



ACADEMIC WORLD SCHOOL™
BEMETARA

Summer Assignment III 2020- 21
Class- V
Subject- Science

Plants and Animals

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Growing Plants

Let us Learn about

- ☐ Reproduction from seeds
- ☒ Reproduction from other parts
- ☐ Crops



Do You Remember

Guess my name:

1. I am found in clayey soils. My roots come out of water for air.
 M N R S
2. I am found on hills. My leaves are needle shaped.
 I E
3. I float on water. My leaves have a waxy coating.
 L T
4. I grow on dead and decaying matter.
 U R M

A variety of plants are found on the earth. They include trees, herbs, shrubs etc. The plants keep on increasing in number by the process of **reproduction**. It is a process by which plants produce new plants like themselves so that their **species** remain on the earth. Reproduction in plants can occur in a number of ways. Most of the plants reproduce from seeds,

Species: a group of plants that are similar and can produce new plants



Do You Know

Flowers are the reproductive organs of plants. Most flowers turn into fruits which have seeds. These seeds can be used again to grow new plants.

while some of them reproduce through other parts like roots, stems or leaves etc.

REPRODUCTION FROM SEEDS

Majority of plants grow from seeds. Seeds grow into seedlings in the presence of water, air and sunlight. A new plant grows from the seedling.

Structure of a Seed

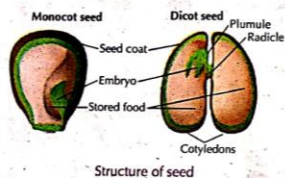
A seed is a tiny life-supporting package which can give rise to a new plant. It contains mainly three parts: seed coat, seed leaves and embryo.

Seed Coat

It is the outer hard covering which protects the baby plant until the seed germinates.

Seed Leaves

Inside the seed coat, you will see the seed leaves or **cotyledons**. They contain the stored food which is used by the growing seedling. Some seeds like gram, pea and bean have two cotyledons; that is why such seeds are called **dicotyledonous** or **dicot seeds**. Other seeds like maize, wheat and rice have only one cotyledon and are called **monocotyledonous** or **monocot seeds**.



Embryo

The **embryo** is a baby plant which lies between the seed leaves. Embryo contains two parts — the radicle and the plumule. The radicle develops into root and the plumule grows out into a stem.

Germination of Seeds

Germination is the process of development of a seed into a seedling. It depends on various factors given below :

Water

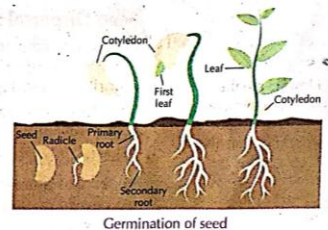
Inside wet soil, the seed absorbs water. Water softens the seed coat. This helps the baby plant to break the seed open and come out.

Warmth (or Sunlight)

It makes the seed active.

Air

It is needed by the seeds to breathe. Seeds, if completely covered with water, do not germinate because they do not get air.



Germination of seed

Let us Do

To do an activity to show that air, water and sunlight are necessary for the germination of seeds.

Take four bowls. In bowl 1, put a few bean seeds on wet cotton. Keep this bowl in a dark and cool place or in a refrigerator. In bowl 2, put a few bean seeds on dry cotton and keep it in an open place exposed to sunlight. In bowl 3, put some bean seeds on wet cotton. Keep bowl 3 next to bowl 2 so that it also gets plenty of sunlight and air. In bowl 4, put some bean seeds in excess water so that the bean seeds remain submerged. Some water should always be there in bowls 1, 3 and 4.



Record your observations.

Bowl	Water	Air	Sunlight	Germination	Reason
1	✓	✓	✗	No	Seeds did not get sunlight.
2	✗	✓	✓	No	Seeds did not get water.
3	✓	✓	✓	Yes	Seeds got water, sunlight and air.
4	✓	✗	✓	No	Seeds did not get air because they were submerged in water.

Conclusion:

The conditions necessary for germination of seeds are:

1. Water
2. Air
3. Sunlight/Warmth

Growing Plants

Seed Dispersal and its Agents

Plants are fixed to the ground and cannot move from one place to another. If all seeds fall and germinate near the place to another. If all seeds fall and germinate near the place to plant, they will not get enough sunlight, water and space to grow. So, it is important that the seeds are spread out. Nature helps the seeds to travel away from the parent plant. This process of scattering of seeds is called **seed dispersal**.

Seeds are scattered in different ways by various external agents like wind, water etc. They are called **agents of dispersal**.

Dispersal by Wind

Seeds that are very light and small usually get dispersed by wind. Seeds of cotton, hiptage, and dandelion have long hair around them, allowing them to be carried away by the wind. Seeds of some plants like maple, jacaranda and drumstick have wing-like structure to help them to float in the air.



Cotton



Dandelion



Maple

Dispersal by Water

Flowing water carries seeds of plants that grow in or near waterbodies. For example, coconut which grows near sea coasts is hollow from inside and is covered with thick fibrous rough hair on the outside. These rough hair help it to float on water. When a coconut falls from a tree into water, it floats and travels with the waves which deposit it far away, where it grows into a new plant. The spongy lotus fruit is also dispersed by water.



Coconut in water

Dispersal by Animals

Human beings and animals also help disperse seeds. We throw away seeds after eating fruits like cherry, mango, papaya and apple. Birds and animals eat whole fruits at one

place and pass out the undigested seeds after some time at another place. Such seeds thus germinate at places far away from the parent plant.

Some seeds have hooks, spines, thorns or stiff hair on them which get attached to the fur of animals passing by, feathers of birds and even to our clothing. Eventually they get dispersed to distant places eg., **Pupalia**, **Xanthium** (Cocklebur).



Pupalia



Xanthium

Let us Do

Take a walk through the tall grass in your school park. When you come out, check if any seeds have stuck to your socks, shoes or trousers. Collect them on a sheet of paper and observe them through a magnifying glass.

Dispersal by Explosion

Some fruits, like pea and balsam, burst open or **explode** when they ripen. The seeds pop-out and get scattered away from the mother plant.

Time to Answer

Choose the odd one from each group.

1. Water, Air, Humidity (conditions necessary for germination)
2. Cotton, Maple, Coconut (dispersal by wind)
3. Seed coat, Seedling, Cotyledon (parts of a seed)



Seeds dispersed by explosion

Explode: burst with force suddenly

REPRODUCTION FROM OTHER PARTS

Plants can sometimes arise from the body parts other than seeds of the parent plants. This process of reproduction by which a plant reproduces from its body parts other than seeds like root, stem, etc., is called **vegetative reproduction**.

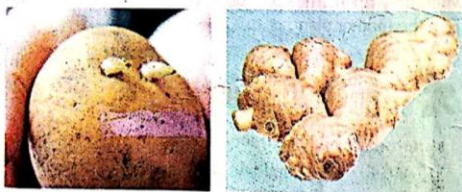
Reproduction from Stems

Some plants can grow from stems. A piece of stem carrying buds from the mother plant is cut and planted in the soil. This is called stem cutting. Each stem then grows into a new plant. For example, sugarcane, hibiscus and rose plant.



Growing of rose plant by stem cutting process.

Some underground stems have small buds on them. When they are planted in the soil, new shoots grow out from the buds. For example, potato and ginger.



Potato

Ginger

Bud: small part of plant that grows into new plant

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Reproduction from Roots

A new plant can also grow from the roots of the mother plant in plants like sweet potato, radish, turnip, beetroot and dahlia.



Sweet potato



Turnip

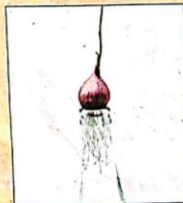
Let us Do

To do an activity to show that roots and shoots grow in suitable conditions.

Take a glass bottle and fill it with water. Keep an onion bulb on the mouth of the bottle. The bottom part of the onion bulb must touch the water inside the bottle. Keep the bottle near a window so that it gets plenty of air and sunlight. Observe the changes in the onion regularly up to 10–12 days.

Conclusion:

After a few days, you will see roots growing from the part of the onion bulb that touches the water, while shoot growing from the part that is above the bottle.



Reproduction from Leaves and Spores

Leaves of certain plants produce buds along their margins. New plants grow from these leaves if these are placed in moist soil. For example, bryophyllum leaves.



Bryophyllum



Ferns with spores

Growing Plants

Some plants have special structures called **spores**, which give rise to new plants. These plants do not bear flowers or seeds. For example, mushrooms, ferns and mosses.

Time to Answer

State true or false for the given statements.

1. All plants reproduce through seeds. _____
2. A stem cutting of rose can give rise to a new plant. _____
3. Plants like sweet potato cannot reproduce at all. _____
4. Spores and flowers can be found on ferns. _____

CROPS

We get most of our food from plants. The plants that are grown and cultivated at one place on a large scale during a particular period are called **crops**. Different crops are grown at different places on the basis of soil type, water available and climate.

Types of Crops

In India, crops like wheat and gram are grown in winter from November to April. They are called **rabi crops**. These crops do not depend on monsoon rains. Vegetables like cabbage, cauliflower, pea and bean are also grown in winter.

Crops grown in summer from June to October are called **kharif crops**. Rice, maize, jowar and bajra are kharif crops. These crops depend largely on monsoon rains. Vegetables like pumpkin, brinjal and groundnut also grow well in summers.



Wheat – rabi crop



Rice – kharif crop

Spores: rounded structures found in ferns and other lower plants which produce new plants

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Healthy Crops

Crops need to be grown on a very large scale to feed the entire **population** of a country. The practice of growing crops on a large scale is called **agriculture**.

Essential requirements to produce a good crop are:

- Farmers should have knowledge about the soil, climate and season for growing different crops.
- They should **sow** healthy and ripe seeds. They should **plough** the field and make it ready before growing the next crop.
- Farmers should mix the right amount of fertilisers in the soil to increase its nutrients. Two kinds of fertilisers are used for this purpose—organic and inorganic fertilisers. **Organic fertilisers** or **manures** are natural fertilisers obtained from cow dung, dead and decaying plants, animals or vegetable matter. **Inorganic fertilisers** are generally made of chemicals such as urea, nitrates and sulphates. These are made in fertiliser industries, and are harmful to the environment.
- Farmers should properly irrigate (supply water) the soil when required.
- They should use insecticides and pesticides to protect crops from insects, pests etc. However, overuse of pesticides and insecticides can be harmful to the soil and crops and ultimately to our health.
- Crops should be cut properly and gathered. This is called **harvesting**.



Ploughing



Irrigation



A farmer using pesticide

Crop Protection

Crop protection includes protecting the growing crops against insects, diseases, weeds, fungi and other undesirable pests by using insecticides and pesticides.

Population: all the people living at a place

Sow: plant seed by spreading on earth

Plough: turn up or loosen the soil

Growing Plants

Do You Know

- Manure is better than fertilisers because it increases the water-holding capacity of the soil, increases number of friendly microbes and improves texture of soil.
- Insecticides and pesticides are harmful as they affect more organisms than they are intended to kill.

- Grazing animals such as cows and goats, and animals like rats, birds, squirrels and moles eat up fruits and crops. They should be kept away from the fields.
- Insects like caterpillars and grasshoppers, and microbes like bacteria and viruses cause diseases in crops. Pesticides, insecticides or fungicides are used to kill them.

Storage of Crops

When the crops ripen, they are harvested and stored as grain after drying. They should be kept safe from moisture and small animals like rats, moles, squirrels, birds and insects. For this purpose, grains should be stored in dry and well-ventilated rooms. Farmers store grains in jute bags or metallic bins. Large scale storage is done in silos or granaries.



Storage in granaries

Let us Do

Take a handful of dry neem leaves and grind them into a fine powder. Mix this powder in one litre of water and leave overnight, strain the liquid and then use it as air insecticide on your potted plants.



Time to Answer

Name the following:

1. A crop grown in winter _____
2. A fertiliser obtained from cow dung _____
3. An insect that harms crops _____
4. Grains are stored in it _____



Silo: a tall tower/pit used to store grain
Granary: a store house for grains

Key Terms

Reproduction: the process of producing new species similar to self

Seed coat: outer hard covering of seed

Cotyledons: seed leaves that contain food for growing seedling

Embryo: baby plant

Germination: process of development of seed into seedling

Seed dispersal: process of scattering of seeds

Vegetative reproduction: process of reproduction of plant from body parts, other than seed

Crop: plant grown and cultivated at one place on large scale

Agriculture: practice of growing crops on large scale



Now I Know

- Plants are the most useful gift of nature for humans and animals.
- Plants reproduce in many ways.
- Some plants reproduce with the help of roots, stems and leaves, etc., while most of them use seed for reproduction.
- A seed contains a seed coat, seed leaves and the embryo or baby plant.
- The process of growth of a baby plant from a seed is called germination.
- Air, water and sunlight are required for germination.
- Dispersal or scattering of seeds can be carried out by external agents like wind, water and animals or by the explosion of dry fruits.
- In India, there are mainly two types of crops—rabi (winter) and kharif (summer).
- Farmers use organic and chemical fertilisers to provide nutrients to crops.
- Crops should be protected against pests, animals, bacteria and fungi, to obtain healthy crops.
- Storage of harvested crops is very important for keeping them for a longer time.

Exercise

FIND THE ANSWERS OF EVERY QUESTIONS GIVEN BELOW FROM THE TEXT ABOVE:-

Q1. Fill in the blanks:

- a) A crop grown in winters _____.
- b) _____ is a seed dispersed by wind.
- c) An insect that harms crop _____.
- d) The _____ is a baby plant lies between the seed.
- e) Embryo contains _____ parts.
- f) _____ Plants can be grown from stem.
- g) _____ does not damage crops.

Q2. Match the following:

Column A

- a) summer crop
- b) Rose
- c) Cabbage
- d) Granary
- e) Pupalia

Column B

- inter crop
- store house for grain
- pumpkin
- dispersed by animals
- not grown from seed

Q3. Answer in one word:

- a) A fertilizer obtained from cow dung.
- b) Grains are stored in it
- c) Seed dispersed by explosion.

Q4. Short answer type question. (In 20-25 words)

- a) What is germination?
- b) What are the conditions necessary for germination?
- c) Give example of plant that reproduces by spores.
- d) What is dispersal of seed?
- e) What are the different parts of seed?
- f) Write the name of some plants which disperse their seed by wind.
- g) Define crop.
- h) What are cotyledons?

Q4. Long answer type question. (In 40-45 words.)

- a) How do farmer protect their crops?
- b) Describe the different type of seeds.
- c) Draw the colorful labelled diagram of structure of seed.
- d) Write note on two types of crops.

Q5. Think and Answer:

- a) Sid kept his rose plant in the bedroom. After few days, the plant died.
Why?
- b) Divya wanted to grow a pea plant in her garden. In which months
should she
sow its seeds? How much water should be given to the plant for growth?

3

Skeletal and Muscular System

Let us Learn about

- ☐ The Skeleton
- ☐ Joints
- ☐ Muscles



Do You Remember

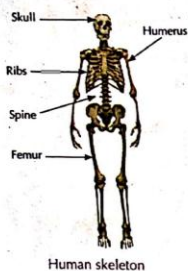
Unscramble the names of organ systems with the help of hints given.

1. It helps in taking up oxygen from air.
RYORTIESAPR MTSEYS
2. It has stomach as one of its organ.
SGIEDEVTI YEMSTS
3. It helps in supplying oxygen and food to all cells.
URLCYITCARO TSYMSE
4. It is composed of hard structure called bones.
LKESELAT TMSYES

The **skeletal system** includes all the bones of the body along with the joints, where they are attached to each other. It protects the organs of the body, produces blood cells and helps in the movement of the body.



For movement, the skeletal system works in association with the **Muscular System**, that is made up of over 600 muscles. Bones and muscles work together to help the body stand and move.



Human skeleton

THE SKELETON

Skeleton is the internal framework of bones that gives a distinct shape to the body.

There are 206 bones in an adult human body, although a newborn baby has about 300 bones at birth. Some bones get fused gradually as the child grows up. Bones require nutrition for their maintenance and growth. Calcium, phosphorus and some vitamins are important nutrients for the bones.

Bones are very hard on the outside. While on the inside, they are soft and spongy and are filled with a soft fatty material called **bone marrow**.

Parts of the Skeleton

The various parts of the skeleton are discussed below:

Skull

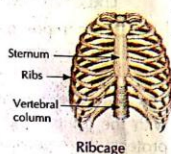
Skull is a hard bony structure that protects the brain. It is made up of 22 bones. Eight flat bones get interlocked together to cover our brain while the remaining 14 make up our face. Out of all the skull bones only lower jaw is movable. It enables us to eat and talk.

Ribcage

The bones that enclose the heart and lungs form the ribcage. It includes the ribs, sternum and vertebral column.

Ribs

There are 12 pairs of ribs. Each rib is a thin flat bone that is joined with the long backbone at the back. Except the last two pairs, the ribs are also joined to the flat breastbone in the front.



Ribcage



Skull



Do You Know
Floating ribs do not float in our body! They are attached to our backbone. Sometimes, people are born with an extra pair of ribs called the gorilla rib.

Distinct: different in nature from other similar type

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The lowest two pairs of ribs are called floating ribs, which are joined only to the backbone.

Backbone or spine

The backbone supports our body and protects our spinal cord. The skull is attached to the backbone. The backbone is made up of 33 small bones called vertebrae. The vertebrae forms a strong column called the **vertebral column**. The vertebrae are interconnected in such a way that it makes bending and twisting possible.

Sternum

It is also known as the breastbone. It is a long narrow flat bone that forms the front of the chest.

Limbs

There are two pairs of limbs—forelimbs (arms) and hindlimbs (legs).

Forelimb

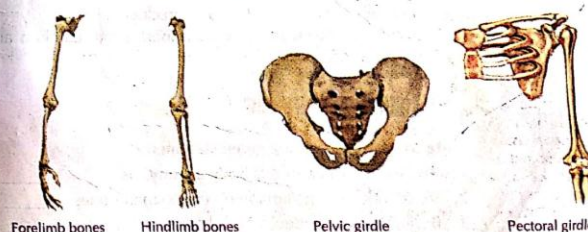
The upper arm has a single long bone, the humerus, that extends up to the elbow. The lower arm has two bones which are together called radio-ulna. There are 27 bones in the hand and wrist.

Hindlimb

The femur is the powerful thigh bone or bone of upper leg which bears the weight of the whole body. It is the longest



Spine



Forelimb bones

Hindlimb bones

Pelvic girdle

Pectoral girdle

Skeletal and Muscular System

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Do You Know
The stapes (one of the bone of middle ear) is the smallest bone in human body.
The funny bone is not actually a bone. It is a nerve (ulnar nerve).

bone in our body. It joins with the two bones of the lower leg through shorter small bones. There are 26 small bones in the ankle and foot.

Girdles

They are 2 in number and help the limbs to join the backbone. The bone of each upper arm joins the spine with the help of **pectoral or shoulder girdle**. It consists of a pair of shoulder blades (scapula) and a pair of collar bones. Similarly, each thigh bone is attached to **pelvic (or hip) girdle**. The pelvic girdle consists of two hip bones, each of which is made of 3 fused bones.



Let us Do

Visit the biology lab of your school and observe the skeleton of various organisms. Look for common structures in them.

Functions of the Skeleton

The skeleton has the following functions:

1. The skeleton gives shape, strength and support to the body. Without it, we would not be able to stand.
2. It covers and protects delicate internal organs. The skull protects the brain. The backbone protects the spinal cord and the ribcage protects the lungs and heart.
3. It allows movement of different body parts.
4. It contains bone marrow where white blood cells (WBCs) and red blood cells (RBCs) are produced.
5. Bones are the storehouse of minerals like calcium and phosphorus.



Time to Answer

State true or false for the given statements.

1. The longest bone of our body is humerus. _____
2. Vertebral column is made up of 36 small bones. _____
3. Bone marrow produces blood cells. _____
4. Not all the ribs are joined to the breastbone. _____

JOINTS

A **joint** is a point where two or more bones meet. Bones are held at the joints together by a strong tissue called **ligament**. Our skeleton has many joints. Except for the skull, movement is possible in all the joints. In the skull, the bones are interlocked, making the joints **immovable**.

Types of Movable Joints

The movable joints are characterised by a fluid-filled cavity. They are of different types.

Ball and Socket Joint

In such a joint, spheroid ball-like end of one bone fits into the cup-like socket of the other bone. It allows maximum movement. Shoulder and hip joints are examples of this type of joint.



Ball and socket joint of shoulder



Ball and socket joint

Hinge Joint

This joint is like a hinge in a door. It allows only back and forth movement. Elbow, knee, fingers and toes have this type of joint.



Hinge joint of elbow



Hinge joint

Immovable: not able to move
Skeletal and Muscular System



Do You Know
The skeleton is so light that it makes up only about 14 per cent of your body's total weight. However, it is five times as strong as steel.



Do You Know
We have more than 230 movable (flexible) and semi-flexible joints in our body.



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Pivot Joint

This joint is found between the skull and the first two vertebrae of the spine. It helps us to move our head sideways, upwards and downwards.



Pivot joint of head



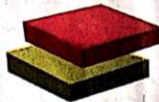
Pivot joint

Gliding Joint

This joint is found in the bones of wrist and ankle. It allows these bones to slide against each other in a gliding motion.



Gliding joint of wrist



Gliding joint



Time to Answer

Classify the joints given in the box into the following types:

1. Ball-and-Socket joint
2. Pivot joint
3. Immovable joint
4. Gliding joint

Hip joint
Skull joint
Skull
Wrist joint

Skull-vertebrae joint, Skull joint, Wrist joint, Hip joint

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Functions of Muscular System

Muscles play four important roles in the body. These are

Causing Movement

Movements of the human body are a result of muscle contraction. They pull the bones to cause movements.

Maintaining Posture

Skeletal muscles help in maintaining our body posture.

Stabilising Joints

Muscles hold our joints firmly and prevent them from getting damaged while moving.

Generating Heat

The fourth function of muscles is to generate body heat. It is a by-product of muscular activities.



Time to Answer

Name the muscle type present in each part.

1. Heart
2. Food pipe
3. Eyes
4. Blood vessels

Key Terms

Skeleton:	internal framework of bones that gives a distinct shape to the body
Bone marrow:	soft spongy material inside bones
Skull:	bony structure that protects the brain
Floating ribs:	pair of ribs that are not attached to the breastbone
Joint:	point where two or more bones meet

Posture: particular position of the body

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MUSCLES

The muscular system enables us to move and control movement. It consists of various types of muscles.

Muscles are fleshy bundles of thin, elastic-like material in the body connected to the bones by tendons. **Tendons** are strong fibres that connect bones to muscles. There are about 650 muscles in our body and each one is responsible for a particular movement. They also help in important processes like digestion, respiration, excretion, etc.

Types of Muscles

The various types of muscles in our body are:

Voluntary Muscles

Most of the muscles in our body are under our control. They are called **voluntary muscles**. These muscles are found in arms, legs, eyes, tongue, etc. We run, walk, bend and stretch with the help of voluntary muscles.



Voluntary muscles

Involuntary Muscles

The muscles which are not in our control are called **involuntary muscles**. We cannot control the movement of food in the digestive system, the flow of blood in the body and the movement of lungs in breathing. These movements are controlled by involuntary muscles.



Involuntary muscles

Cardiac Muscles

These muscles are present only in the heart. These are involuntary in nature, but are structured like voluntary muscles. As the muscles are involuntary, they are not under our control and work throughout life without stopping or getting tired.



Cardiac muscles

Working of Muscles

A pair of muscles work at a joint to bring about movement. When one of them shortens and contracts, the other lengthens and relaxes. When we lift weights, the bicep muscles contract and the tricep muscles stretch.



Do You Know

The strongest muscle in the body is masseter while stapedius is the smallest muscle.

Skeletal and Muscular System

Ligament:

tissue that holds the bones together

Muscles:

fleshy bundles of thin elastic-like material in body

Tendons:

tissue for connecting bones to muscles

Voluntary muscles:

muscles that are under our control

Involuntary muscles:

muscles that are not under our control

Cardiac muscles:

muscles that are structured like voluntary muscles but are not under our control



Now I Know

- The body is supported by a framework of bones called the skeleton.
- The skeleton consists of:
 - (i) the skull which has 22 bones, covers the brain and forms the frame of the face.
 - (ii) the ribcage surrounding the heart and lungs made up of ribs (12 pairs), sternum and spine (made up of 33 small bones called vertebrae).
 - (iii) the limbs (forelimbs and hindlimbs, each with 30 bones) which are attached to the girdles.
- Bones are of different shapes and sizes; they give shape, support and strength to the body.
- The skeleton protects the internal organs and helps us to move.
- The backbone protects the spinal cord and the skull protects the brain.
- A joint is the meeting point of two or more bones held together by strong tissues called ligaments.
- Joints in the skull are immovable. There are four kinds of movable joints in the body.
- Muscles are bundles of elastic-like material in the body which help in movement.
- There are three types of muscles: voluntary, involuntary and cardiac.
- Voluntary muscles are under our control, whereas involuntary and cardiac muscles are not.

Exercise

Q1. Fill in the blanks:

- a) The number of ribs that are part of the ribcage are _____.
- b) The number of bones in your skull is _____.
- c) _____ are the strong tissues which hold the bones together.
- d) _____ is the organ protected by the spine.
- e) The muscles which are not under our control are called _____.
- f) The organ protected by the skull is _____.

Q2. Match the following:

Column A

- 1. Skull
- 2. Upper arm
- 3. Gliding joint
- 4. Ribcage
- 5. Hip joint

Column B

- a. ball and socket
- b. Hinge joint
- c. Brain
- d. Wrist and ankles
- e. Heart and lungs

Q3. Answer in one word:

- a) Which tissues connect bones to muscles?
- b) Name the muscle present in eyes.
- c) Identify the joint that help us to move our head sideways, upwards.

Q4. Short answer type question. (In 20-25 words)

- a) How is the skeleton useful?
- b) What are tendons?
- c) What is hinge joint? Give one example.
- d) Write short note on : (a) skull (b) spine
- e) What are limbs?
- f) List one function of skeleton system?
- g) What is bone marrow?

Q4. Long answer type question. (In 40- 45 words.)

- a) What is the difference between Ligament and tendons?
- b) Write the difference between the muscles of heart and the muscles of leg.
- c) What is the difference between voluntary and involuntary muscles?
- d) What are muscles? How are cardiac muscles special?

Q5. Think and Answer:

- a) Why the bones of the skull are joined together and immovable? What would happen if they were free and movable?
- b) If our backbone was a single long bone instead of a series of small bones, would you have been able to bend? Give reasons for your answer.