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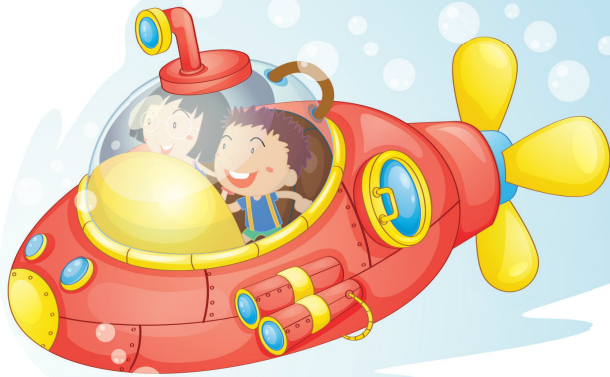
Explore
Green
World
System



3

A Book of Environmental Studies

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B. Com



Teacher Manual



Best Way Publication Pvt. Ltd.

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1. My Family



ACADEMIC ASSESSMENT

- A. 1. (b) 2. (c) 3. (c) 4. (a) 5. (b)
- B. 1. Joint family is a house where parents, grandparents, uncles, aunts, and cousins live together.
2. The members of a family are similar are another in various ways. They have some similar features and habits.
3. We can divide a family into generation Our grandparents, parents and we the children,belong to various generations.
4. All the members spend time together. We learn many things and good values from our elders.
5. There are members in my family.
- C. 1. single-parent-family 2. extended 3. cousin 4. paternal relatives
5. family resemblance
- D. 1. F 2. T 3. F 4. F 5. T
- E. I Live in a joint family. There are 11 members in any family. We help one another. We enjoy spending good times with one another. Every member enjoys celebrating happy occasions. It is indeed a happy family. I love my family very much.

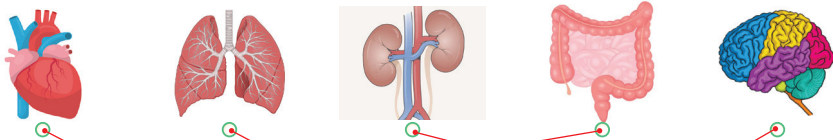
2. Human Body



ACADEMIC ASSESSMENT

- A. 1. (c) 2. (a) 3. (a) 4. (b) 5. (c)
- B. 1. Eyes, ears, nose, tongue and skin are the different sense organs, Each organ performs specific and special functions.
2. The parts, of the body that cannot be seen from outside are called internal organs For example: bones, brain, heart, lungs and kidneys etc.
3. Two types of limbs the upper limbo and lover limbs.
4. The body parts that can be seen from outside are called external organs. For example: eye, nose, lags, hands etc.

C.



Digestive system

Circulatory system

Respiratory system

Nervous system

Excretory system

D. 1. eyelid 2. nervous 3. organ system 4. kidney 5. lower, upper

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

3. Food



ACADEMIC ASSESSMENT

A. 1. (c) 2. (b) 3. (a) 4. (c) 5. (a)

B. 1. We need to eat food to get energy to study, work, play and remain active

2. The food items containing vitamins and minerals are called protective food, Milk, eggs, meat vegetables etc.

3. They are the useful substances that our body needs.

4. A diet that contains the right amounts of a nutrients required by our body is called a balanced diet.

5. We should drink 8-10 glasses of water everyday for the proper digestion of food and keeping healthy.

C. 1.energy-givingfood 2.Protectivefood 3.roughage 4.Fruits,greensalad

5. Minerals, carbohydrates, vitamins proteins fats

D. 1. (c) 2. (d) 3. (e) 4. (a) 5. (b)

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

4. My House



ACADEMIC ASSESSMENT

A. 1.(c) 2. (b) 3. (b) 4. (c) 5. (a)

B. 1. A kutcha house is weak while a pucca house is strong.

2. A good house must have good ventilation. It must have cleanliness. It must have good safety measures.

3. We need a house to live safely. It keeps us safe from heat, cold, wind, insects and wild animals etc.
 4. The houses that can be easily moved from one place to another are called temporary houses. For example: a hut and a caravan.
 5. We must dust and sweep it daily. We should keep toilets and bathrooms hygienic. We must throw garbage in covered dustbins.
- C. 1. neat, clean 2. live 3. wire 4. pesticides, disinfectants 5. heavy rainfall
- D. 1. F 2. T 3. F 4. F 5. F
- E. 1. (a) 2. (c) 3. (e) 4. (b) 5. (d)

5. Caring For Special People



ACADEMIC ASSESSMENT

- A. 1. (b) 2. (b) 3. (a) 4. (c) 5. (a)
- B. 1. The people who have some problems with their body that makes it difficult for them to do things that other people can do easily called differently abled people.
2. The Braille script refers to a script which written 1 to 6 raised dots. A blind person runs his fingers on these dots and can read the script.
3. The homes that are build for those children who have no parents are called orphanage. The homes where old people who have no family and relatives live are called old age home.
4. We can visit old age homes and spend good time with them.
5. We should not laugh at them. We should encourage them. We should talk to them politely and spend some good time with them.
- C. 1. (e) 2. (a) 3. (d) 4. (c) 5. (b)
- D. 1. sign language 2. abnormal behaviour 3. happy
4. old people 5. orphanage

6. Keeping Safe and Healthy



ACADEMIC ASSESSMENT

- A. 1.(b) 2. (c) 3. (c) 4. (c) 5. (a)
- B. 1. The rules that keep us safe are called safety rules.
2. We can stay healthy by eating a balanced diet and taking proper sleep and exercising daily.

3. It make our body tired after working continuously. So, sleep make us active and fresh.
 4. We should always walk on the footpath. We should cross the road at the zebra crossing . We should wear a helmet r fasten the seat belt.
 5. The first or immediate help that an injured person gets in called a first aid.
- C. 1. injury 2. wet 3. trim 4. fit, healthy 5. 6-8hrs, work 6. antiseptic lotion
- D. 1. Burger Pizza Ice-cream 2. Red Green Yellow
3. Razor Scissors Blade 4. Hockey Cricket Football
5. Sleeping Washing hand before meal Taking a both daily

7. Living Beings and Non-living Things



ACADEMIC ASSESSMENT

- A. 1. (b) 2. (c) 3. (a) 4. (a) 5. (a)
- B. 1. The person or animals having a life in it is called a living being.
2. All living beings need to eat food they grow, breathe, feel and reproduce.
3. The plants breathe through pores in their leaves called stomata. Insects breathe through air holes on their body.
4. Animals reproduce by giving birth to their babies.
5. All living beings grow. Non-living things do not grow.
All living beings feel. Non-living things do not feel.
All living beings eat food. Non-living things do not eat food.
All living beings breathe. Non-living things do not breathe.
- C. 1. can't 2. gills 3. non-living 4. own kind 5. fold 6. stomata 7. non-living
- D. 1. (c) 2. (e) 3. (b) 4. (a) 5. (d)
- E. 1. F 2. F 3. T 4. F 5. T

8. Plants



ACADEMIC ASSESSMENT

- A. 1. (c) 2. (c) 3. (a) 4. (b) 5. (a) 6. (a) 7. (a) 8. (c)
- B. 1. Potato 2. banana 3. Neem, basil 4. trunk 5. Radish, onion
6. land, water 7. Hydrilla, tape grass 8. stomata
- C. 1. The part of the plant that grows above the ground is called a shoot. It has many parts, such as-stem, branch, leaf, and flowers.
2. A leaf needs a green coloured pigment, called chlorophyll.

3. There three divisions-

Annuals – These plants live for one season only.

Biennials – These plants live for two season only.

Perennials – These plants live for many years.

4. Functions of fruits and seeds are as under. Seeds grow into new plants when sown in the soil. Fruits protect seeds inside them.

5. The examples of herbs, shrubs and trees are:

Herbs are very small plants with soft and green stem. For example: Spinach, rice, wheat, grass etc.

Shrubs are the medium sized bushy plants. They live for many years. For example: Rose, and Bougainvillea.

Trees are the tallest and big plants, having hard and thick trunk. They live for several years. For example Mango, Neem, Banyan etc.

- D.
- 1. Tap Root** – It is primary root that grows from the end of stem and goes deep into the ground and tiny roots grow from the main root. For example: rose, carrot, radish etc.
Fibrous Root – It has on primary root. A bunch of thin and tiny root grows from the end of the stem. For example: wheat, grass, onion etc
 - 2. Land Plants** – A number of plants grow on land. Some of them need enough water. For example: Sugarcane rubber, coffee etc.
Water Plants – There are two types of water plants— some float on the surface of water. For example: lotus and water hyacinth. Some plants live fully under water. They are known as submerged plants. For example: Hydrilla and tape grass.
 - 3. Floating Plant** – These water plants float on water. For example: lotus and water hyacinth.
Submerged Plants – These water plants live fully under water. For example: Hydrill, tape grass.
 - 4. Annual Plant** – They are those plants that live for one season only. For example: paddy, wheat beans etc.
Perennial Plants – They are those plants that live many years. For example: Mango, Neem, Banyan etc.
 - 5. Root** – The part of a plant that grows under the ground in known as a root. It has fine hair all over the surface, known as root hair.
Shoot – The part of the plants that grows above the ground is know as shoot. It various parts- such as - stem, branch, leaf, flowers and fruits etc.
- E.
1. Rose Bougainvillea 2. Cucumber Pumkin 3. Carrot Radish
 4. Fern Pine 5. Lotus Water haycinth 6. Hydrilla Tape grass
 7. Wheat Onion 8. Gvava Papaya 9. Litchi Mango 10. Neem Basil

9. Animals

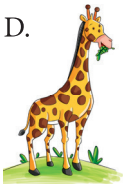


ACADEMIC ASSESSMENT

- A. 1. (c) 2. (a) 3. (b) 4. (a) 5. (c)
- B. 1. insects 2. dog, cat 3. mosquito 4. gills 5. limbs 6. wings
- C. 1. Insects possess three pairs of legs and one pair of antennae. They are small air-breathing animals with segmented bodies. Some of them possess wings which help them to fly.
2. The animals that eat the flesh of other animals are called carnivores. They are also known as flesh-eating animals. For example: fox, tiger, lion etc.
3. A herbivore eats a green plant. Carnivores eat a herbivore. This is like a chain that plants and animals form in nature food chain shows us how plants are eaten by animals and later animals are eaten by other animals. For example: refer the chapter
4. Animals get their food from plants and other small animals. The herbivores get their food from plants while the carnivores get their food from the other small (alive or dead) animals by eating their flesh.
5. Mammals refer to those animals that give birth to their offspring (young ones) and take good care of them by feeding them their own milk. They possess two pairs of limbs. Except human beings, mammals walk using their both pairs of limbs.
6. The amphibians lay eggs near the sources of water in the nests made/ build by them.
- D. 1. (iv) 2. (v) 3. (vi) 4. (iii) 5. (ii) 6. (i)

Model Test Paper – 1 Based on Chapters 1 to 9

- A. 1. (a) 2. (c) 3. (c) 4. (c) 5. (b)
- B. 1. joint 2. 206 3. herbivore 4. clean 5. 8 6. beings
- C. 1. T 2. F 3. T 4. T 5. F 6. F
- D.



Giraffe



Digestive System



Fruits



Houseboat



Good Habit



Tree

- E.
1. Big plants are called trees, Mango, Banyan and Neem.
 2. A family of parents and two children is called a small family.
 3. A diet that has right amount of nutrients is called a balanced diet.
 4. Herbivores eat only grass while carnivores eat flesh of other animals.
 5. The place where old people having on family or relative is called old off home
 6. There are several rooms-bed room, bath room, kitchen, living room dining room etc.
 7. Living beings can breathe and feel.
Non-living things cannot breath and feel.

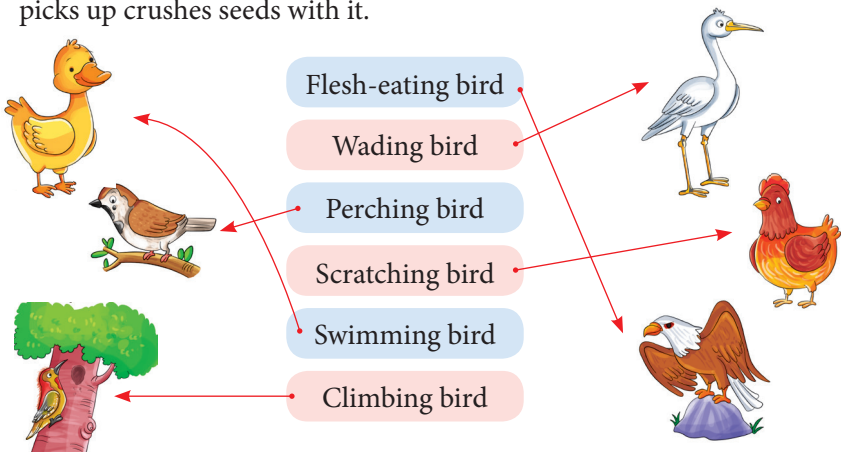
10. Birds



ACADEMIC ASSESSMENT

- A.
1. (b) 2. (b) 3. (a) 4. (c) 5. (c)
- B.
1. The feet of the perching birds helps them to hold on the branch.
 2. The mother bird takes good care of her babies. It keeps her eggs warm by sitting on them. She teach her babies how to fly and find food.
 3. A talon refers to the sharp claws of flesh eating birds.
 4. Flight feathers are long and attached to the wings and tails and helps them to fly
Down feather- The birds body is covered with them. They keep in warm.
Body feather- They cover a birds rest of the body and give it a shape.
 5. It scoops the muddy water with its help while a sparrow has short beak. It picks up crushes seeds with it.

C.



- D.
1. perching 2. woodpecker 3. beak 4. hold talons 5. Body feather

11. India-Our Country



ACADEMIC ASSESSMENT

- A. 1. (c) 2. (a) 3. (a) 4. (c)
- B. 1. Andaman and Nicobar Islands and Lakshadweep Islands
2. Bhutan, Nepal, China Sri Lanka and Afghanistan.
3. A peninsula is land surrounded by water on three sides.
4. There are 28 states and 8 union territories in India.
- C. 1. Itanagar 2. three 3. second 4. Gujarat 5. eight
- D. 1. Kolkata 2. Hyderabad 3. Gangtok 4. Bhuvaneshwar 5. Aizawl
6. Thiruvananthapuram 7. Patna 8. Bengaluru
- E. 1. F 2. T 3. T 4. F 5. T 6. F

12. National Symbols and Emblem



ACADEMIC ASSESSMENT

- A. 1. (b) 2. (c) 3. (b) 4. (a)
- B. 1. They are categorized as living beings and non-living things.
2. They give us our national identity.
3. Dharma Chakra 24 spokes that represent 24 hours a day which symbolises continuous effort and ground.
4. Our national flag marks the freedom and unity of India. It is also called 'Tiranga' as it has three colours— i.e., saffron (at the top), white (in the middle) and green (at bottom). There is also a navy blue wheel or Dharma Chakra in the middle of white band.
5. Rabindranath Tagore and Bankim Chandra Chattopadhyay respectively.
- C. 1. Sarnath lion capital 2. Dharma Chakra, Navy blue 3. tricolour
4. unity, freedom 5. wealth, purity
- D. 1. (ii) 2. (iv) 3. (vi) 4. (v) 5. (iii) 6. (i)

13. Cities and Villages



ACADEMIC ASSESSMENT

- A. 1. (a) 2. (a) 3. (c) 4. (b) 5. (c)

- B. 1. A village is a tiny settlement of people. There is no modern facilities while cities are big. They have all modern, technical and advanced facilities.
 2. Akshardham Temple, Jama Masjid, Chadni Chouk and Qutub minar.
 3. The NCR stands for National Capital Region. It includes Delhi, Ghaziabad, Faridabad, Gurugram, Meerut and Noida.
 4. In Chennai, we have- automobile, manufacture, hardware and healthcare industries. In Mumbai, we have- textiles, medicines, oils chemicals etc.
 5. Living in village is very beneficial to us as we get fresh air, water, vegetables, fruits and grains etc. The village environment is less polluted as compared to the cities.
- C. 1. (iv) 2. (ii) 3. (i) 4. (iii)
- D. 1. F 2. T 3. F 4. T 5. F

14. Means of Transport and Communication



ACADEMIC ASSESSMENT

- A. 1. (c) 2. (b) 3. (c) 4. (a) 5. (a)
- B. 1. Land transport, water transport and air transport.
 2. Large quantities of goods are transported in the big countries through the ships.
 3. It refers to network that links computers all over the world using telephone lines and satellites.
 4. When we speak or listen, read or write to someone, it means communication.
 5. **Individual communication** means using inland letters. Post cards and envelope and writing letters to our near and dear ones. It also includes sending messages to them.
Mass communication means communicate to a large group at the same time using radio and newspapers.
- C. 1. land transport 2. Alexander Graham Bell 3. Postage stamp 4. Satellites
- D. 1. T 2. F 3. F 4. T 5. F
- E. 1. (ii) 2. (iv) 3. (v) 4. (iii) 5. (i)

15. The Earth and The Sky



ACADEMIC ASSESSMENT

- A. 1. (c) 2. (b) 3. (b) 4. (a)

- B. 1. eight 2. atmosphere 3. Constellations 4. Purnima 5. Amavasya
- C. 1. The sun is the closest star of the earth, It is a huge fir ball made up not burning gases. It is one of the millions of stars in universe.
 2. The family of the sun is called solar system. There are eight planets- Venus Jupiter, Earth, Mars, Mercury, Saturn, Neptune, Uranus.
 3. The thick layer of air surrounding the earth is called atmosphere.
 4. The satellites refer to a body in space that moves a planet. While a star is a bright stationary object. It does not revolve around any planet.
 5. It is because the planet earth has water and life.
- D. 1. T 2. T 3. F 4. T 5. F

16. Natural Resources and Pollution



ACADEMIC ASSESSMENT

- A. 1. (c) 2. (a) 3. (b) 4. (c) 5. (b)
- B. 1. The substances which are not man-made are called natural resources.
 2. Rocks are found everywhere on the earth's surface and under the ground. For example marble, granite and soil. While soil is the uppermost layer of the earth's crust. It is formed by breaking of rocks into small pieces of time.
 3. We should plant more trees to check pollution as it is causing global warming and to save our precious lives.
 4. Forests are home to many wildlives. They give us a number of things for our survival. It is our duty to save them for our well-being.
- C. 1. (iv) 2. (iii) 3. (ii) 4. (vi) 5. (i) 6. (v)
- D. 1. metal 2. Carbon dioxide 3. rocks 4. natural 5. forest

17. Wheel-Man's Greatest Invention



ACADEMIC ASSESSMENT

- A. 1. (c) 2. (b) 3. (a) 4. (b)
- B. 1. The early humans firstly used their wheels in the carts that were made by them.
 2. The early humans tamed animals carried load for them.
 3. Actually, the potter's wheel made by the early human was a kind of machine which was used to give shapes to the clay.

4. The invention of wheel was a big steps for the early humans: Now he came in contact with other people Now, he had much free time to lead a social life.

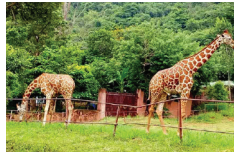
- C. 1. 03 2. 06 3. 06 4. 04 5. 02 6. 04 7. 04 8. 02
D. 1. T 2. F 3. T 4. F

Model Test Paper – 2 Based on Chapters 10 to 17

- A. 1. (a) 2. (c) 3. (b) 4. (c) 5. (a)
B. 1. Pollution 2. moon 3. E-mail 4. post office 5. India 6. 28
C. 1. T 2. T 3. T 4. F 5. T 6. T
D.



Well



Zoological Park



Post office



Clouds



Stars



Rocket

- E. 1. Electronic communication is fast but postal communication is slow.
2. Sikkem, Uttar Pradesh, Punjab, Telangana, Goa.
3. It refer to the mixing of dirty things into pure water, air, soil etc.
4. It is a machine used by the early human to give shape to clay.
5. It is the commercial capital of India. It is one of the most populated cities of India.
6. It stand for freedom and unity. It has three colours.
There is a navy blue Chakra in it.
7. Sometimes, we see that stars form imaginary groups which are known as constellations.