

C. Shoulder joint and Ball and socket type of joint elbow joint
D. Structures Description
Premolars and molars
20 in all and 3- rooted

## Answer: B

## D Watch Video Solution

110. When the head of humerus fits into glenoid cavity, joint is
A. Ball and socket joint
B. Hinge joint
C. Pivot joint
D. Saddle joint

## Answer: A

## - Watch Video Solution

111. An all out sprint can not continue for more than 40 seconds because
A. Run out of oxygen
B. Accumulation of creatine
C. Muscles collapse
D. All of these

## Answer: D

## - Watch Video Solution

112. Select the correct matching of the type of the joint with the example in human skeletal system
Type of joint Example
A. Hinge joint $\quad-\quad$ Between humerus and pectoral girdle
B. $\begin{array}{cc}\text { Type of joint } & \text { Example } \\ \text { Gliding joint } & -\quad \text { Between carpals }\end{array}$

Type of joint Example
C. Cartilaginous joint - Between frontal and parietal

Type of joint
Example
D. Pivot joint - Between third and fourth cervical vertebrae

## Answer: B

## - Watch Video Solution

113. Which of the following joints would allow no movement
A. Cartilaginous joint
B. Synovial joint
C. Ball and socket joint
D. Fibrous joint

## Answer: D

## - Watch Video Solution

114. The ankle, knee and elbow joints are
A. Synovial joints
B. Hinge joints
C. Pivot joints
D. Ellipsoid Joints

## Answer: A

## - Watch Video Solution

115. Joint between femur and pelvic girdle is
" " Or

Joint between femur and acetabulum is known as
A. Pivotal
B. Ball and socket
C. Hinge
D. Saddle

## D Watch Video Solution

116. Achilles tendon is associated with
A. Gluteus muscle
B. Hamstring muscle
C. Quadriceps muscle
D. Gastrocnemius muscle

## Answer: D

## D Watch Video Solution

117. Joint between femur and tibio-fibula is
A. Hinge joint
B. Saddle joint
C. Pivot joint
D. Imperfect joint

## Answer: A

## - Watch Video Solution

118. $\qquad$ acts as a shock absorber to cushion when tibia and femur came together
A. Ligament
B. Cartilage
C. Tendon
D. Disc

## Answer: A

119. Ends of long bones are covered with
A. Muscles
B. Tendons
C. Ligaments
D. Cartilage

## Answer: C

Watch Video Solution
120. What is the name of joint between ribs and sternum ?
A. Cartilagenous
B. Angular joint
C. Fibrous joint
D. Gliding joint

## D Watch Video Solution

121. Sutural joints are found between
A. Parietals of skull
B. Humerus and radio-ulna
C. Glenoid cavity and pectoral girdle
D. Thumb and metatarsal

## Answer: A

## - Watch Video Solution

122. Which of the following pairs is correctly matched ?
A. Hinge joint - Between vertebrae
B. Gliding joint - Between zygapophyses of the successive vertebrae
C. Cartilaginous joint - Skull bones
D. Fibrous joint - Between phalanges

## Answer: B

## - Watch Video Solution

123. Tendon is a structure which connects
A. A bone with another bone
B. A nerve with a muscle
C. A muscle with a bone
D. A muscle with a muscle

## Answer: C

124. Synovial joint is exemplified by
A. Pivot joint
B. Hinge joint
C. Ball and socket joint
D. All of these

## Answer: D

## - Watch Video Solution

125. 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

## - Watch Video Solution

126. Sarcolemma is a membrane found over in
A. Nerve fibre
B. Cardiac muscle
C. Skeletal muscle fibre
D. Heat

## Answer: C

Watch Video Solution
127. Ensheathing of muscles is called
A. Fascia
B. Peritoneum
C. Ligament
D. Tendon

## Answer: A

## - Watch Video Solution

128. Standing on tip toe is an example of
A. Elevation
B. Flexion
C. Extension
D. Retraction

## Answer: A

129. Action potential in a muscle fibre is
A. -90 mV
B. -80 mV
C. $45-50 \mathrm{mV}$
D. 90 mV

## Answer: C

## - Watch Video Solution

130. The generation of excitation-contraction coupling involves all the following events except
A. Generation of end-plate potential
B. Release of calcium from troponin
C. Formation of cross-linkages between actin and myosin
D. Hydrolysis of ATP to ADP

## Answer: B

## - Watch Video Solution

131. See the figure of actin (thin) filaments, Identify $A, B$ and $C$

A. A-Troponin, B-Tropomyosin, C-F-actin
B. A- Troponin, B- Tropomyosin, C- Myosin
C. A- Troponin, B-Myosin, C-F-Tropomyosin
D. A-Tropomyosin, B-Troponin, C-F-actin

## Answer: A

## - Watch Video Solution

132. The contraction of muscle of shortest duration is seen in
A. Heart
B. Jaws
C. Intestine
D. Eyelids

## Answer: D

## - Watch Video Solution

133. Gastrocnemius' is a muscle of
A. Forelimbs
B. Thigh
C. Shank
D. Abdomen of frog

## Answer: C

## - Watch Video Solution

134. ATPase enzyme needed for muscle contraction is located in
" " Or

The contractile protein of skeletal muscle involving ATPase activity is
A. Myosin
B. Actin
C. Actinin
D. Troponin

## Answer: A

135. Select the letter from the figure that most appropriately corresponds to the structure

I. A-band " " II. I-band
III. Sarcomere " " IV. H-zone
V. Myosin
VI. Actin, Troponin, Tropomyosin
VII. Z-line
A. I-E,II-D-III-F-IV-A,V-B,VI-C,VII-G
B. I-E,II-D,III-F, IV-G, V-C, VI-A, VII-B
C. I-E, IIID, III-C, IV-G, V-B, VI-A, VII-F
D. I-E,II-D, III-F,IV-G, V-B, VI-C,VII-A

## Answer: D

136. What is sprain
A. More pulling of tendon
B. Less pulling of tendon
C. More pulling of ligament
D. Less pulling of ligament

## Answer: C

## - Watch Video Solution

137. Muscles are red because of the presence of
A. Myoglobin and mitochondria
B. Haemoglobin and golgi bodies
C. Globulin and mitochondria
D. Protein and lysosome

## Answer: A

## - Watch Video Solution

138. The dark bands in a myofibril are due to accumulation of
A. Only thick bands
B. Only thin bands
C. Both thick and thin bands
D. None of the above

## Answer: C

## - Watch Video Solution

139. The muscle fatigue occurs due to accumulation of
A. Pyruvic acid
B. ATP
C. Lactic acid
D. Eroman $\mathrm{CO}_{2}$

## Answer: C

## - Watch Video Solution

140. The muscular contraction in which the tension remains the same and the mechanical work is also done is called
A. Isotonic contraction
B. Tetanus
C. Isomeric contraction
D. Single muscle twitch
141. In a relaxed fibril, H-zone, a lighter region of low density can be seen in the centre of
" " Or

The dark bands (Black bands) of a skeletal muscle are known as
A. Anisotropic or A-band
B. Isotropic or I-band
C. Z-band
D. Both in A and I-band

## Answer: A

## - Watch Video Solution

142. The total number of muscles in the body of man is
A. 409
B. 439
C. 539
D. 639

## Answer: D

## D Watch Video Solution

143. Major protein in the thick filament of skeletal muscle fibre is
A. Tropomyosin
B. Myosin
C. Actin
D. Troponin

## Answer: B

144. Select the correct statement with respect to disorders of muscles in humans
A. Failure of neuromuscular transmission in myasthenia gravis can prevent normal swallowing
B. Accumulation of urea and creatine in the joints cause their inflammation
C. An overdose of vitamin D causes osteoporosis
D. Rapid contractions of skeletal muscles causes muscle dystrophy

## Answer: A

## - Watch Video Solution

145. Largest number of muscles will be found in
B. Neck
C. Back
D. Arm

## Answer: C

## - Watch Video Solution

146. Muscles of the heart are
A. Voluntary, striated
B. Voluntary, smooth
C. Involuntary, striated
D. Involuntar, smooth

## Answer: C

147. Cori's cycle operates in
A. Liver
B. Liver and muscles
C. Nerve
D. Muscles

## Answer: B

## - Watch Video Solution

148. Contraction of a muscle is caused by
A. Myosin
B. Actin
C. ATP
D. Actomyosin

## Answer: D

## - Watch Video Solution

149. The biceps and triceps muscles are found in
A. Fore arm
B. Shank
C. Shoulder
D. Lower jaw

## Answer: A

## D Watch Video Solution

150. For the given statement ' X ' and ' Y ', which option is the correct option

Statement 'X'- Red muscle are also called aerobic muscle

Statement ' $Y$ ' - Red muscle possesses large amount of mitochondria
which can utilize large amount of oxygen stored in them for ATP production
A. Statement ' $X$ ' and ' $Y$ ' are correct and statement ' $Y$ ' is incorrect explanation for 'X'
B. Statement ' X ' is correct and ' Y ' is incorrect
C. Statement ' X ' is incorrect and ' Y ' is correct
D. Statement ' $X$ ' and ' $Y$ ' are correct and statement ' $Y$ ' is correct explanation for ' X '

## Answer: D

## - Watch Video Solution

151. Ciliary muscles are found in
A. Diaphragm of a mammal
B. Eyes of vertebrates
C. Heart of vertebrates
D. Stomach of frog

## Answer: B

## - Watch Video Solution

152. The given figure is associated with myosin monomer (meromyosin). Identify A to C


## E

A. A-cross arm, B-head, C-ATP binding sites
B. A-head, B-cross arm, C-ATP binding sites
C. A-head, B-cross arm, $\mathrm{C}=\mathrm{Ca}^{+2}$ binding sites
D. A-head, B-cross arm, C-GTP binding sites

## Answer: B

## - Watch Video Solution

153. Electron microscopic studies of the sarcomeres have revealed that during muscle contraction
A. The width of A-band remains constant
B. The width of the H -zone becomes smaller
C. The width of I-band increases
D. The diameter of the fibre increases

## Answer: A

## D Watch Video Solution

154. Latissius dorsi muscles are
A. Muscles of fore arm
B. Muscles of lower jaw
C. Muscles of the chest
D. Muscles of the shoulder

## Answer: D

## - Watch Video Solution

155. During muscle contraction
A. Chemical energy is changed into electrical energy
B. Chemical energy is changed into mechanical energy
C. Chemical energy is changed into physical energy
D. Mechanical energy is changed into chemical energy

## Answer: B

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

## Answer: D

## - Watch Video Solution

157. Identify the tissue shown in the diagram and match with its characteristics and its location

B. Cardiac muscles, unbranched muscles, found in the walls of the heart
C. Striated muscles, tapering at both-ends, attached with the bones of the ribs
D. Skeletal muscle, shows striations and closely attached with the bones of the limbs

## Answer: D

## - Watch Video Solution

158. Calcium is important in skeletal muscle contraction because it
A. Binds to troponin to remove the masking of active sites on actin for myosin
B. Activates the myosin ATPase by binding to it
C. Detaches the myosin head from the actin filament
D. Prevents the formation of bonds between the myosin cross bridges and the actin filament

## Answer: A

## - Watch Video Solution

159. Match the following and mark the correct option
Column I
Column II

Fast muscle fibres $i$. Myoglobin
Slow muscle fibres ii. Lactic acid
Actin filament iii. Contractile unit
Sarcomere $\quad i v$. I-band
A. A-I, B-ii, C-iv, D-iii
B. A-ii, B-I, C-iii, D-iv
C. A-ii, B-I, C-iv, D-iii
D. A-iii, B-ii, C-iv, D-i

## Answer: C

160. Ribs are attached to
A. Scapula
B. Sternum
C. Clavicle
D. Ilium

## Answer: B

## - Watch Video Solution

161. ATPase of the type muscle is located in
A. Actinin
B. Troponin
C. Myosin

## D. Actin

## Answer: B

## - Watch Video Solution

162. Intervertbral disc is found in the vertebral column of
A. Birds
B. Reptiles
C. Mammals
D. Amphibians

## Answer: C

## - Watch Video Solution

163. Which one of the following is showing the correct sequential order of vertebrae in the vertebral column of human beings ?
A. Cervical-lumbar-thoracic-sacral-coccygeal
B. Cervical- thoracic - sacral - lumbar - coccygeal
C. Cervical - sacral - thoracic - lumbar - coccygeal
D. Cevical - thoracic - lumbar - sacral - coccygeal

## Answer: D

## - Watch Video Solution

164. Which one of the following options is incorrect ?
A. Hinge joint - between Humerus and pectoral girdle
B. Pivot joint - between atlas, axis and occipital condyle
C. Gliding joint - between the carpals
D. Saddle joint - between carpel and metacarpals of thumb

## D Watch Video Solution

165. Match the followings and mark the correct option

Column I
Column II
Sternum
Glenoid Cavity ii. Vertebrae
Freely movable joint iii. Pectoral girdle
Cartilagenous joint $i v$. Flat bones
A. A-ii, B-I, C-iii, D-iv
B. A-iv, B-iii, C-I, D-ii
C. A-ii, B-I, C-iv, D-iii
D. A-iv, B-I, C-ii, D-iii

## Answer: B

## - Watch Video Solution

166. Macrophages and leucocytes exhibit
A. Ciliary movement
B. Flagellar movement
C. Amoeboid movement
D. Gliding movement

## Answer: C

## - Watch Video Solution

167. Which one of the following is not a disorder of bone ?
A. Arthritis
B. Osteoporosis
C. Rickets
D. Atherosclerosis

## Answer: D

## - Watch Video Solution

168. Which one of the following statement is incorrect
A. Heart muscles are legs are striated and voluntary
B. The muscles of hands and legs are striated and voluntary
C. The muscles located in the inner walls of alimentary canal are striated and involuntary
D. Muscles located in the reproductive tracts are unstriated and involuntary

## Answer: C

## - Watch Video Solution

169. Which one of the following statements is true?
A. Head of humerus bone articulates with acetabulum of pectoral girdle
B. Head of humerus bone articulates with glenoid cavity of pectoral girdle
C. Head of humerus bone articulates with a cavity called acetabulum of pelvic girdle
D. Head of humerus bone articulates with a glenoid cavity of pelvic girdle

## Answer: B

## - Watch Video Solution

170. Typical all mammals have seven cervical vertebrae except in
A. elephant
B. man
C. kangaroo
D. sea cow

## Answer: D

## - Watch Video Solution

171. The membrane areas between the cranial bones of the foetal skull are called
A. Areolas
B. Foramina
C. Sutures
D. Fontanelle

## Answer: D

172. Select the correct statement regarding the specific disorder of musclular or skeletal system.
A. Muscular dystrophy-age releated shortening of muscles
B. Osteroporosis-decreases in bone mass and higher chances of fractures with advancing age
C. Myasthenia gravis-auto immune disorder which inhibits sliding of myosin filaments.
D. Gout-inflamation of joints due to extra deposition of calcium

## Answer: B

## - Watch Video Solution

173. Which of the following is not a functioin of the skeletal system
A. storage of minerals
B. Production of body heat
C. Locomotion
D. Production of erythrocytes

## Answer: B

## - Watch Video Solution

174. The zygomatic process in mammals arises from
A. Premaxilla
B. Maxilla
C. Mandible
D. Squamosal

## Answer: D

## - Watch Video Solution

175. In frog, the verteba with an anterior convex surface is
A. Atlas
B. Urostyle
C. 8th vertebra
D. 9th vertebra

## Answer: D

## - Watch Video Solution

176. Epiphyseal discs, which are present at the ends of long bones are responsinle for
A. Bone elongation
B. growth of thickness of the bone
C. Remodelling the shape of bone
D. Formation of Haversian canal
177. A greater troachanter is found in
A. Femur
B. Humerus
C. Ulna
D. Radius

## Answer: A

Watch Video Solution
178. The Paget's disease is caused by
A. Prolonged deficiency of vitamin D in adults
B. Abnormal bone resortion by abnormal osteoclasts
C. Excesss alkaline phosphatase
D. Excess production and abnormal organization of collagen

## Answer: B

## D Watch Video Solution

179. Bone is distinguished from the cartilage by the presence of
A. Collagen
B. Blood vessels
C. Lymph vessels
D. Haversian canals

## Answer: D

180. Which of the following is not found in birds
A. Pectoral girdle
B. Pelvic girdle
C. Hind limb
D. Fore limb

## Answer: D

## - Watch Video Solution

181. Interphalangeal joints are also called as
A. Fixed joints
B. Hinge joints
C. Movable joints
D. Straight joints

## Answer: B

## - Watch Video Solution

182. The immediate regeneration of ATP used up during muscle contraction is faciliated by
A. Glucose
B. Glycogen
C. Lactic acid
D. Creatine phosphate

## Answer: D

## - Watch Video Solution

183. Smallest muscle in the human body
A. Sartorius
B. Spinal muscle
C. Stapes
D. Stapedius

## Answer: D

## D Watch Video Solution

184. Quadriceps and Gastrocnemius muscle lies in
A. Hands
B. Legs
C. Shoulder
D. Wrist

## Answer: B

185. See the following figure describing musle contraction.


Identify $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}$ and E
A. A- cross bridge, B -Cross bridge formation, C-Sliding/rotation, D-ADP,

E-Breaking of cross bridge
B. A- Cross bridge, B -Breaking of cross bridge formation , $\mathrm{E}-\mathrm{AMP}$
C. A- Cross bridge, B-cross bridge formation, C-Sliding/rotation, DBreaking of cross bridge, E-ATP
D. A- Cross bridge, B -Cross bridge formation, C-Breaking of cross bridge, D-Sliding (rotation), E-ATP

## - Watch Video Solution

186. The figure given here is of rib cage. Identify the parts labelled as A, B and C and select the correct option .

A. Tarsal, ribs, vertebral column
B. Scapula, ribs, vertebral column
C. Sternum, ribs, vertebral column
D. Coccys, ribs, vertebral column

## Answer: C

## - Watch Video Solution

187. Study the diagram given below,


Parts labelled as $A, B, C, D$ and $E$ respectively represent
A. Parietal bone, Frontal bone, Temporal bone, Occipital condyle and Hyoid bone.
B. Frontal bone, Parietal bone, Temporal bone, Hyoid bone and Occipital condyle
C. Frontal bone, temporal bone, Parietal bone, Occipital condyle and Hyoid bone
D. Frontal bone, Parietal bone, Temporal bone, Occiptial condyle and Hyoid bone

## Answer: D

## - Watch Video Solution

188. The given figure indicates vertebral column of human (right lateral view). Parts labelled as $A, B, C$ and $D$ respectively represent .

A. Cervical vertebra, Intervertebral disc, Sacrum and Lumber vertebra
B. Cervical vertebra, Intervertebral disc, Lumbar vertebra and Coccys
C. Cervical vertebra, Intervertebral disc, Sacrum and Coccys
D. Lumber vertebra, Intervertebral disc, Sacrum and Coccys

## - Watch Video Solution

189. Which of the following sarcomeres is labelled correctly
A.

B.

C.


190. Osteoporosis, an age related disease of skeletal system, may occue due to
A. Accumulation of uric acid leading to inflamation of joints.
B. Immune disorder affecting neuromuscular junction leading to fatigue
C. High concentration of $\mathrm{Ca}^{++}$and $\mathrm{Na}^{++}$
D. Decreased level of estrogen

## Answer: D

## - Watch Video Solution

191. which of the following structures or regions is incorrectly paired with its function.
A. Medulla oblongata: Controls respirationi and cardiovascualr reflex.
B. Limbic system : consists of fibre tracts that interconnect different
regions of brian, controls movement
C. Hypothalamus : Production of releasing hormones and regulation of temperature, hunger and thirst
D. Corpus callosum : band of fibres connecting left and right cerebal hemispheres

## Answer: B

## - Watch Video Solution

192. Assertion : Ball and socket joints are the most mobile joints.

Reason: Synovial fluid is present here.
A. If both the assertion and the reason are true and reason is a correct explanation of the assertion
B. If both the assertioin and reason are true but the reason is not a correct explanation of the assertion.
C. If the assertion is true but the reason is false
D. If both the assertion and reason are false

## Answer: B

## - Watch Video Solution

193. Assertion: Locomotion in Hydra is carried out by two types of contractile cells.

Reason: Muscle fibres are lacking in Hydra.
A. If both the assertion and the reason are true and reason is a correct explanation of the assertion
B. If both the assertioin and reason are true but the reason is not a correct explanation of the assertion.
C. If the assertion is true but the reason is false
D. If both the assertion and reason are false

## Answer: A

## - Watch Video Solution

194. Assertion: Triceps is said to be an extensor muscle for elbow joint.

Reason: Triceps relaxes durings extension of forearm at the elbow joint.
A. If both the assertion and the reason are true and reason is a correct explanation of the assertion
B. If both the assertioin and reason are true but the reason is not a correct explanation of the assertion.
C. If the assertion is true but the reason is false
D. If both the assertion and reason are false

## Answer: C

195. Assertion : Muscle contraction force increases with rise in strength of stimulus.

Reason: This is due to increased contraction of individual muscle fibres with increases in stimulus strength.
A. If both the assertion and the reason are true and reason is a correct explanation of the assertion
B. If both the assertioin and reason are true but the reason is not a correct explanation of the assertion.
C. If the assertion is true but the reason is false
D. If both the assertion and reason are false

## Answer: C

## - Watch Video Solution

196. The smooth sustained contraction of a muscle due to fusion of many twitches is called
A. Tendon
B. Tetanus
C. Twitch
D. Rigor mortis

## Answer: B

## - View Text Solution

197. Bucket-handle movement is seen in
A. $1^{\text {st }} \mathrm{rib}$
B. $3^{r d}$ rib to $5^{t h}$ rib
C. $6^{\text {th }}$ rib to $10^{\text {th }}$ rib
D. $11^{\text {th }}$ and $12^{\text {th }}$ rib

## Answer: C

## D Watch Video Solution

198. The characteristics and an example of a symbol joint in humans is
Characterstics
Example
(a) Lymph filled between two bones, limited movement Gliding joint
(b) Fluid cartilage between two bones, limited movements
(c) Fluid filled between two joints, provides cushion
(d) Fluid filled synovial cavity between two bones

Knee joint Skull bones

Joint betwee

## - Watch Video Solution

199. Pick out the correct match
A. Sternum - 14
B. Pelvis - 3
C. Ribs-20
D. Face-5

## D Watch Video Solution

200. The cranium is formed of 8 bones. They are
A. 1 frontal 2 parietals, 1 occipital, 2 temporals, 1 sphenoid and 1 ethmoid
B. 1 frontal, 1 parietal, 2 occipitals, 1 temporal, 2 sphenoids and 1 ethmoid
C. 2 frontals, 1 parietal, 1 occipital, 2 temporals, 1 sphenoid and 1 ethmoid
D. None of the above.

## Answer: A

## - Watch Video Solution

201. The muscles associated with heart in insects are :
A. Alary
B. Radial
C. Striped
D. Pericardial

## Answer: A

## Watch Video Solution

202. Which of the following bones are cartilaginous
A. Exoccipital and frontoparietal
B. Exoccipital and spenethmoid
C. Exoccipital and parasphenoid
D. Frontoparietal only

## D View Text Solution

203. Intercalated discs are found in
A. Tendons
B. Striped muscle
C. Unstriped muscles
D. Cardiac muscles

## Answer: D

## - Watch Video Solution

204. Biceps and triceps surround
A. Radius
B. Ulna
C. Humerus
D. Femus

## Answer: C

## - Watch Video Solution

205. A cotyliod bone is found in
A. Pelvic girdel of frog
B. Pelvic girdle of rabbit
C. Pectoral girdle of rabbit
D. Skull of frog

## Answer: B

206. Fabellae bones are associated with
A. angular joint
B. Elbow joint
C. Knee joint
D. Neck joint

## Answer: C

## D Watch Video Solution

207. Which of the following structure joins biceps muscles with radiusulna
A. Tendon
B. small muscles
C. Ligament
D. None of the above.

## D Watch Video Solution

208. Sometimes the muscles do not relax and become stiff. This condition is known as Rigor Mortis which is due to fall of concentration of
A. Myosin
B. Relaxin
C. Actin
D. ATP

## Answer: D

## - View Text Solution

