SARANSH | BIOLOGY

BIOLOGY

DAILY PRACTICE PROBLEMS

DPP NO. 1



## TARGET : NEET (UG) 2024

## Course : SARANSH (Youtube Live CRASH COURSE)

## **ZOOLOGY: LOCOMOTION AND MOVEMENT**

## DPP No.: 1

1.	Sarcolemma is a meml (1) Nerve fibre (3) Skeletal muscle fibr	orane found over e	(2) Smooth muscle (4) Heart				
2.	<ul> <li>Smooth or non-striated muscles do not assist in –</li> <li>(1) Transport of gametes through the digestive tract</li> <li>(2) Transport of chyme from stomach to duodenum.</li> <li>(3) Change in body posture</li> <li>(4) Peristalsis</li> </ul>						
3.	Major protein in the thick filament of skeletal muscle fibre is						
	(1) Tropomysin	(2) Myosin	(3) Actin	(4) Troponin			
4.	The special contractile protein actin is found in(1) Thick filaments of A-bands(2) Thin filaments of I-bands(3) Both thick and thin filaments(4) Whole of myofibril						
5.	<ul> <li>Striated muscles contract by –</li> <li>(1) Sliding of actin filament upon myosin filaments</li> <li>(2) Sliding of myosin filaments upon actin filaments</li> <li>(3) Pulling together of myosin filaments</li> <li>(4) Pulling together of actin filaments</li> </ul>						
6.	In the resting state, the active binding sites for myosin on the actin filaments are masked by-						
	(1) Troponin subunit	(2) G-actin	(3) Tropomyosin	(4) Myosin			
7.	The HMM part in a meromyosin constitute						
	(1) Head only	(2) Tail only	(3) Head and arm	(4) Arm and Tail			
8.	In a meromyosin, the globular head is (1) An active ATPase and has binding sites for ATP only (2) An active ATP synthetase and has binding sites for ADP and actin (3) A passive ATPase and has binding site for active.						

(4) An active ATPase enzyme and has binding sites for ATP and active sites for actin.



9.	During muscle contraction (1) Chemical energy is changed into electrical energy (2) Chemical energy is changed into mechanical energy (3) Chemical energy is changed into physical energy (4) Mechanical energy is changed into chemical energy						
10.	Muscle fatigue is due (1) Na	to : (2) K		(3) Lactic acid	(4) Citric acid		
11.	During muscular contraction, the (1) I–zone will decrease in length (3) Z–zone will decrease in length		<ul><li>(2) A–zone will decrease in length</li><li>(4) H–zone will increase in length</li></ul>				
12.—	–Which of the following (1) Botulism	) muscular (2) Tetai	disorders is inho ny	erited? (3) Muscular dystrophy	y (4) Myasthenia gravis		
13.	If a muscle undergoes rapid contraction and relaxation, the sarcoplasmic reticulum extension: (1) requires constant plugging in and out of Ca <sup>2+</sup> (2) rapid synthesis of myosin (3) do not require energy (4) all of the above						
14.	Inter-vertebral disc is a (1) Fibro cartilage between the centrum of vertebrae (2) Pad in the centrum of bone (3) Cartilage bone in the body (4) Body of vertebrae						
15.	Find out the correct option regarding true sentence/s from the followings-(i) Human skull is dicondylic like reptiles.(ii) Foramen of Magnum is found at the anterior side of skull(iii) Atlas vertebrae helps in rotation of neck.(iv) Spinal cord passes to the brain through Foramen of Magnum.(1) only iv(2) i, ii, iv(3) i, iii, iv(4) iii and iv						
16.	Match the following columns and select the correct Column-IColumn-II(a) Gout(i) Decreased leg(b) Osteoporosis(ii) Low Ca <sup>++</sup> ion(c) Tetany(iii) Accumulation(d) Muscular dystrophy(iv) Auto immun(v) Genetic diso(1) (a)-(ii), (b)- (i), (c)-(iii), (d)-(iv)(3) (a)-(iv), (b)- (v), (c)-(i), (d)-(ii)		ect option: evels of estrogen ns in the blood on of uric acid crystals ne disorder order (2) (a)-(iii), (b)- (i), (c)-(ii), (d)-(v) (4) (a)-(i), (b)- (ii), (c)-(iii), (d)-(iv)				
17.	Vertebrochondral ribs (1) 11 <sup>th</sup> & 12 <sup>th</sup> pair rit (3) 1 <sup>st</sup> – 7 <sup>th</sup> pair ribs	are – os		(2) 8 <sup>th</sup> , 9 <sup>th</sup> & 10 <sup>th</sup> pai (4) 8 <sup>th</sup> – 12 <sup>th</sup> pair ribs	r ribs		



- **18.** What is correct about human body
  - (1) There are 5 vertebra in the neck
  - (3) There are 15 pairs of ribs
- (2) Brain box is made up of 4 bones
- (4) There are 12 thoracic vertebra
- **19.** The last two pairs of ribs are named floating ribs because
  - (1) Their sternal parts are attached to the sternum directly
  - (2) Their sternal parts are attached on the  $7^{th}$  pair of ribs
  - (3) Their sternal parts remain free and do not even reach the sternum
  - (4) They float in the body cavity
- **20. Assertion:** Mechanism of muscle contraction is explained by sliding-filament theory.

**Reason :** Contraction of muscle fibre takes place by the sliding of thick filaments over the thin filaments.

- (1) If both Assertion and Reason are true and the Reason is the correct explanation of the Assertion
- (2) If both Assertion and Reason are true but the Reason is not the correct explanation of the Assertion
- (3) If Assertion is true but Reason is false
- (4) If both Assertion and Reason are false

