DAILY PRACTICE PROBLEM

Body Movements DPP – 01

Q.1 to Q.4 are multiple choice questions. Each has four options (1), (2), (3) and (4) out of which only one option is correct.

1. Which system helps in movement and locomotion?

(1) Skeletal (2) Digestive (3) Excretory (4) None of these

2. _____ is the change in position of only a part of the body, while the act of moving from place to place is known as _____.

(1) Locomotion and movement. (2) Movement and locomotion.

(3) Migration and motion. (4) None of these.

3. _____ helps in protecting internal organs and gives support to the body.

(1) Skeletal system (2) Excretory system

(3) Nervous System (4) Digestive System

4. Human skeletal comprises of –

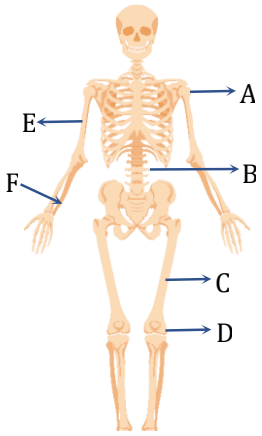
(1) skull and back bone (2) ribs and breastbone

(3) shoulder and hip bone (4) All of the above

5. Unscramble the words –

(i) Msteunr (ii) Shumeru

6. Observe the diagram and write down which of the labelled parts are humerus, vertebral column, knee and femur?



Read the following statement and give your answer as true or false.

7. Osteology is the study of gums.

Read the following statement and fill in the blanks.

8. _____ form a framework that supports an organism's body.

Subjective Questions

9. How does movement help animals?

10. Differentiate locomotion and movement with the help of an example.

Solutions DPP – 01

1. Option (1)

The skeletal system helps in movement and locomotion.

2. Option (2)

Movement is the change in position of only a part of the body, while the act of moving from place to place is known as locomotion.

3. Option (1)

The skeletal system helps in protecting internal organs and gives support to the body.

4. Option (4)

The human skeletal comprises of skull, back bone, ribs, breastbone, shoulder and hip bone.

5. (i) Sternum

(ii) Humerus

6. Humerus – E, Vertebral column – B, Knee – D, Femur– C

7. False

8. Bones

9. Movements in animals help them to move towards safety and to places where food and water are available.

10. Locomotion is the act of moving from one place to another. Example a pet dog running towards pet owner. Movement is a change in position of a body part. Example movement of stem towards light in plants.

DAILY PRACTICE PROBLEM

Body Movements DPP – 02

Q.1 to Q.9. are multiple choice questions. Each has four options (1), (2), (3) and (4) out of which only one option is correct.

1. Rian had an accident and hurt his arm. Then he was taken to the hospital. What diagnostic test will be required for doctor to find out about the damage to Rian's arm?

(1) Blood test (2) C.T. scan (3) X–ray imaging (4) Sonography

2. The backbone is a long, hollow, rod–like structure running from the neck to the hips which is scientifically known as –

(1) scapula (2) humerus (3) clavicle (4) vertebral column

3. Choose the incorrect.

(1) Ribs are attached in front to breastbone or sternum and at the back they are attached to pelvic bone.

(2) There are 12 pairs of ribs in the chest of our body.

(3) Rib cage protects the lungs and heart in our body.

(4) The hollow, bony structure formed by the ribs is called 'rib cage'.

4. How many vertebrae form our neck?

(1) 7 (2) 9 (3) 3 (4) 10

5. When we observe a human skull, we see two large cavities at the place of the eyes. What are these cavities called?

(1) Eye bags (2) Eye pockets

(3) Eye sockets (4) No particular name for it.

Read the given paragraph and answer the following questions:

Calcium is a nutrient that all living organisms require, including humans. It is the most abundant mineral in our body. It is essential for strong healthy bones. 99% of the calcium in our body is in our bones and teeth. Some calcium rich foods are cheese, tofu, milk, green leafy vegetables. Along with calcium, people also need vitamin D. This vitamin helps our body in absorbing calcium.

6. Most abundant mineral in our body that maintains the bone health is –

(1) calcium (2) phosphorus

(3) vitamin D (4) potassium

7. Milk is said to be best for bone health. Why?

(1) It has many proteins.

(2) It contains potassium.

(3) Due to the presence of calcium.

(4) None of these

8. Jamie has poor bone health, even though he is taking enough calcium rich food. What can be the reason behind it?

(1) He doesn't exercise enough. (2) He is lazy.

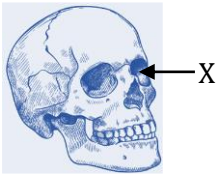
(3) His bones are getting old. (4) He has vitamin D deficiency.

9. Calcium rich foods are –

(1) milk (2) tofu

(3) cottage cheese (4) all of the above

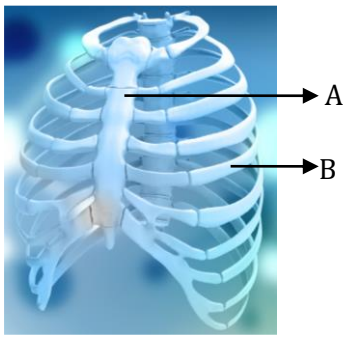
10. Label the X?



11. Unscramble the words

(i) Nebokacb (ii) Aebervter

12. Identify the labels A and B?



13. Match the column–I with column–II – I with columns – II.

Column – I		Column – II	
(A)	Skull	(i)	Main supporting structure of body
(B)	Rib cage	(ii)	Protect heart and lungs
(C)	Back bone	(iii)	Shows the structure and shape of bone
(D)	X–ray	(iv)	Protects the brain

Read the following statements and give your answer as true or false.

14. Skull protects the brain, eyes and neck.

15. Locomotion and movement are similar processes.

Read the following statements and fill in the blanks.

16. Number of ribs is _____.

17. Delicate organs like _____ & _____ are present inside the rib cage.

Subjective Questions

18. What does X–ray imaging show?

19. What would have happened if the backbone was made up of 1 long bone instead of 33 small bones?

20. What is the scientific name of backbone?

Solutions DPP – 02

1. **Option (3)**

X – Ray imaging can show the damage to the bones.

2. **Option (4)**

The backbone is a long, hollow, rod–like structure running from the neck to the hips which is scientifically known as Vertebral column.

3. **Option (1)**

Ribs are attached in front to breast bone or sternum and at the back they are attached to backbone.

4. **Option (1)**

Top 7 vertebrae form our neck.

5. **Option (3)**

Eye sockets are two large cavities at the place of eyes in skull.

6. **Option (1)**

Calcium is the most abundant mineral in our body that maintains the bone health.

7. **Option (3)**

Milk is said to be the best for bone health due to the presence of calcium.

8. **Option (4)**

Due to vitamin D deficiency, Jamie's body cannot absorb calcium.

9. **Option (4)**

Calcium rich foods are cottage cheese, tofu, milk, green leafy vegetables.

10. X – Eye sockets

11. (i) Backbone

(ii) Vertebrae

12. A – Sternum

B – Rib cage

13. (A) – (iv), (B) – (ii), (C) – (i), (D) – (iii).

14. False

15. False

16. 24

17. Heart and lungs

18. X – ray image shows the shape and number of bones in various parts of our body. X – ray image used by doctors to examine the bones in our body when it gets fractured.

19. If our backbone would have made up of 1 long bone, then we would not be able to bend and twist our body.

20. It is a long, hollow, rod like structure running from neck to the hips inside our body known as backbone and the scientific name of backbone is vertebral column.

DAILY PRACTICE PROBLEM

Body Movements DPP – 03

Q.1 to Q.5 are multiple choice questions. Each has four options (1), (2), (3) and (4) out of which only one option is correct.

1. What are the names of shoulder bones respectively?

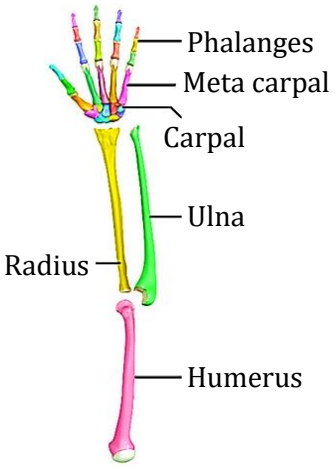
(1) Humerus, Femur

(2) Clavicle bone and Scapula

(3) Radius and Ulna

(4) Collar bone and humerus

2. Which is the correct option for the number of bones in the lower arm?



	Carpals	Metacarpals	Phalanges
(1)	5	8	14
(2)	5	14	8
(3)	14	8	5
(4)	8	5	14

3. Which one is the longest bone of the human body?

(1) Humerus (2) Pelvic Bone

(3) Femur (4) Ulna

4. Calcium is essential for –

(1) bones (2) teeth

(3) both (1) & (2) (4) None of these

5. Which joint connects the bones of legs with pelvis?

(1) Hinge (2) Pivot

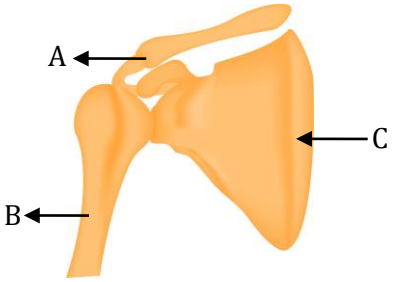
(3) Ball and socket (4) None of these

6. Unscramble the words –

(i) Rusoshpohp (ii) Icepvl

7. Bone 'X' is joined to the thigh bones with ball and socket joints. Write the name of 'X'?

8. Image shown below is of shoulder bone. Label the parts A, B and C.



9. Match the Column–I and Column–II.

Column – I		Column – II	
(A)	Pelvic bone	(i)	Attaches arms to body
(B)	Shoulder bones	(ii)	Parts of hand
(C)	Wrist, palm and fingers	(iii)	Link between trunk and the legs
(D)	Hip bone	(iv)	Another name for hip bone

Read the following statements and give your answer as true or false.

10. Bones of fingers are known as phalanges.

11. Hip bones connect the upper part of our body to our legs.

Read the following statements and fill in the blanks.

12. Shoulders are made up of _____ and _____.

13. Carpals are _____ in number.

Subjective Questions

14. Write the names and numbers of bones of foot.

15. Name the bones which attach our arms to the body.

Solutions DPP – 03

1. **Option (2)**

Clavicle bone and Scapula are shoulder bones respectively.

2. **Option (4)**

The number of bones in lower arm are respectively 8, 5, 14.

3. **Option (3)**

The femur is one of the longest bone of the human body.

4. **Option (3)**

Calcium is essential for strong healthy bones. 99% of calcium in our body is in our bones and teeth.

5. **Option (3)**

The ball and socket joint connect the bones of legs with pelvis.

6. (i) Phosphorus,

(ii) Pelvic

7. X – Hip bone (Pelvic bone)

8. A – Collar bone

B – Humerus

C – Shoulder blade (scapula)

9. (A) – (iv), (B) – (i), (C) – (ii), (D) – (iii)

10. True

11. True

12. Shoulders are made up of shoulder blade and collar bone.

13. Carpals are 8 in number.

14. Bones of foot

Bones of ankle – tarsals (7)

Bones of middle part of foot – metatarsals (5)

Bones of finger – phalanges (14)

15. Shoulder blade and collar bone.

DAILY PRACTICE PROBLEM

Body Movements DPP – 04

Q.1 to Q.10 are multiple choice questions. Each has four options (1), (2), (3) and (4) out of which only one option is correct.

1. Joint that allows little movement in all directions in carpals of wrist –
(1) gliding joint
(2) pivot joint
(3) ball and socket joint
(4) none as wrist has only cartilages.

2. Select the right option.
(1) Pivot joint – Ankle
(2) Hinge joint – Wrist
(3) Pivot joint – Neck
(4) Gliding joint – Elbow

3. Knee joint is an example of –
(1) fibrous joint
(2) fixed joint
(3) synovial joint
(4) none of these

4. Choose the correct option.
(1) Ball and socket joint allow movement in one particular direction.
(2) Hinge joint allows movement in all directions.
(3) Plane joint allows bones to glide over each other.
(4) All of the above

5. Why can't we move our upper jaw?
(1) Fibrous joint is present in the bones of upper jaw.
(2) Upper jaw is made up of hard tissue.
(3) Upper jaw is made up of cartilage.
(4) None of above

6. Freely movable joints is/are –
(1) ball and socket joint
(2) hinge joint
(3) pivot joint
(4) all of these

7. Immovable joints are present in –
(1) upper jaw and wrist
(2) upper jaw and lower jaw
(3) lower jaw and neck
(4) upper jaw and skull

8. Group of joints that allows movement only in one direction –

(1) shoulder joint and neck–head joint

(2) elbow joint and knee joint

(3) ankle joint and knee joint

(4) hip joint and elbow joint

9. Pivot joints allow the head to move –

(1) backward and forward (2) only backward

(3) left and right direction (4) (1) and (3) both

10. Which group of bones has the least movement?

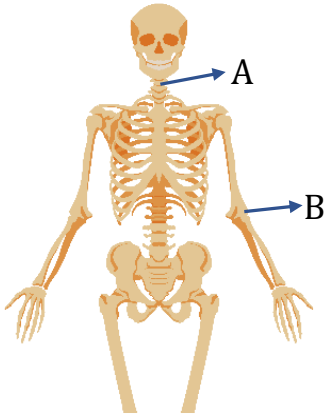
(1) Ankle and carpals

(2) Knee and vertebral column

(3) Skull bones and lower arm

(4) Skull and backbone

11. Find out what kind of joint are present label A & B represent?

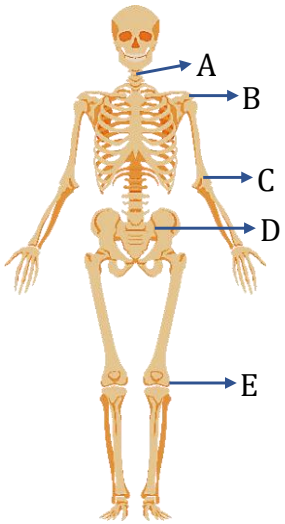


12. Unscramble the words.

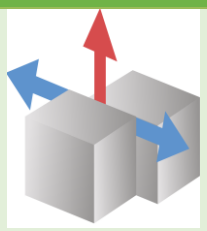
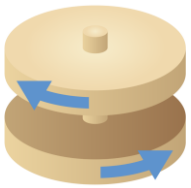
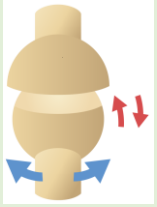
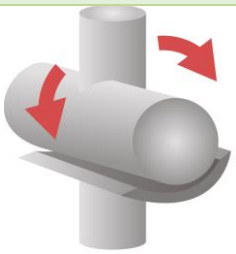
(1) TLagienm

(2) Tdnneo

13. Which of the following show the hinge joint in the label given in diagram?



14. Match the column–I with column–II:

	Column – I		Column – II
(A)	Ball and socket joint	(i)	
(B)	Hinge joint	(ii)	
(C)	Gliding joint	(iii)	
(D)	Pivot joint	(iv)	

Read the following statements and give your answer as true or false.

15. Ball and socket joint present in elbow.

16. Fibrous joints are movable while synovial joints are partially movable.

Read the following statements and fill in the blanks.

17. In _____ joint, the rounded head of one bone fits into a _____ cavity which is formed by the other bone.

18. Carpals in wrist have _____ joint.

Subjective Questions

19. Which joint provides maximum movement in all directions and how?

20. What are sutures? Explain.

Solutions DPP – 04

1. Option (1)

Gliding joint allows little movement in all directions in carpals in wrist.

2. Option (3)

Pivot joints occur where our neck joins the head.

3. Option (3)

Knee joints are an example of synovial joint or freely movable joints.

4. Option (3)

Plane joint allows bones to glide over each other.

5. Option (1)

Fibrous joint is present in the bones of upper jaw.

6. Option (4)

Ball and socket joint, hinge joint and pivot joints are freely movable joints.

7. Option (4)

Immovable joints are present in the upper jaw and skull.

8. Option (2)

Elbow and knee joints are examples of hinge joints which allow movement only in one direction.

9. Option (4)

Pivot joint allows the head to move backward and forward as well as in left and right direction.

10. Option (4)

The skull and backbone have the least movement since they have fibrous and catilagenous joints respectively.

11. A – Pivot joint, B – Hinge joint

12. (i) Ligament (ii) Tendon

13. C (elbow) and E (knee) have hinge joints.

14. (A) – (iii), (B) – (iv), (C) – (i), (D) – (ii)

15. False

16. False

17. Ball & socket, cup shaped

18. Gliding joint

19. Ball and socket joint allows maximum movement in all directions. In this joint, the rounded head (like a ball) of one bone fits into a cup–shaped cavity formed by the other bone which helps in making movements in all directions.

20. The bones of skull are interlocked with each other by their serrated margins. These margins are called sutures.

DAILY PRACTICE PROBLEM

Body Movements DPP – 05

Q.1 to Q.5 are multiple choice questions. Each has four options (1), (2), (3) and (4) out of which only one option is correct.

1. The upper part of ear has –

(1) bones (2) carpals

(3) muscles (4) cartilage

2. Match the column–I with column–II and select the correct option.

Column – I		Column – II	
(A)	Muscles	(i)	Shorter, stiffer and thicker
(B)	Cartilage	(ii)	Helps in locomotion and movements
(C)	Muscular system	(iii)	Soft, smooth and elastic tissue
(D)	Contracted muscle	(iv)	Fibrous tissue

(1) (A) – (iv), (B) – (iii), (C) – (ii), (D) – (i)

(2) (A) – (i), (B) – (ii), (C) – (iii), (D) – (iv)

(3) (A) – (iv), (B) – (ii), (C) – (i), (D) – (iii)

(4) (A) – (i), (B) – (iv), (C) – (iii), (D) – (ii)

3. Choose the incorrect option –

(1) muscles work in pairs.

(2) 2 pairs of muscles work together to move a bone.

(3) when a muscle is contracted, it becomes shorter, stiffer and thicker.

(4) a muscle is a fibrous tissue.

4. Which one of the following is not true about cartilage?

(1) Found in the joints of body.

(2) Cartilage is soft, smooth and elastic tissue.

(3) Upper part of ear is made up of cartilage.

(4) Cartilage is harder than bones.

5. What is the difference between cartilage and bone?

(1) Bone is hard and firm whereas cartilage is soft and can be bent.

(2) Cartilage is flexible and stronger than bone.

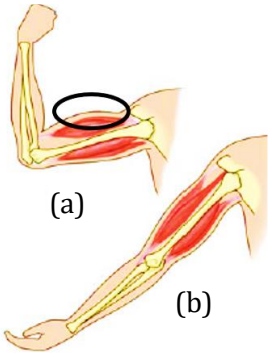
(3) Bone is inside the body, and cartilage is outside.

(4) All of these

Read the following statement and fill in the blank

6. Muscles are the fibrous which have the property of _____ and _____.

7. What is the reason behind the disappearance of swollen part in part (b) which is present in part (a) [encircled]?



8. Unscramble the word.

(i) Gcaarlite

(ii) Suesclm

Subjective Questions

9. Explain the mechanism involved in the working of muscles.

10. Give one example of cartilagenous structure in our body.

Solutions DPP – 05

1. **Option (4)**

The upper part of the ear has cartilage.

2. **Option (1)**

(1) (A) – (iv), (B) – (iii), (C) – (ii), (D) – (i)

3. **Option (2)**

2 muscles work together to move a bone.

4. **Option (4)**

Cartilage is softer than bones.

5. **Option (1)**

Bone is hard and firm whereas cartilage is soft and can be bent.

6. Muscles are fibrous which have the property of contraction and relaxation.

7. The swollen region in part (a) is due to a swollen muscle which happens due to contraction of the muscle.

When the arm is brought back to its normal position just like in part (b) the swollen part disappears. This is due to the relaxation of muscles.

8. (i) cartilage

(ii) Muscles

9. Muscles work in pairs. When one of them contracts, the bone is pulled in that direction. The other muscles of the pair relax. To move the bone in the opposite direction, the relaxed muscle contracts to pull the bone towards its original position, while the first relaxes.

10. Cartilaginous structure in our body – The upper part of ear has cartilages.

DAILY PRACTICE PROBLEM

Body Movements DPP – 06

Q.1 to Q.5. are multiple choice questions. Each has four options (1), (2), (3) and (4) out of which only one option is correct.

1. Which one of the following animals does not have bones?

(1) Human (2) Dog

(3) Earthworm (4) Rat

2. Snail moves forward via –

(1) snail moves forward with the help of cartilagenous structures.

(2) contraction and relaxation of foot muscles simultaneously.

(3) snail moves forward with the help of bones.

(4) contraction and relaxation of foot muscles alternatively.

3. Choose the correct option regarding snake.

(1) Snakes have a long backbone and no muscles.

(2) Movement does not take place by crawling.

(3) It contracts and relaxes the muscles alternately to form loops which gives snake a forward push.

(4) It moves first backward and then pushes itself forward.

4. Adaptation that let a fish swim easily underwater –

(1) streamlined body shape

(2) absence of fins

(3) thin and fragile body muscles

(4) rigid backbone

5. Similar feature that helps birds fly in sky and fish swim in water –

(1) heavy bones

(2) streamlined body

(3) skeleton made up of cartilage

(4) presence of wings

6. Identify the organism in the given image and write the organ of movement in it.

7. Unscramble the words.

(i) Tonkeelxoes (ii) Tgai

8. Which snake 'A' or 'B' would be faster in the given image below. Give reasons.


(a)


(b)

9. Match the column – I with column – II.

Column – I		Column – II	
(A)	Streamlined body	(i)	Earthworm
(B)	Light weight bones	(ii)	Cockroach
(C)	Bristles	(iii)	Crow
(D)	Exoskeleton	(iv)	Fish

Read the following statements and give your answer as true or false.

10. Birds that swim in water have webbed fore limbs.

11. Streamlined body of fishes provides least resistance to forward movement through water.

Read the following statements and fill in the blanks.

12. Thin and flat projections on the body of fish called _____, helps in moving fish forward.

13. Wave like motion of snake is _____.

Subjective Questions

14. Write any 3 adaptations in fishes that help them to swim in water.

15. What is the function of bristles in earthworm?

Solutions DPP – 06

1. **Option (3)**

Earthworms does not have bones.

2. **Option (4)**

Snail moves forward via contraction and relaxation of foot muscles alternately.

3. **Option (3)**

Snake contracts and relaxes the muscles alternately to form loops which gives snake a forward push.

4. **Option (1)**

Streamlined body shape helps a fish swim easily underwater.

5. **Option (2)**

Birds and fishes both have streamlined body.

6. The organism given in the given diagram is snail. The snail moves with the help of large, disc–shaped muscular feet.

7. (i) Exoskeleton

(ii) Gait

8. Snake 'A' would be faster because it makes more loops. Each loop of the snakes gives it a forward push.

9. (A) – (iv), (B) – (iii), (C) – (i), (D) – (ii)

10. False

11. True

12. Fins

13. Slither

14. Adaptations in fishes that help them to swim in water –

(i) The fish has flexible backbone.

(ii) The fish has fins.

(iii) The fish has powerful body muscles.

15. The bristles in earthworm help to get a good grip on the ground. The bristles are connected with muscles which help to get a good grip on the ground.