

## CHAPTER 20: LOCOMOTION AND MOVEMENT

### ONE MARK QUESTIONS:

1. Name the movement exhibited by unicellular organisms.(K)
2. Which animal uses tentacles for locomotion.(K)
3. Movement and locomotion cannot be studied separately. Why?(U)
4. Which cells shows amoeboid movements in human?(U)
5. "Tubular organs are lined by cilia" Why?(U)
6. Give an example of muscular movements.(K)
7. "Smooth muscles are involuntary In action" Justify the statement.(A)
8. What is sarcolemma?(K)
9. State the difference between I- Band and A- Band found in striated muscles.(S)
10. What is F- Actin?(K)
11. Mention the site on Myosin by which it forms cross bridge?(U)
12. What is HMM (Heavy Mero Myosin)?(K)
13. What is neuromuscular junction?(K)
14. What is sarcomere?(K)
15. What is the significance of myoglobin?(U)
16. Which muscle fibres are striated but involuntary in action?(U)
17. What are visceral muscles?(K)
18. What is neuromuscular junction?(K)
19. Name the parts of myosin monomer.(U)
20. Name the neurotransmitter released in neuromuscular junction?(K)
21. Define striated muscles. (K)
22. Define visceral muscles. (K)
23. Define smooth muscles. (K)
24. Define cardiac muscles. (K)
25. What is found in the globular head of globulin? (K)
26. What is the collagenous tissue layer which holds muscle bands? (K)
27. Name the neurotransmitter that generates action potential? (K)
28. What is myoglobin? (K)
29. What is sliding filament theory?(K)

### TWO MARKS QUESTIONS:

30. How cross bridge will form?(U)
31. Name the bands formed by specific arrangement of proteins. (U)
32. Write the difference between fascicles and fascia.(U)
33. Muscle fibres appear red and pale/ white. Why?(U)
34. Write the complex proteins associated with actin.(U)
35. Sketch and label sarcomere.(S)
36. Add a note on myosin monomer.(U)
37. Draw actin filament and show the location of troponin and tropomyosin.(S)
38. Mention functions of cilia in *Paramecium*.(U)
39. Write the differences between smooth muscles and rough muscles. (U)
40. Compare skeletal muscles with cardiac muscles. (U)

### THREE MARKS QUESTIONS:

1. What is movement? With suitable example explain the types of movements.(U)
2. Name the type of movement found in *Amoeba*, *Paramecium* and limbs of mammals.(K)
3. Explain the arrangement of actin and myosin.(U)
4. With labelled sketch describe the structures of actin and myosin.(S)
5. Draw a diagram showing cross- bridge formation.(S)
6. List three types of muscles based on their location.(K)

### FIVE MARKS QUESTIONS:

1. Repeated muscle contraction causes accumulation of lactic acid. Why? What is the effect of it? Specify role of myoglobin. (A)
2. Why some muscles appear white? How they derive energy source?(U)
3. Explain mechanism of voluntary muscle contraction.(S)
4. Depict diagrammatically formation and breaking of cross bridge.(S)
5. What are contractile proteins? Explain its arrangement in rough muscles.(U)
6. Draw neat labelled diagram of sarcomere.(S)
7. What are the following?  
a. Myofibrils                      b. Fascicles              c. Fascia                      d. Sarcoplasm      d. Regulator proteins
8. What are the different types of movements exhibited by the cells of human body?

## SKELETAL SYSTEM

### ONE MARK QUESTIONS:

1. What is skeletal system?(K)
2. Name the parts of skeletal system.(U)
3. How many bones are present in human skeleton.(K)
4. Name the major divisions of human skeleton.(U)
5. What is sternum?(U)
6. What are floating ribs?(K)
7. How many bones are found in each limb of man?(K)
8. What is patella?(K)
9. What is collar bone?(K)
10. What is pubic symphysis?(K)
11. What is atlas?(K)
12. Which girdle articulates with the forelimbs?(U)
13. What are synovial joints?(U)
14. Where do we find fibrous joints?(K)
15. Which joints are found between the vertebrae.(K)
16. Which disorder is characterised by the accumulation of uric acid?(U)
17. Which disorder is caused due to autoimmunity?(K)
18. Name the genetic disorder of muscles.(U)
19. What is osteoporosis?(K)
20. What do you "Rapid spasm in muscles"? (K)

21. How many bones are there in facial region? (K)
22. Name the 'U' shaped bone present at the base of buccal cavity. (K)
23. How many cranial bones are there?
24. How many vertebrae are found?
25. Name the first vertebra.
26. How many pairs of ribs are present?
27. Which ribs are called true ribs?
28. How many bones form a limb?

#### **TWO MARKS QUESTIONS:**

1. Draw and label vertebral column.(S)
2. What is appendicular skeleton? Name the parts.(K)
3. What is skull? Name its parts.(K)

#### **THREE MARK QUESTIONS:**

4. Name the bones of middle ear.(K)
5. Name the bones forming pelvic girdle (K).
6. List the three types of ribs.(K)
7. Enlist the types of vertebrae?
8. Explain significance of joints.(U)
9. List three types of joints.(K)
10. Enlist the parts of pectoral girdle. (K)

#### **FIVE MARK QUESTIONS:**

1. What is skeletal system? Write two divisions of skeletal system.(U)
2. What is rib cage? List the parts of it.(U)
3. Enlist the synovial joints and write the location of each joint.(U)
4. Explain the cause and symptoms of tetany, Arthritis and gout.(U)
5. What is i. Acromion      ii. Glenoid      iii. Scapula      iv. Sternum      v. Hyoid (K)
6. Enlist the bones forming forelimb.(K)
7. Enlist the bones forming hind limb.(K)
8. Name the type of joint between the following(A)
  - a. Atlas and Axis
  - b. Between phalanges
  - c. Femur and acetabulum
  - d. Pubic bone and pelvic girdle
  - e. Between cranial bones