

**VASISHTHA GENESIS SCHOOL, BARDOLI**

(Academic Session: 2025-26)

Date: \_\_\_\_\_ Class: 5

Div: A / B / C

Roll No: \_\_\_\_\_ Sub: Science

Name: \_\_\_\_\_

**ANSWER KEY**

**Ch-1 REPRODUCTION IN PLANTS**

**Short Question Answer:**

**Qa- What are different stages of growing crop? Name them.**

Ans:- Different stages of growing a crop are:

(i) Ploughing, (ii) Sowing, (iii) Adding fertilizers, (iv) Irrigation, (v) Protection, (vi) Harvesting, storing and transportation

**Qb. What is dispersal of seed? Why it is important?**

Ans:- The process of scattering of seeds is called dispersal of seeds. If all the seedlings grow together at same place, then none of the seedlings will get enough food, water, sunlight and space to grow and hence, they will not survive. Therefore, it is important to scatter the seeds of a plant so that the young plants can grow in sufficient food, water, sunlight and space to grow.

**Qc- Define Reproduction.**

Ans:- The process by which living beings produce more of their own kind is called reproduction.

**Qd- What are spores? Name some plants that reproduce through spores**

Ans:- Some plants do not flower and thus, do not produce seeds. Such plants develop with the help of spores, which are small and round structures. Ferns and mosses are some plants that reproduce through spores.

**Qe- Write a shortnote on vegetative reproduction of a plant.**

Ans:- Potato is a stem that grows underground and has buds called eyes. Any part of the potato that has buds on it can grow into a new plant.

**Long answer questions:**

**Qa- Draw & explain the structure of a seed.**

Ans:- 1. The outer hard cover is called seed coat. The seed coat contains two cotyledons. The seed contains embryo, which has a radicle and Plumule. The seedling develops from these parts.

**Qb- What are the various stages of Germination? Explain in brief.**

Ans:- Germination means development of a seed into a seedling or a young plant. The various stages of germination are as follows:

- (i) During germination, the seeds absorb water and warmth; the cells of the embryo start dividing and the embryo increases in size.
- (ii) The moist and soft seed coat breaks open and a small root from radicle comes out and grows downwards.
- (iii) Next the foliage leaves appear which form the shoot producing stems and leaves eventually. The shoot grows upwards,
- towards the sunlight. (iv) The seedling grows green leaves and the cotyledons dry up.

### **Competency based questions**

- (a) He can cut small pieces of stem of the rose plant. Each piece must have a bud. Place them in the moist soil of the pot.
- (b) This probably happened because he dug a deep hole and the seeds could not get adequate oxygen for germination.

## **Ch-3 Human Body- Bones & Muscles**

### **Short answer questions:**

#### **Qa- What is gliding joint?**

Ans:- Gliding joint allows movement between the connecting bones, like wrists and ankles. The bones at this joint glide or slide against each other.

#### **Qb- What is the significance of the "s" shape of the spine?**

Ans:- Spine is a long column of hollow bones, called vertebrae. The spine is in the shape of "S". This shape helps prevent shocks and jerks to our head.

#### **Qc- What is the difference between bone & cartilage?**

Ans:- Cartilage is flexible connective tissue that is not as hard and rigid as a bone. It is stiffer and less flexible than muscles.

#### **Qd- What is joint? How are bones held together at a joint?**

Ans:- A joint is a junction where two or more bones meet. Joints hold the bones together and allow easy movement. Bones are held together at a joint by ligaments, which are strong and stretchable elastic tissues.

### **Long answer questions:**

#### **Qa- How do muscles help the bones to move?**

**Ans:** - Muscles are the fleshy bundles of elastic material that are connected to the bones by strong fibers called tendons. Muscles are attached to the bones and make them move by contraction and relaxation. Muscles work in pair, one on each side of the bone.

#### **Qb- What is bone? Describe its structure.**

**Ans:** - Bones are the hard structure that you can feel when you touch your body. They form the framework that gives shape to the body and protects various vital organs.

A bone has a hard outer covering called the compact bone.

The inner layer is called spongy bone.

The long bones contain a jelly-like material called bone marrow.

The types of bones are:, Long, Short, Flat, Irregular

### **Competency based questions**

(a) Milk & milk products

(b) Most probably from the shoulder ball & socket joint, the ball-part which is the arm got pulled out from its socket for a fraction of a second.

## **Ch-6 Building Houses**

### **Short answer questions:**

#### **Qa- What are the main factor that decide the type of a house?**

**Ans:** - There are three main factors that decide the type of house to be constructed. These are:

- (i) Climatic conditions
- (ii) Availability of building materials
- (iii) Economic conditions.

#### **Qb- Describe the house built in hot & dry desert.**

**Ans:-** In hot and dry deserts, houses are built with flat roofs having thick mud walls. These walls keep the house cool.

#### **Qc- What is ventilation?**

**Ans:-** The free flow of fresh air in & out of the house is called ventilation.

#### **Qd- How does the cost of construction affect the type of house constructed?**

**Ans:-** The construction of the house depends on the money that a person can spend. People in villages usually make small houses as they do not have much money to spend on it.

Some rich farmers in villages, who can spend more money make big houses with stronger construction materials.

People in cities generally spend more money to utilize better construction materials. The size of houses vary depending upon the money they can spend.

### **Long answer questions:**

**Qa- What is Sanitation? What practices should be followed to ensure cleanliness?**

**Ans:** - Sanitation is the process of keeping places free of dirt, germs, infections and diseases etc. by keeping the surroundings clean of garbage, sewage, waste, etc. Drainage and disposal of sewage or waste water from the kitchen, toilets and courtyards, etc. are important for sanitation.

We must follow the following practices to ensure cleanliness:

- i. Sweep and mop the house regularly.
- ii. Do not let dust settle on the windows and doors. Dust them regularly.
- iii. Put grills and wire meshing on doors and windows for safety against theft and insects.
- iv. Keep garbage in covered dustbins.
- v. Never keep drinking water uncovered.
- vi. Never throw garbage in the open, outside the house, or on the road.
- vii. Do not let water gather or stagnate anywhere in or around the house in drains, etc.

### **Competency based questions**

(a) It probably would be an apartment in a skyscraper. Big cities have lack of space and higher population to accommodate.

(b) The place has wet climate with persistent rains

## **Ch-7 Living Safely**

### **Short answer questions:**

**Qa- What are the various ways by which we can treat heat illness?**

**Ans:** The various ways by which we can treat heat illness are:

- (i) Move to a cool place or under the shade.
- (ii) Drinking a glass of lemonade helps to cool the body.
- (iii) Apply ice pack on the nose and head to stop the nose bleeding if it occurs.

**Qb- What should be done to prevent tetanus?**

**Ans:-** If one gets cut or scratch while playing in a playground, on the road or due to some dirty or rusty object, germs may enter the body through this wound and cause a disease called tetanus. One should get an anti-tetanus injection immediately after the injury to prevent it.

**Qc- What is first aid? What will you keep in it?**

Ans:- The first medical help given to an injured person is called first aid. In a first aid box, we will keep cotton wool, bandage, antiseptic lotion, antiseptic cream and some basic medicines for fever.

**Qd- How electrical appliances should be handled?**

Ans:- Special care should be taken while handling electrical appliances. Always wear rubber or plastic slippers while operating any electrical appliances. Never operate them with wet hands or feet.

**Long answer questions:**

**Qa- Can accidents can be prevented? Suggest some ways-**

Ans:- (a) Accidents can be prevented by following certain safety rules:

1. Be alert and prepared at all places and all times. We need to be alert not only on road but everywhere.
2. Be dressed in comfortable clothes which do not hamper your activeness. Wrong clothes can prove to be disastrous.
3. Always maintain peace of mind and be patient.
4. Do not panic and help the injured.

**Qb- What are road safety rules? List some road safety rules.**

Ans: - Those rules that everyone must follow to prevent accidents are called road safety rules. Some of them are:

- i. Keep to your left while walking or cycling on the road. Always walk on the footpath
- ii. Do not ride your bicycle at a high speed. Always stick to your lane.
- iii. If you need to overtake, do it from the right side only.
- iv. Do not play near or on the road.
- v. Use zebra crossing, subway or pedestrian overpass to cross the road.
- vi. Do not get into or out of the moving bus. Do not peep out of the moving vehicle.

**Competency based questions**

(a) First aid kit, hiking boots, appropriate clothing, drinking water, ready to eat food, torch, gloves, etc.

(b) Switch of the plug and unplug the iron. Keep it out of reach. Keep the first aid kit safe and out of reach for children.

## **Ch-8 Saving Environment**

### **Short answer questions:**

#### **Qa- What is global warming?**

Ans: Due to increase in green-house gases there is continuous warming up of the Earth, resulting in rise in temperature. This is known as global warming.

#### **Qb- What do you understand by Greenhouse effect?**

Ans: The green house gases let the Sun's rays enter the earth but block the heat escaping the earth's surface. This effect is called greenhouse effect.

#### **Qc- What do you understand by air pollution?**

Ans:- The addition of dirty and dangerous elements to air causes air pollution. Smoke containing harmful chemicals produced by industries and vehicles is the main cause of air pollution. Burning of forests and garbage also adds to air pollution. It may cause a number of breathing related diseases like bronchitis and asthma.

### **Long answer questions:**

(a) The harmful gases from factories, vehicles, power plants etc. rise up and combine with water vapour present in the atmosphere and form harmful acids. These acids fall in the form of acid rain.

The various effects of acid rain are as follows:

- (i) The acidic rain damages plants, animals and even buildings.
- (ii) The acidic rain water also flows into various bodies and becomes a part of water cycle.
- (iii) It seeps through soil thereby affecting the growth of plants.

(b) Steps that can be taken to save the environments are as follows:

- (i) Stop using plastic bags.
- (ii) Use wind and solar energy instead of fossil fuel energy.
- (iii) Use CNG and LPG vehicles.
- (iv) Plant more trees and prevent deforestation.
- (v) Treat chemical waste before disposal.
- (vi) Educate farmers on sensible use of fertilisers and other chemicals in farming.

### **Competency based questions:**

- (a) Mixing of chemicals due to overuse of fertilisers, industrial waste being dumped in the nearby water body upstream, etc.
- (b) To be guided by the teacher. Hint: use public transport, not waste electricity, paper, water, reuse as many things as possible, buy only those things that you need, etc.