ప్రతిభ
ఈనాడు
సోమవారం 20 ఏప్రిల్ 2020 ■ email: help@eenadupratibha.net

Shoulder blade is made up of..?

Human Physiology

Locomotion and Movement (Musculo Skeletal System)

1. Assertion (A): Rotation of head is facilitated by the joint between atlas and axis.
Reason (R): Odontoid process of atlas is movably fixed in odontoid canal of axis.
a) Both A and R are correct R is correct explanation to A
b) Both A and R are present but R is not correct explanation to A
c) A is correct, R is wrong
d) Both A and R are wrong

2. Middle line of Sarcomere shows.
a) Z line b) M - Line
c) Troponin - C d) Triad System

3. Assertion (A): Muscle contracts upon stimulation normally when it is relieved from muscle fatigue.
Reason (R): The vein which is taking away blood from the muscle transports accumulated lactic acid from the muscle to the liver.
a) Both A and R are correct R is correct explanation to A
b) Both A and R are present but R is not correct explanation to A
c) A is correct, R is wrong
d) Both A and R are wrong

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4. At the time of muscle contraction which of the following does not occur?
a) Generation of action potential at sarcolemna
b) Release of Ca^{++} from troponin
c) Sliding of actin over myosin
d) Occurence of repeated cross bridge cycles

5. Match the following

Feature	Number
A) Cranial bones	1) 22
B) Floating ribs	2) 7 pairs
C) Hind limb bones	3) 8
D) Vertebro - sternal ribs	4) 30
	5) 2 pairs

	A	B	C	D
a)	2	4	1	5
b)	4	2	5	1
c)	3	5	4	2
d)	5	3	2	4

6. The locomotory structures of Hydra are
a) Pseudopodia b) Parapodia
c) Tentacles d) Suckers

7. Cytoskeletal elements involved in amoeboid movement are
a) Microtubules b) Micro filaments
c) Micromeres d) Intermediate filaments

8. Identify the structure not associated with pectoral girdle
a) Acromion process b) Acetabulum
c) Glenoid cavity d) Scapula

9. If a stimulus, several times higher than the threshold stimulus is applied on a muscle fibre, then it will
a) Contract with larger force
b) Contract with a smaller force
c) Contract with the same force
d) Undergoes tetany

10. Sprain is caused due to the excessive pulling of .....
a) Tendon b) Muscle
c) Ligament d) Both 1 & 3

11. Shoulder blade is made up of .....
a) Ilium b) Scapula c) Clavicle d) Humerus

12. Sternum is connected to ribs by
a) Tendon b) Muscle
c) Ligament d) Both 1 & 3

13. Which of the following of myosin protein serves as cross bridges?
a) Heads b) Long tail
c) Twisted part of heavy chain
d) Both 1 & 2

14. Osteoporosis, an age related disease of skeletal system, may occur due to
a) Decreased level of oestrogen
b) Accumulation of uric acid leading to inflammation of joints
c) Immune disorder affecting neuro muscular junction leading to fatigue
d) High concentration of Ca^{++} and Na^{++}

15. The pivot joint between atlas and axis is a type of
a) Cartilagenous joint
b) Synovial joint - rotatory type
c) Saddle joint d) Fibrous joint

16. Isotropic band of muscle cell contains:
a) Actin b) Myosin
c) M - line d) Sarcomere

17. Which point of myosin filament has active sites for actin?
a) Head b) Short arm c) Tail d) Neck

18. Each F - actin is a .....
a) Monomeric 'G' actin
b) Polymer of meromyosin
c) Polymer of monomeric 'G' actins
d) Monomer of meromyosin

19. This serves as a strong foundation for pelvic girdle.
a) Coccyx b) Ilium c) Sacrum d) Ischium

20. How many bones are present in human skull? And what is the type of joints in it?
a) 22, Synovial b) 29, Amphiarthrosis
c) 28, Diarthrosis d) 22, Synarthrosis

21. Assertion (A): Hensen's disc or H zone of A band is relatively less dark than the edges of A band.
Reason (R): Thin filaments or actin filaments are present in it.
a) Both A and R are correct and R is correct explanation to A
b) Both A and R are correct but R is not correct explanation to A
c) A is correct, R is wrong
d) A is wrong, R is correct

22. Locomotion by streaming of protoplasm is shown by .....
a) Amoeba, paramecium, macrophages
b) Amoeba, macrophages, leucocytes
c) Hydra, macrophages, leucocytes
d) Amoeba, acellular organisms, paramecium

23. Assertion (A): Visceral muscle fibre is a syncytium.
Reason (R): The Straited muscle fibre is multinucleate as it is formed by fusion of embryonic mononucleate myoblasts and nuclei are peripheral in position.
a) Both A and R are correct and R is correct explanation to A
b) Both A and R are correct but R is not correct explanation to A

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c) A is correct, R is wrong
d) A is wrong, R is correct

24. Read the following statements:
I) Actin and myosin filaments are called thin and thick filaments respectively.
II) The thick filaments are held together in the middle of dark band by M - line
III) The central part of A band is relatively less dark than the edges
IV) Actin, troponin and tropomyosin are often called 'regulatory proteins'.
The correct statements are:
a) I, II, III b) II, III only
c) I, III only d) All

25. Identify the wrongly matched set
a) Sphenoid bone - keystone bone
b) Palatine process - hard palate
c) Zygomatic bones - Cheek bones
d) Nasal conchae - Smallest bones of face

26. The functional unit of skeletal muscle fibre is formed by
a) One complete I - band and two halves of A band
b) One complete I - band and one complete of A band
c) One complete A band and two halves of I band
d) Half part of A - band and half part of I - band

27. Assertion (A): Due to rapid activity of a muscle, there occurs oxygen debt.
Reason (R): Pyruvic acid gets accumulated in the absence of oxygen.
a) Both A and R are correct and R is correct explanation to A
b) Both A and R correct but R is not correct explanation to A
c) A is correct, R is wrong
d) A is wrong, R is correct

28. Calcium ions in a myocyte during muscle contraction bind to .....
a) Myosin of thin filaments
b) Myosin of thick filaments
c) Troponin of thin filaments
d) Tropomyosin of thin filaments

29. The H - zone in the skeleton muscle fibre is due to
a) The Central gap between actin filaments extending through myosin filament in A - band
b) Extension of myosin filaments in the central portion of A - band
c) The absence of myofibrils in the central portion of A - band
d) The central gap between myosin filaments in the A - band

30. Coronal suture is found between
a) Parietal and Squamosal
b) Parietal and Pterygoid
c) Parietal and Frontal
d) Parietal and Sphenoid

31. Following are the structures in a muscular system
A) Myofibril B) Myofibre
C) Sarcomere D) H - zone
Arrange them in ascending order of their complexity
a) A - B - C - D b) C - D - A - B
c) B - A - C - D d) D - C - A - B

32. In Human beings, the cranium is formed by
a) 10 bones of which 2 are paired
b) 8 bones of which 2 are paired
c) 14 bones of which 6 are paired
d) 6 bones of which 3 are paired

33. This facial bone is unpaired
a) Nasal b) Vomer C) Lacrimal d) Palatine

34. Which one is a cartilaginous Joint?
a) Synchondoses b) Symphysis
c) Diarthrosis d) Both 1 and 2

35. A Cricket player is fast chasing a ball in the field, Which one of the following groups of bones are directly contributing in this movement?
a) pelvis, ulna, patella, tarsals
b) stemum, femur, tibia, fibula
c) tarsals, femur, metatarsals, tibia
d) femur, malleus, tibia, metatarsals

36. Fibrous immovable joints are found in
a) Bones of skull
b) Bones of limbs
c) Bones of girdles
d) Bones of vertebral column

37. The articulation of odontoid process of axis and atlas is an example of
a) Pivot joint b) Synovial joint
c) Ball and socket joint d) Hinge joint

38. Human vertebral formula is .....
a) $C_7T_{12}L_5S_5Cd_4$ b) $C_7T_9L_5S_4Cd_1$
c) $C_7T_{12}L_5S_1Cd_1$ d) $C_7T_{12}L_4S_4Cd_1$

39. Match the following

List - I	List-II
i) Hip joint	A) Pivot joint
ii) Elbow joint	B) Fibrous joint
iii) Wrist joint	C) Hinge joint
iv) Joint in Thumb between carpal and metacarpal	D) Gliding joint
v) Neck Joint	E) Ball & Socket joint
	F) Saddle joint

	I	II	III	IV	V
a)	E	B	D	C	A
b)	E	C	D	F	A
c)	E	C	B	F	A
d)	D	C	A	F	B

40. Acromion process is associated with
a) Collar bone b) Scapula
c) Pubis d) ilium

ANSWERS

1-c	2-b	3-a	4-b	5-c	6-c	7-b	8-b	9-c	10-d
11-b	12-c	13-a	14-a	15-b	16-a	17-a	18- c		
19-c	20-d	21-c	22-b	23-d	24-a	25-d	26-c		
27-c	28-c	29-a	30-c	31-d	32-b	33-b	34-d		
35-c	36-a	37-a	38-c	39-b	40-b				