DPP
DAILY PRACTICE PROBLEMS

Class : XIth **Subject : BIOLOGY**
Date : **DPP No. :4**

Topic :- Locomotion & Movement

1. Lactic acid in muscles is formed due to
   a) Aerobic breakdown of sucrose b) Anaerobic breakdown of glycogen
   c) Anaerobic breakdown of galactose d) Anaerobic breakdown of fructose

2. Identify the correct statements
   I. Acetylcholine is released when the neural signal reaches to the motor end plate
   II. Muscle contraction is initiated by signals sent by CNS *via* a sensory neuron
   III. During muscle contraction, isotropic bands get elongated
   IV. Repeated activation of the muscles can lead to lactic acid accumulation in them
   The option with correct choices is
   a) I and III b) I and IV c) II and III d) I and II

3. Number of bones in skull is
   a) 26 b) 28 c) 107 d) 29

4. Fascicles are held together by the structure
   a) Connective tissue b) Connective fibres c) Fascia d) All of these

5. Select the correct statements
   I. During muscle contraction, chemical energy changes into mechanical energy
   II. Muscle fatitue occurs due to lactic acid formation
   III. The reaction time is different to different muscle
   IV. Muscle contraction don't need ATP
   Choose the option with the correct statements
   a) All except I b) All except II c) All except III d) All except IV

6. Choose the correct statements for flagellar movements
   a) They are found in coanocytes of sponges
   b) They are performs locomotion in euglenoids
   c) They helps in the circulation of blood (flagella)
   d) All of the above

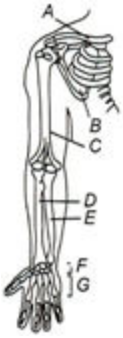
7. Our vertebral column is formed by the
   a) 26 serially arranged units called vertebrae b) 27 serially arranged units called vertebrae

c) 33 serially arranged units called vertebrae d) 35 serially arranged units called vertebrae

8. The sensation of fatigue in the muscles after prolonged strenuous physical work, is caused by
a) a decrease in the supply of oxygen b) minor were and tear of muscle fibers
c) the deletion of glucose d) the accumulation of lactic acid

9. Visceral muscles are also called
a) Smooth muscles b) Non-striated muscles
c) Involuntary muscles d) All of these

10. Given diagram shows the right pectoral girdle and upper arm (frontal view) of human female
Identify *A* to *G* and choose the correct option



a) A-1st Vertebra, B-Scapula, C-Humerus, D-Radius, E-Ulna, F-Carpals, G-Metacarpals
b) A-Scapula, B-Clavicle, C-Humerus, D-Radius, E-Ulna, F-Carpals, G-Metacarpal
c) A-Ilium, B-Scapula, C-Humerus, D-Radius, E-Ulna, F-Carpals, G-Metacarpals
d) A-Clavicle, B-Scapula, C-Humerus, D-Radius, E-Ulna, F-Carpals, G-Metacarpals

11. Identify *A*,*B* and *C* in the given diagram and choose the correct option

a) A-Cervical vertebrae, B-Coccyx, C-Sacrum b) A-Cervical vertebrae, B-Coccyx, C-Atlas
c) A-Cervical vertebrae, B-Coccyx, C-Axis d) A-Cervical vertebrae, B-Sacrum, C-Coccyx

12. Movement of our limbs, jaws, tongue, etc., requires
a) Ciliary movement b) Amoeboid movement c) Muscular movement d) Flagellar movement

13. Tick the wrong option regarding human beings

a) Cranial bones-12 b) Facial bones-14 c) Mendible bones-1 d) Zygomatic bones-2

14. Cross arms of the myosin monomer consists of
a) Outward projection of G-actin filament
b) Outward projection of the head region of meromyosin
c) Outward projection of the tail region of meromyosin
d) Both (b) and (c)

15. Which of the following option shows correct order of some stages of muscle contraction from the beginning to the end of the process?
a) stimuli →Neurotransmitter secretion→ Release of Ca^{2+}→Cross bridges formation→ Excitation of T-system→ Sliding of action filaments
b) Stimuli→ Neurotransmitter secretion→Excitation of T-system →Release of Ca^{2+}→Cross bridges formation → Sliding of actin filaments→ 'H' band diminishes
c) Stimuli→ Excitation of T-system→ Neurotransmitter secretion→ Cross bridges formation→ sliding of action filaments→ 'H' band diminishes
d) Stimuli→ Neurotransmitter secretion→ Cross bridges formation→ Excitation of T-system→ Sliding of action filaments

16. Fused vertebrae in human are
I. Sacral
II. Coccygeal
III. Thoracic
IV. Cervical
V. Lumber
a) I and II b) III and IV c) IV and V d) II and V

17. Which of the following statements are false regarding the muscle structure?
I. In the centre of each I-band is an elastic fibre (Z-line) which bisects it
II. Thin filament are firmly attached to the Z-line
III. M-line is a fibrous membrane in the middle of A-band
IV. A sarcomere comprises one full-A band and two half I-bands
a) I and II
b) III and IV
c) II and III
d) None of these

18. Which of the following lubricates ligament or tendons and is an important constituent of synovial fluid of bones?
a) Pectins b) Lipids c) Hyaluronidase d) Hyaluronic acid

19. Troponin is a
a) Digestive enzyme b) Muscle protein

c) High energy reservoir d) Water soluble vitamin

20. Nucleus pulposes is found in
a) Brain b) Nucleus c) Intervertebral disc d) Liver