

CH:2 Human Body: The skeletal system

I Technical words:

1. Skeleton:

The framework of bones that supports the body and gives it shape.

2. Cartilage:

A smooth and flexible tissues that covers the end of bones at joint.

3. Tendons:

Strong fibres by which the muscles are attached to the bones.

II Differentiate

1. Differentiate between the structure of the forelimbs and hind limbs

Forelimbs	Hindlimbs
i) Bones of the arms	i) Bones of the legs
ii) Attached to the back bone with the help of the shoulder girdle	ii) Attached to the hip by the hip girdles.
iii) Made up of humerus, radius and ulna	iii) Made up of femur, tibia and fibula.
iv) 27 small bones in the palm and wrist.	iv) 26 small bones in the ankle and feet.

III Short answer:

1. How can we take care of our bones and joints to keep them strong and healthy?

- Ans
- i) Eating healthy food rich in protein and calcium.
 - ii) Eating fruits and vegetables.
 - iii) Exercising regularly.
 - iv) Taking Proper rest and keeping good posture.

IV Long Answer

1. Briefly explain the four types of movable joint with examples.

S.N.	Joint	Location	function
i)	Ball and socket joint	Hip and Shoulder	Allow free movement in all directions.
ii)	Hinge joint	Elbows, Knees, fingers and toes	Allows the movement of these parts in one direction.
iii)	Pivot joint	neck	Allow it to move side to side, up and down, as well as rotate.
iv)	Gliding joint	Wrist and Ankle	Enable these body parts to move side ways as well as back and forth.

V. HOTS

1. Can you move your elbows in a circle?
Why not?

Ans i) The elbow cannot be moved in a circle.

ii) The joint present between the bones of the elbow is the hinge joint.

iii) This joint ^{only} allows movement in only one direction.

iv) It is not a ball and socket joint and hence, cannot be moved in circle.

2. What ~~hap~~ would have happened if
a) There were no back bone in our body?
b) Our wrist had only one bone?

Ans a) we would not be able to stand upright and the spinal cord would not be protected
b) our wrist would not be flexible and hand movement would be limited.

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