

Class V (A+B+C+D)

Subject :- Science

Chapter 2 – SKELETAL SYSTEM

Exercises (Answers)

A. Tick the correct option:-

1. iii.skeleton 2.ii .ribcage 3.ii.bone marrow 4.iii.33 5.ii.cardiac

B. Fill in the blanks:-

1. Spinal cord 2. Ribcage 3. Shoulder blades, collarbones 4. Joint 5. Cardiac 6. Proteins

C. Write 'T' for True and 'F' for False:-

1. F 2. T 3. F 4. T 5. T

D. Match the following:-

1. Smooth muscles	iii. Stomach and intestines
2. Hinge joint	iv. Elbows and fingers
3. Bone marrow	v. Blood cells
4. Ball and socket joint	i. Hip and shoulder
5. Gliding joint	ii. Wrist and ankle

E. Name the following:-

1. Skeleton 2. Floating ribs 3. Femur 4. Cartilage 5. Voluntary muscles 6. Calcium

F. Differentiate between:-

1. Movable and immovable joints.

Movable Joints

a) Joints that help in movement are called movable joints.

b) Examples:- Joints of knees, elbows and hips.

Immovable Joints

a) Joints that do not move are called immovable joints.

b) Examples:- Joint of skull

2. Voluntary and involuntary muscles.

Voluntary muscles

a) The movement of these muscles can be controlled by us.

b) Examples:- Muscles of hands, legs, arm and feet.

Involuntary muscles

a) The muscles are not in our control.

b) Examples:- Muscles of intestines, stomach, heart, walls of food pipe and blood vessels.

G. Answer the following questions:-

Ans1. The skeletal system is a rigid framework of bones that serve many functions such as it gives shape and strength to the body.

It is a bony cage that protects the internal organs of the body. The framework of all bones together is known as skeleton. There are 206 bones in an adult human body.

The major bones of the skeleton include skull, limbs (bones of arms and legs), backbone, ribcage (chest bone) and jaw bone.

Ans2. The last two pairs of the ribcage are not attached to the sternum but are attached to the backbone. These two pairs are called the floating ribs.

Ans3. The sternum is a long, flat bone that lies in the centre of the ribcage.

Ans4. Importance of Bones:-

- i) **Shape and support-** They give shape, support and strength to the body.
- ii) **Protection-** They protect the soft internal organs such as brain, heart and lungs.
- iii) **Movement-** Bones , muscles and joints together helps in the different types of body movement.
- iv) **Production-** White blood cells (WBC) and Red blood cells (RBC) are produced in the bone marrow present in hollow bones.
- v) **Storage-** Bones store minerals like calcium and phosphorus.

Ans5. Joints that help in the movement are called movable joints.

There are four types of movable joints. They are:-

- a) Hinge joint
- b) Ball and socket joint
- c) Pivot joint
- d) Gliding joint

a) **Hinge joints-** They are present in knees, elbows, fingers and toes.

b) **Ball and socket joints-** They are present in hip and shoulders.

c) **Pivot joint-** It is present between the skull and the neck.

d) **Gliding joints-** They are present in wrists, ankle and between any two vertebrae of the spine.

Ans6. Posture is the position in which we keep our body while standing or sitting.

Ans7. We can keep our bones healthy and strong by the following ways:-

- 1) We should take healthy diet which include food items rich in protein, minerals and vitamins.
- 2) We should take proper rest, maintain good posture and do regular exercise.
- 3) We should do physical activities like running, cycling, skipping, swimming and playing outdoor games.

Ans8. (i) Forelimbs- Refer book, page no.27

(Diagram of arm)

(ii) Hindlimbs- Refer book, page no.27

(Diagram of leg)

(iii) Ribcage- Refer book, page no.26

(Diagram of ribcage)

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QUESTIONNAIRE
CLASS V (A+B+C+D)
SUBJECT- SCIENCE
CHAPTER 2 – SKELETAL SYSTEM

I. Fill in the blanks:-

1. _____ help in growth and repair of the body.
2. Vertebral column is made up of _____ small bones.
3. The bony structure that encloses heart and lungs _____.
4. The longest bone in our body _____.
5. The muscles present in stomach _____.
6. The most important minerals needed by joints and bones _____.
7. The framework of all bones together is known as _____.
8. There are _____ bones in an adult human body.
9. Skull is made up of _____ bones.
10. Red blood cells are produced in the _____.

II. Answer the following questions in short:-

1. What is skeletal system?
2. What are floating ribs?
3. What do you mean by 'posture'?
4. What is joint?

III. Give long answers for the following:-

1. Write short note on skeletal system. Name the major bones of the human body.
2. Write down the importance of bones.
3. How do we keep our bones healthy and strong?
4. Differentiate between:-
 - a) Movable and immovable joints
 - b) Voluntary and involuntary muscles

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