

Long Answer Questions

Q.1. How is the skeleton of a bird well suited for flying? [NCERT Exemplar]

Ans. Skeleton of a bird has following features: -

- (i) Bones are hollow and light.
- (ii) Bones of hindlimbs are for walking and perching.
- (iii) Bones of forelimbs are modified as wings.
- (iv) Shoulder bones are strong.
- (v) Breast bones hold flight muscles and are used to move the wings up and down.

In the given figure, there are two snakes of the same size slithering on sand. Can you identify which of them would move faster and why?

A



B



[NCERT Exemplar]

Ans. A snake forms loops in its body while slithering. Each loop of the snake gives it a forward push by pressing against the ground. The snake with a large number of loops moves much faster than the snake with less number of loops. Thus snake 'A' will move faster than snake 'B'.

Q.2. Provide one-word answers to the statements given below. [NCERT Exemplar]

(i) Joint which allows movement in all directions.

Ans. Ball and socket joint

(ii) Hard structure that forms the skeleton.

Ans. Bones

(iii) Part of the body with a fixed joint.

Ans. Upper jaw with skull

(iv) Help in the movement of body by contraction and relaxation.

Ans. Muscles

(v) Bones that join with chest bone at one end and to the backbone at the other end.

Ans. Ribs

(vi) Framework of bones which gives shape to our body.

Ans. Skeleton

(vii) Bones which enclose the organs of our body that lie below the abdomen.

Ans. Pelvic bones

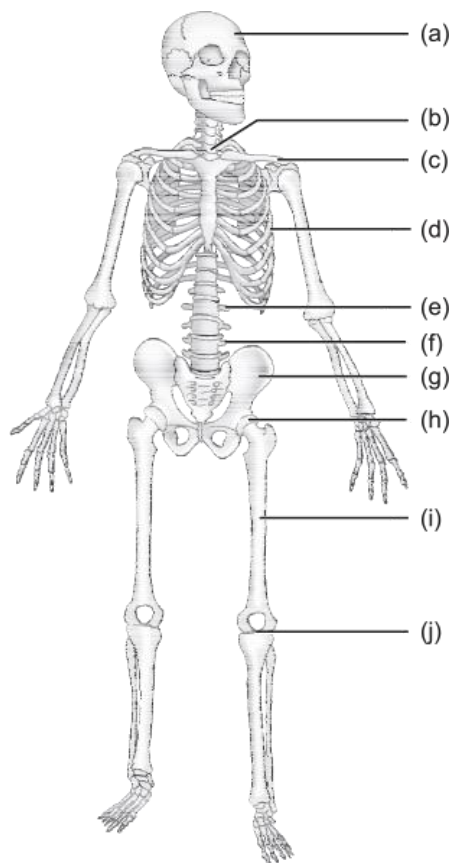
(viii) Joint where our neck joins the head.

Ans. Pivotal

(ix) Part of the skeleton that forms the earlobe.

Ans. Cartilage

Given below is the picture of the skeleton. Label the parts marked as (a), (b), (c), (d), (e), (f), (g), (h), (i), (j).



Ans.

- (a) Skull
- (b) Pivot joint
- (c) Shoulder blade
- (d) Rib cage
- (e) Gliding joint

- (f) Vertebrae
- (g) Pelvic girdle
- (h) Ball and socket joint
- (i) Femur
- (j) Knee

Q.5. Distinguish between the following.

(i) Movement and Locomotion

Ans.

S. No.	Movement	Locomotion
(i)	A change in position and not particularly location.	Movement of organisms from place to place.
(ii)	Occurs in all living organisms.	Does not occur in plants.

(ii) Tendons and Ligaments

Ans.

Tendons	Ligaments
A tough strand that joins a muscle to a bone is known as a tendon.	A muscle strand that holds bones together is known as a ligament.

(iii) Movable joint and Immovable joint

Ans.

S. No.	Movable joint	Immovable joint
(i)	These joints allow movement between bones and have cartilage between them.	These joints do not allow movement between bones.
(ii)	For example, wrist joints.	For example, upper jaw joint.

(iv) Ball and socket joint and Hinge joint

Ans.

S. No.	Ball and socket joint	Hinge joint
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(i)	This joint permits a circular movement.	This joint allows movement only in one plane.
(ii)	For example, shoulder joint.	For example, elbow joint.