

Unit I: Home and Family

Me and My Family

ANSWERS

IN-TEXT QUESTION

(Page 3)









Big family

Single parent family

Nuclear family

Joint family

- **A. 1.** Do it yourself.
 - **2.** Family size increases in the following cases:
 - 1. There is a remarriage and a blended family results.
 - 2. There is a birth in the family or a new member is adopted.
 - 3. There is a marriage, resulting in the addition of new members in the existing members.
 - **3.** Do it yourself.
 - **4.** Do it yourself.
- **B. 1.** People who migrate to a new country are called immigrants.
 - 2. People who move to another country and start living there permanently are called emigrants.
 - 3. In a blended family, people who are previously married and are no more with their partners, remarry and accept each other's children making their family a big family.
 - 4. Many people leave their families in rural areas (villages) and migrate to cities for better living conditions and more income. They are called migrant workers.



THINK AND ANSWER

- **D. 1.** Some of the problems faced by migrant workers are given below.
 - 1. Migrant workers often have to leave their families behind to find work in other places. This can be emotionally difficult for them and their families.
 - 2. Migrant workers may not have a stable employment or job, which can make it hard for them to plan for the future.
 - 3. Some migrant workers may face poor working conditions, including long hours, low pay and lack of access to basic amenities like clean water and sanitation facilities.
 - 4. Migrant workers may face discrimination based on their ethnicity, language or migrant status. This can make it hard for them to find work.
 - 5. Migrant workers may feel isolated and lack social support networks in their new communities, which can affect their mental health and well-being.
 - **2.** Here are some things you can do to help cheer up and motivate someone who has lost a family member:
 - 1. Offer him/her comfort.
 - 2. Just being present and listening can make a big difference.
 - 3. Talk about the good times you've had together. Reminding the person of happy memories can bring a smile to his/her face.
 - 4. Let the person know it is okay to express his/her feelings. Encourage him/her to share what he/she going through.
 - 5. Offer to do something special together, like going for a walk, watching a movie or playing a game. Doing fun things can help take their mind off the sadness, even if just for a little while.
 - 6. Understand that he/she may need time to grieve.
 - 7. Let the person know you are there to help with anything he/she needs, whether it is running errands, cooking meals or just lending a listening ear.

ACTIVITY



Unit I: Home and Family



ANSWERS

IN-TEXT QUESTIONS

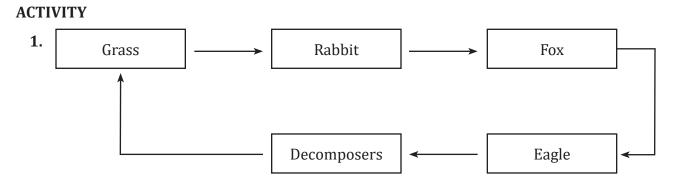
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1. RESPIRATION **2.** FOOD CHAIN

Name two plant products that provide us with energy and strength to fight diseases.

Ans. Fruits and vegetables.

- A. 1. (b) 2. (b) 3. (b) 4. (b) 5. (b)
- B. 1. Drey 2. Aboreal animals 3. Photosynthesis 4. Pollination
- C. 1. All living forms (including human beings) need oxygen to stay alive. In return, humans exhale (give out) carbon dioxide, which plants need for the process of photosynthesis. This cycle keeps on working and shows a beautiful relationship between plants, animals and human beings. This is also called interdependence on each other for survival.
 - 2. Four uses of plants:
 - 1. Plants provide us with fresh air.
 - 2. Plants provide us with food and nutrition.
 - 3. Plants give shelter to many animals.
 - 4. Plants provide us with clothing and livelihood.
 - **3.** A food chain is a sequence of eating and being eaten among living organisms to transfer energy.
 - **4.** The network of several interconnected food chains is called a food web.
 - 5. Milk, eggs, honey and meat.
 - **6.** Plants make the air fresh by absorbing carbon dioxide during photosynthesis and releasing oxygen as a by-product. This process helps to improve the air quality and maintain a balance of gases in the atmosphere.





The Role and Importance of Animals in Nature and Human Life

ANSWERS

- A. 1. (b) 2. (b) 3. (b) 4. (b) 5. (d)
- B. 1. biodiversity 2. pollinators 3. microorganisms 4. companionship
 - 5. endangered species
- **C. 1.** Bees are important as they act as pollinators, helping plants to reproduce and produce fruits.
 - **2.** Pets like dogs and cats offer companionship, reducing stress and promoting mental wellbeing.
 - **3.** Decomposers like worms and microorganisms break down organic matter, recycling nutrients in ecosystems.
 - **4.** Oxen.
 - **5.** Animals contribute to biodiversity, ensuring a variety of species that support ecosystem's health.



Unit II: Birds and Animals



Senses of Animals

ANSWERS

EXERCISES

- **A. 1.** (a) **2.** (c)
- B. 1. True 2. False 3. True 4. False 5. False
- C. 1. Nocturnal 2. use 3. Some
- **D.** 1. Dogs are used to track thieves because they have a sharp sense of smell.
 - **2.** Bats hear with the help of echoes. When bats fly, they make high-pitched sounds. The sounds bounce off other objects. These echoes help the bats to locate food and obstacles.
 - **3.** Whiskers help cats navigate, hunt, communicate by sensing touch, vibrations and air currents. They also help in maintaining balance, especially during activities like climbing or jumping.

THINK AND ANSWER

E. Dogs are used in rescue operations because they have excellent senses like smell, hearing and sight. They can find missing people, detect harmful things like explosives and move through rough areas to rescue those in trouble. Their loyalty, agility and ability to learn make them great helpers for rescue teams.

ACTIVITY



D Bad Impact of Human Activities

ANSWERS

IN-TEXT QUESTIONS

CASE STUDY

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Wild animals left forests and came near human settlements due to habitat loss, food scarcity, water availability, human activity or climate change.

EXERCISES

- **A. 1.** Interaction of all living organisms (like plants and animals) of any place with all the nonliving things (like water, rocks, sun, etc.) makes up an ecosystem.
 - 2. Illegal hunting or catching of animals is termed as poaching.
 - **3.** Human activities like cutting down forests, polluting water and soil, building roads and cities, over hunting and climate change destroy the places where animals live. This makes it difficult for them to survive and can lead to their extinction.
 - **4.** We should support the government and wildlife conservation organisations that work to conserve endangered species and their habitats. For example, national parks and wildlife sanctuaries are being made to protect the wildlife and their habitats. They provide a safe and secure place for the animals kept there.

The government protects these areas and the animals are kept away from human contact and roam around in their natural surroundings freely.

- **B. 1.** food; habitat **2.** smog **3.** chemicals **4.** step **5.** Endangered
- C. 1. Dodo; Mammoth 2. Rhinoceros; Tiger 3. Elephant; Rhinoceros
 - 4. National parks; Wildlife sanctuaries
- **D. 1.** (b) **2.** (d) **3.** (e) **4.** (c) **5.** (a)

THINK AND ANSWER

E. Using animals for entertainment, like in circuses, is not right because it often leads to animals experiencing suffering and mistreatment. Animals have basic needs and rights that should be respected, and it is important to find alternative forms of entertainment that don't involve exploiting animals.

ACTIVITY





Types of Soil

ANSWERS

IN-TEXT QUESTIONS

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- 1. Soil is a mixture of clay, sand and humus (decayed matter). It also has air and moisture.
- **2.** Alluvial soil.
- 3. Regur soil.
- 4. Igneous rocks.

- A. 1. (d) 2. (b) 3. (a) 4. (c) 5. (b)
- B. 1. True 2. True 3. False 4. False 5. True 6. False
- C. 1. igneous 2. regur 3. alluvial 4. humus 5. clay
- **D. 1.** Alluvial soil, black soil (also called regur soil), red soil, laterite soil, desert soil and mountain soil.
 - **2.** Alluvial soil is found in the Northern Plains and in the deltas of Mahanadi, Godavari, Krishna and Kaveri rivers.
 - **3.** Ways to protect the fertility of soil:
 - 1. Plant more trees.
 - 2. Keep the fields covered with plants.
 - 3. Reduce overgrazing by cattle and sheep.
 - 4. Use organic manure to increase the fertility of soils. (Any three)

| 4. | Red Soil | Laterite Soil |
|----|----------|---|
| | 8 | Laterite soil develops due to leaching in areas of high temperature and heavy rainfall. With proper manuring, laterite soil can produce a variety of plantation crops such as tea, coffee, coconut, rubber, etc. It is mainly found in the hilly areas of Maharashtra, Odisha, West Bengal, Karnataka, Andhra Pradesh, Telangana, Kerala, Assam and Meghalaya. |

- **5.** With proper manuring, laterite soil can produce a variety of plantation crops such as tea, coffee, coconut, rubber, etc.
- 6. Black soil is suitable for growing cotton, sugarcane, wheat, millets, oilseeds and tobacco.

THINK AND ANSWER

E. It takes thousands of years to develop a very thin layer of soil because soil forms slowly over time through a process called weathering. Weathering breaks down rocks into smaller particles, and then plants, animals and microorganisms help to mix these particles with organic matter. This gradual process of rock breakdown and accumulation of organic matter takes a long time, which is why soil formation is a slow process.

| F. | Η | U | М | U | S | E | S | S | Ι | L | Т | С |
|-----------|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | Е | Α | С | Н | Ι | N | G | L | R | E | L |
| | A | С | 0 | Т | Т | 0 | N | E | А | U | A | A |
| | Т | W | Μ | Ι | L | L | E | Т | S | В | J | Y |
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| | Т | Т | Е | М | Ι | L | L | E | Т | S | W | U |
| | E | 0 | Ι | L | S | E | Е | D | S | Ι | Y | R |
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| | R | Е | G | U | R | С | 0 | F | F | Е | Е | Ν |
| | Α | L | L | U | V | Ι | U | Μ | L | А | V | Α |

ACTIVITY



Unit III: Plants and Geography



Up in the Sky

ANSWERS

IN-TEXT QUESTIONS

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Earth

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Do you know how astronomers find out what is there in space?

Astronomers use special tools like telescopes to explore space. They also use artificial satellites to gather information about what is out there in space.

Can you name India's first unmanned spacecraft to moon?

Chandrayaan-1.

EXERCISES

- A. 1. (b) 2. (a) 3. (a) 4. (a) 5. (a) 6. (a)
- **B. 1.** Celestial bodies are natural objects which lie beyond the Earth's atmosphere, such as the Sun, moon and other planets. These celestial bodies are also called heavenly bodies.
 - **2.** A satellite is an object which moves around a larger object.

The moon moves around the Earth, making it Earth's natural satellite.

But some of the satellites are not natural. They are man-made. They are termed as artificial satellites.

| 3. | Solar Eclipse | Lunar Eclipse |
|----|--|---|
| | A solar eclipse happens when the Moon | A lunar eclipse takes place when the Moon |
| | passes between the Sun and the Earth, | moves into the shadow of the Earth and the |
| | casting a shadow on the Earth. It sometimes | Sun's light is blocked and it does not reach |
| | completely and sometimes partially blocks | the Moon. Because of this, the Moon is not |
| | the light coming from the Sun in some areas. | able to reflect the Sun's light and we aren't |
| | | able to see the Moon. |

4. The Sun is the largest object of our solar system. It is a huge ball of hydrogen and helium gases. The hottest part of the Sun is its core. Its surface is called photosphere which means 'sphere of light'.

Planets are the next largest objects of the solar system after the Sun. They are made up of rocks, metals or gases. The eight planets in order of their distance from the Sun are Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.

5. Every day the ocean water rises and falls on a regular basis. This movement is called a tide. When the water reaches its greatest height, it is called a high tide. When it falls at its lowest level, it is termed as a low tide.

THINK AND ANSWER

- **C. 1.** The Sun appears larger than other stars because it is much closer to Earth than any other star. While other stars are also very big, they are very far away from us, so they appear much smaller in the sky.
 - 2. If there were no Sun, life on Earth would not be possible. The Sun provides heat and light, which are essential for plants to grow and for animals to survive. Without the Sun's energy, Earth would become extremely cold and dark, and all life as we know it would cease to exist.

ACTIVITY





Challenges Faced by Animals in Different Locations

ANSWERS

IN-TEXT QUESTIONS

ACTIVITY 1

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Students can do this with the help of the teacher.

ACTIVITY 2

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Students can do this with the help of the teacher.

- **A. 1.** (a) **2.** (b) **3.** (b) **4.** (d)
- B. 1. False 2. True 3. True 4. False
- C. 1. scales 2. fur 3. arms and tails 4. webbed
- **D. 1.** The special features in living beings which help them to survive in their habitats are called adaptations.
 - **2.** Animals live in different environments such as cold mountains, hot deserts and deep seas. Therefore, they have different types of body shapes. They have different food habits. Their body shapes and food habits help them to adjust in their environment. An animal which is adapted to live in a cold place cannot survive in a hot desert. The animals which do not adapt to their surroundings die. Thus, adaptations help animals to live in their environment successfully.
 - **3.** Some land animals like frog, lizard and snake cannot tolerate cold. So they hide themselves in warm places during winter and show very little body activity. This state of low body activity of animals is called hibernation or winter sleep. These animals eat a lot of food before the winter months and store it as fat in their bodies. They use this stored fat as food during the hibernation.
 - **4.** Plant-eating animals are called herbivores. Cow, deer, horse, donkey, buffalo, etc., are examples of common herbivores.

- 5. Camels have broad and padded feet which help them walk and run on loose sand.
- **6.** We can take care animals in the following ways:
 - We should not tease animals by throwing stones or other objects on them or bursting crackers near them.
 - Animals also feel thirst, hunger and pain like us. Therefore, we should give them food and water, as well as medical aid when required.
 - If we have pet animals or birds, we should take good care of their cleanliness and health. We should give them a clean space to live, fresh and healthy food to eat and take them to the veterinary doctor regularly.

THINK AND ANSWER

E. 1. duck 2. squirrel 3. camel 4. snake

ACTIVITY

Do it yourself.



Unit IV: Culture and Traditions

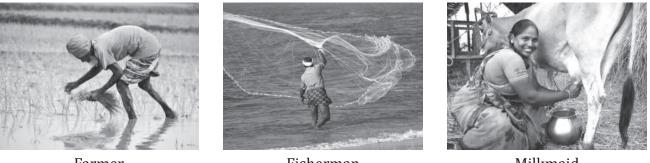


Diverse Occupations

ANSWERS

IN-TEXT QUESTIONS

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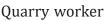


Farmer

Fisherman

Milkmaid







Mining engineer

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Truck driver; Teacher; Barber; Doctor; Sweeper

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If all the sweepers or garbage collectors stopped working, it would affect our lifestyle in many ways. Streets and neighbourhoods would become dirty and smelly because trash would pile up everywhere. This could attract pests like rats and flies, leading to health problems and making it unpleasant to go outside.

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- **1.** I wear waterproof clothes in the monsoon season.
- **2.** During winters, I wear warm woollen clothes. Waterproof clothes are designed to keep water out so that I remain dry while woollen clothes are designed to keep me warm during the cold winters.

EXERCISES

- A. 1. (c) 2. (b) 3. (a) 4. (b) 5. (b)
- B. 1. Mining engineer 2. Fisherman 3. Printer 4. Animal husbandry 5. soil, water; sunlight
- **C. 1.** The work that a person does for earning money is called an occupation.
 - **2.** Farmer, fisherman, milkmaid, quarry worker and mining engineer are examples people of different occupations who earn their living by exploiting natural resources.
 - **3.** Service providers are people who provide services to other people, e.g., teachers, barbers, doctors, sweepers, etc.
 - **4.** Adverse weather changes can affect people's lifestyles in several ways:
 - Extreme weather like heat waves or storms can cause health issues such as heatstroke, dehydration or injuries.
 - Heavy rain or snow can disrupt transportation, making it hard for people to go to work or school.
 - Floods, hurricanes or wildfires can damage homes and property, leading to financial losses and displacement.
 - Changes in weather patterns can affect crop growth, leading to food shortages and higher prices.
 - Severe weather events can force people to leave their homes temporarily or permanently, causing stress and uncertainty.
 - Weather changes can also impact ecosystems, affecting wildlife and natural resources that people rely on.
 - 5. Drought is the condition caused by extreme shortage of water due to low or no rainfall.

THINK AND ANSWER

- D. 1. If there were no teachers, our lives would be challenging. Teachers help us learn new things, understand subjects and become smarter. Without them, we might struggle to gain knowledge and skills. We wouldn't have someone to guide us, answer our questions or inspire us to do our best. So, teachers play a crucial role in making our lives better by helping us learn and grow every day.
 - **2.** Without maids or helpers, parents would have to do all the household chores themselves, leaving them tired and stressed with less time for their families and relaxation.

ACTIVITY



Unit IV: Culture and Traditions



Traditional Methods of Making Clothes

ANSWERS

EXERCISES

2.

- **A. 1.** (b) **2.** (a) **3.** (b) **4.** (a) **5.** (b)
- **B. 1.** We need clothes to protect our bodies from natural forces like heat and rain or other climatic conditions. They also protect us from insect–bites and make us look good.

| | Tr | raditional Method | ls of Making Fabric | | |
|---|--|---|---|--|--|
| Weaving | 5 | Knitting | Crocheting | Lace making | |
| | | | | | |
| The craft of ma fabric by inter- threads using a loom. The supporting structure of th loom is called frame in which threads are fix | lacing by a kni g e the 1 the | s done either flat or round itting needles. | It is done with the help of a crochet hook. | This fabric is very light and has open holes all over it. Usually, lace is made from a single thread. | |

3. Earlier, people used handlooms for making fabric, which required a lot of labour, time and skill. But now powerlooms are being used. They are more efficient, technologically advanced and power operated.

The weaving on powerlooms is done at a very high speed. They can weave yards of fabric in no time.

4. A charkha is a small, portable wheel used to spin cotton or other fibres into yarn.

5. Cotton, silk and wool.

- C. 1. (a) Cotton (b) Yarn (c) Handloom (d) Powerloom
- **D.** 1. (c) 2. (a) 3. (d) 4. (b)

THINK AND ANSWER

E. We wear different types of clothes for various reasons. Firstly, clothes protect our bodies from the weather, keeping us warm in cold weather and cool in hot weather. Secondly, different activities require different types of clothing for comfort and safety. Lastly, clothes also express our personalities and culture, allowing us to show who we are and what we believe in.

ACTIVITY





Our Cultural Diversity

ANSWERS

EXERCISES

- A. 1. (c) 2. (a) 3. (d) 4. (b) 5. (c)
- B. 1. True 2. False 3. False 4. True 5. False 6. True
- C. 1. dialects 2. Tamil Nadu 3. North India
 - **4.** miniature [The sentence should be: The Rajputs developed their own style of ______ paintings.]
 - 5. Delhi
- **D. 1.** Tamil, Telugu, Kannada and Malayalam.
 - 2. Sitar, tabla, veena and sarod.
 - **3.** Mughal times: Tansen and Baiju Bawra.

Modern times: Pandit Jasraj and Bhimsen Joshi.

- **4.** There are beautiful paintings on the walls of the Ajanta Caves in Maharashtra. They show stories from the life of Lord Buddha. From these paintings, we can learn about the dresses and the hairstyles of people of that period.
- 5. **Stupa:** Sanchi Stupa, Madhya Pradesh.
 - **Temple:** Sun Temple at Konark, Odisha.
 - Mosque: Jama Masjid, Delhi.
 - Church: Basilica of Bom Jesus, Goa.
 - **Fort:** The Red Fort, Delhi.

| 6. | Folk Dances | Classical Dances |
|----|---|---|
| 6. | | Classical dances began as a form of worship in the temples. Later on, these dances were also performed for kings and rulers. Most of the states in India have their typical |
| | Some of the popular folk dances are Bhangra (Punjab), Ghoomar (Rajasthan), Bihu (Assam), Garba (Gujarat), Lavani (Maharashtra), etc. | Telangana), Kathak (Uttar Pradesh), Odissi (Odisha), Manipuri (Manipur), Mohiniattam (Kerala), Sattriya (Assam), Yakshagana (Karnataka), etc. Kathakali and Yakshagana are dance dramas in which stories are told through dance. |

THINK AND ANSWER

E. To protect our cultural heritage, we should learn about it, respect it and take care of it. This means understanding our traditions, preserving our history and supporting efforts to save important places and objects. By doing this, we can keep our culture alive for the future.

ACTIVITY



Unit IV: Culture and Traditions



Man and Resources

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ANSWERS

IN-TEXT QUESTIONS

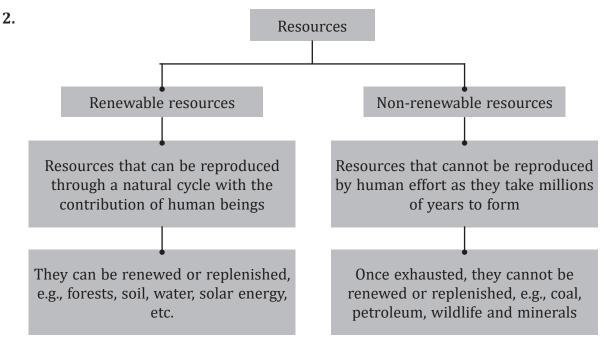
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Do it yourself.

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1. Kerala 2. Rajasthan

- A. 1. (c) 2. (a) 3. (a) 4. (b) 5. (a)
- **B.** 1. Materials that are needed by humans and other life-forms to satisfy their needs are called resources. For example, living beings (biotic components) need air, water and land to survive. Besides, they also need resources like forests, rocks, minerals, sunlight, coal and petroleum (non-biotic components) to obtain energy and lead their lives comfortably. All these are resources.



3. (a) Nitrogen is an essential element needed by plants and humans to survive. The nitrogen cycle is the process through which nitrogen travels from air, soil, animals, humans and plants.

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Air \longrightarrow Soil \longrightarrow Living organisms \longrightarrow Dead organisms \_

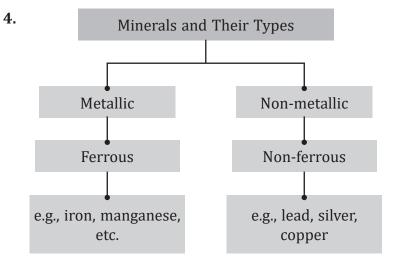
\uparrow Decomposers

Back into the air
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In this way, vegetation not only provides habitat to animals but also provide food and many other things like timber, rubber, cotton, etc., to us.

(b) The carbon cycle is a process by which carbon dioxide from the atmosphere moves to living beings and the Earth and then travels back into the atmosphere.

The carbon cycle is the way by which nature uses carbon present for the survival of living forms present on Earth.



- 5. (a) Aluminium: Used in shipping and car industries and also used for making aircraft.
 - (b) Gold: Used in jewellery industry.
 - (c) Copper: Used in coin making and for making pipes and wires.
 - (d) Silicon: Used in computers, (electronic industry), phones and in manufacturing of glass.
- **C. 1.** (c) **2.** (d) **3.** (b) **4.** (a)

THINK AND ANSWER

D. If non-renewable resources (coal, oil and natural gas) get exhausted, it would have a big impact on our lives. These resources take millions of years to form, so once they are used up, they are gone forever. We use these resources for many things, like generating electricity, powering vehicles and making products. If they run out, we would have to find other ways to do these things. This might mean using more renewable energy sources like solar and wind power, which won't run out and are better for the environment. It is important to use resources wisely and find ways to conserve them so that we can protect our planet for future generations.

ACTIVITY



Unit V: Caring for Self and Others



Government Aid

13

ANSWERS

- A. 1. (b) 2. (d) 3. (c) 4. (c) 5. (b)
- **B.** 1. If my friend is stuck in an emergency situation, the first thing I would do is stay calm and reassure him/her that everything will be okay. Then, I would try to assess the situation and see what help is needed. If it's something I can handle myself, like a small injury, I would provide first-aid if I know how to do so safely. If it's a more serious situation, like a fire or someone being seriously hurt, I would call for help immediately by dialling the emergency number. While waiting for help to arrive, I would stay with my friend, keep him/her safe and comfort him/her until help arrives. It's important to always be prepared for emergencies and know how to respond calmly and quickly to help others.
 - 2. In your first-aid kit, you should keep some important things ready to help with minor injuries. These include Band-Aids for cuts and scrapes, antiseptic lotion to clean wounds, sterile gauze pads and adhesive tape for larger cuts and tweezers for removing splinters or debris. You should also have scissors to cut bandages or clothing if needed, disposable gloves to protect yourself from germs and a small booklet with basic first-aid instructions. It's important to check your first-aid kit regularly to make sure everything is still there and not expired.
 - **3.** Non-Governmental Organisations (NGOs) work to provide relief to the victims of a disaster by offering various forms of assistance. Firstly, they often collaborate with local communities to assess the needs of the affected people. Then, they provide essential items such as food, water, clothing and shelter to those in need. NGOs also offer medical assistance by sending doctors and healthcare workers to treat the injured. They also help in rebuilding homes, schools and other infrastructure that may have been damaged or destroyed. NGOs rely on donations and volunteers to carry out their relief efforts efficiently. Through their dedication and support, NGOs play a crucial role in helping communities recover from disasters and rebuild their lives.
 - **4.** We should store water during a cyclone because water supply may be cut off when a cyclone strikes.
 - **5.** Storm shutters are exterior shutters that help to protect windows and interior things of a house from damage caused by high winds, rains or any other weather-related phenomena.

- 6. Mock drills are useful because they help us practise what to do in case of emergencies or disasters. By simulating a real-life situation, like a fire or earthquake, mock drills teach us how to respond quickly and safely. They help us understand the importance of staying calm and following emergency procedures. Mock drills also allow us to identify any weaknesses in our emergency preparedness plans and improve upon them. Through regular practice, we become more confident and better equipped to handle emergencies, which ultimately helps keep ourselves and others safe.
- C. 1. (c) Natural disaster 2. (d) Man-made disaster 3. (a) Natural disaster
 - 4. (e) Natural disaster 5. (b) Man-made disaster

ACTIVITY



Unit V: Caring for Self and Others



Discrimination – A Social Evil

ANSWERS

IN-TEXT QUESTIONS

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Girl



Man

Woman

Case Study

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- **1.** From the case study, we learn that Khushi faced gender discrimination because she was a girl. Even though she was intelligent and had big dreams, Khushi's father stopped her from studying because he believed that girls should focus on chores at home and getting married instead of pursuing education and career goals.
- **2.** Yes, if Khushi was allowed to study further, she could have contributed significantly to society. She wanted to become a doctor and improve healthcare in her village, which would have helped many people. Khushi's determination and intelligence could have led to positive changes in her community if she had been given the opportunity to pursue her dreams.

- **A. 1.** (b) **2.** (a) **3.** (c) **4.** (a)
- **B. 1.** Gender is a form of social division in terms of roles, behaviours and expressions. For example, women have been given the role of raising children, taking care of the family, etc. Men, on the other hand, have been given the role of going out and working to earn the bread for his family.
 - 2. Earlier, only men used to go out to work but lately women have also started earning. They have become financially independent. Still, it is expected from them to come home and do all the household chores, though they are tired. This is a stereotypical notion being followed since centuries that cooking food, washing clothes and utensils, cleaning

the house, etc., are part of a woman's responsibility.

Many women manage their household and outdoor responsibilities efficiently. But their work at home is not valued and does not get recognised. This is called discrimination.

- **3.** Children below fourteen years of age cannot work. But they are sometimes forced to work. It is called child labour which is an illegal activity as it deprives them of their childhood which is bad for their physical and mental growth.
- **4.** In India, our Constitution has given us six Fundamental Rights which no one can violate. The six Fundamental Rights are:
 - Right to Equality
 - Right to Freedom
 - Cultural and Educational Rights
 - Right to Constitutional Remedies
 - Right Against Exploitation
 - Right to Freedom of Religion
- **5.** According to the Right to Equality, everyone will be treated equally before the law and no one can discriminate against people on the basis of their religion, caste, race or sex. Right to Equality also states that equal opportunities would be provided to all the citizens of India.

THINK AND ANSWER

C. Without a Constitution or rules and regulations, life would be chaotic and unpredictable. These laws help protect our rights, ensure fairness, and maintain order in society. Without them, there would be no guidelines for how people should behave or interact with each other. This could lead to confusion, injustice and even violence. Having a Constitution and rules in place provides stability and allows us to live in a structured and organised manner, which ultimately makes life better for everyone.

ACTIVITY





Seed to Plant Process

ANSWERS

IN-TEXT QUESTIONS

(Pages 111, 112, 116 and 117)

Activities 1-8 can be done by the students with the help of the teacher.

- **A. 1.** (d) **2.** (b) **3.** (c) **4.** (a) **5.** (a)
- B. 1. Roots, stems, buds; leaves 2. seed coat 3. seed germination 4. plumule 5. crops
- C. 1. Seed 2. Wind 3. Vegetative propagation 4. Sowing 5. Irrigation 6. Harvesting
- **D.** 1. Cotton Dandelion**2.** Rajma Pea**3.** Lotus fruit Coconut
 - **4.** Balsam Pea**5.** Mushroom Mould**6.** Carrot Turnip
 - **7.** Money plant Rose **8.** Bryophyllum Begonia **9.** Wheat Barley
 - 10. Rice Maize
- **E. 1.** In plants, reproduction takes place in the following ways:
 - **b** by seeds**b** from spores**b** by vegetative propagation
 - 2. The cotyledon is the leafy structure in a seed. It stores food for the baby plant inside the seed.
 - **3.** Animals help in seed dispersal in the following ways:
 - Animals eat fruits and throw away their seeds. The seeds of apple, plum, mango, orange, peach, etc., are dispersed in this way.
 - Some seeds such as cocklebur and tiger nail seeds have hooks that stick to the fur of animals and get dispersed.
 - Squirrels collect nuts and bury them for use in winter. They often forget where they had buried the seeds. So when the conditions become favourable, these seeds grow into new plants.
 - Birds swallow some seeds which come out with their droppings. Also, while eating fruits, some seeds are left on the beaks of birds. When they rub their beaks on the bark of trees or any other structure, the seeds fall down and later on they grow into new plants.

- **4.** (a) The size of seeds is an important factor in their dispersal. Seeds dispersed by the wind must be light and small in order to be carried by the wind to greater distances. They may have hairs or wings to help them be carried away by the wind. The seeds of hiptage, dandelion, madar and cotton have tufts of hair. Sycamore seeds are winged. They spin through the air like mini-helicopters.
 - (b) The seeds of plants which grow in rivers, oceans and ponds or near water bodies are dispersed by water. The fruits of such plants have special structures which help them float to far-off places carrying seeds in them. For example, the lotus fruit has a spongy part which helps it float.
- **5.** The growing of a new plant from a seed is called germination of seeds.
- **6.** Spores are small, spherical and light structures which help in reproduction. Since spores are tiny and very light, they can be flown and dispersed easily in various directions to give rise to new plants. Spores are found in fungi such as mushrooms and moulds.
- **7.** The removal of weeds is called weeding. This is necessary as weeds compete with the main crops for space, nutrients, water and sunlight.
- 8. When the crop is ripe, it is cut down. This is called harvesting.
- **9.** After harvesting, grains like wheat and rice are stored in godowns. This prevents them from getting spoilt by moisture or eaten by rats, birds or insects.

THINK AND ANSWER

- **F. 1.** Flowering plants produce seeds in large numbers to increase the chances of their offspring surviving and growing into new plants. Some seeds may not get the right conditions to grow, so by making many seeds, at least some of them are likely to find a suitable spot to grow. Also, seeds can be eaten by animals, scattered in different places and even carried by the wind, which helps the plants spread and grow in new areas. So, lots of seeds give plants a better chance to grow and make more plants.
 - **2.** Cotyledons fall off after plants grow. This helps the seedling get started by providing food until the plant can make its own through photosynthesis. As the plant grows bigger and stronger, it doesn't need the cotyledons anymore, so they naturally fall off. By this time, the plant has its own leaves to make food, and it can take care of itself without the cotyledons.
 - **3.** Yes, Amit is right to prefer using manure instead of chemical fertilisers. Manure is made from natural sources like animal waste and plant matter, and it is rich in nutrients that plants need to grow healthy and strong. Chemical fertilisers, on the other hand, may contain harmful substances that can harm the environment and even the plants themselves if used too much. Manure also helps improve soil structure and supports beneficial organisms in the soil, making it a better choice for long-term soil health and sustainable farming.

ACTIVITY

1, 2 and 3: Students can do these with the help of the teacher.





Food for All

ANSWERS

IN-TEXT QUESTIONS (Page 125)



- Bad for health
- ▶ Reasons: Fast foods like french fries, burgers ▶ Reasons: Fruits and vegetables are good for and pizzas are bad for health because they contain unhealthy fats and sugars



- Good for health
- health as they provide essential nutrients and fibre that keep our bodies strong and healthy.

ACTIVITIES 1 - 4

(Page 128 - 130)

Students can do these in the class with the help of the teacher.

- A. 1. (a) 2. (a) 3. (a) 4. (d)
- B. 1. True 2. True 3. False 4. False 5. True
- **C. 1.** roughage **2.** nutrients **3.** digestive enzymes, vitamins, minerals, fibres and proteins
 - **4.** insulin **5.** rickets
- **D. 1.** Our food has various components. They are carbohydrates, fats, proteins, vitamins and minerals. These components of food are called nutrients. Each nutrient of food has some special work in the body. Based on the special work of nutrients, food is divided into the following groups: Carbohydrates, proteins, vitamins and minerals, roughage and water.
 - **2.** A diet which contains the right amount of all the nutrients is called balanced diet. Eating only one type of food will cause deficiency of other nutrients. It will cause many diseases and slow down the growth of body. Therefore, we should eat a balanced diet. A balanced diet provides all the nutrients to the body in proper amounts.

- **3.** The food which is good for health is called healthy food. The grain, vegetable, fruit, milk and meat groups of the food pyramid show healthy food items. Fruits, nuts, vegetables, cereals, pulses, milk and milk products are good for health. They give us energy, keep us active, help us to grow and fight against diseases.
- **4.** The food items shown at the top of the food pyramid, and some others such as burger, chips, pizza, chowmein, momos, samosas, pakoras, etc., are junk foods. Junk foods have large parts of fats and carbohydrates as they are prepared with lots of salt, sugar, spices, refined flour and oil. So, we should avoid eating junk food and eat it occasionally.
- **5.** Benefits of eating sprouts:
 - Sprouts are good for our digestive system.
 - They control blood pressure, diabetes and prevent plugging of cholesterol in blood vessels.
 - They keep the skin and hair shiny and the heart healthy.
 - They help our body to fight cold and other diseases.
 - They make our bones and muscles strong and keep a check on the weight.

The sprouts of radish, pea, chickpea, beans, green gram (*moong*), bengal gram, sunflower, alfalfa, fenugreek, red lentil, etc., are very nutritious.

- **6.** Curd, vinegar, yoghurt, pickles, soy sauce, bhatura, uttappam, idli, dosa, dhokla, wada, kadhi, kanji, bread, ketchup, mayonnaise, etc., are examples of fermented food.
- **7.** Eating food rich in carbohydrates and fats more than our body requires causes obesity. The extra fat and carbohydrates are stored in the body as fat and make us obese.
- **8.** The toxic and harmful substances which are mixed in food are called adulterants and the process is called adulteration. Some common food adulterants and the food items in which they are mixed are given in the following table.

| | Adulterants | Food Items |
|----|------------------------------|---------------------------|
| 1. | Lead chromate | Turmeric powder |
| 2. | Cowdung or horse dung powder | Coriander (dhania) powder |
| 3. | Brick powder | Chilli powder |
| 4. | Argemone seeds | Mustard seeds |
| 5. | Sugar, jaggery | Honey |
| 6. | Water, starch | Milk |
| 7. | Wax | Vanaspati ghee |
| 8. | Metanil yellow | Pulses (pigeon pea) |

E. 1. (f) 2. (e) 3. (d) 4. (b) 5. (a) 6. (c)

| X | 0 | C | S | Т | Р | E | Α | Т | S | Т |
|---|---|---|---|---|---|---|---|---|---|---|
| W | 0 | U | D | Р | A | P | Q | Ζ | N | С |
| Т | N | H | С | S | Р | Ι | Ν | A | С | Η |
| Μ | Ι | L | К | Т | A | V | W | M | K | Y |
| Р | 0 | S | Ζ | U | Y | Т | S | L | Т | С |
| Y | N | Р | Q | V | Α | С | N | Α | 0 | L |

F. 1. MILK, PAPAYA 2. SPINACH 3. AMLA 4. MILK 5. SPINACH 6. ONION

THINK AND ANSWER

- **G. 1.** The milk used for setting curd should not be too hot or too dry because it can affect the growth of good bacteria needed to make the curd. If the milk is too hot, it can kill the bacteria, and if it's too dry, there might not be enough moisture for the bacteria to grow properly. So, just the right temperature and moisture help the bacteria in milk turn it into tasty curd.
 - 2. We should eat more green vegetables and fruits because they are packed with vitamins, minerals and fibre that help keep our bodies strong and healthy. They also give us energy and help our immune system fight off illnesses. So, eating lots of green vegetables and fruits keeps us healthy and happy.

ACTIVITY



Unit VII: Water



Water – A Natural Resource

ANSWERS

IN-TEXT QUESTIONS

(Page 141)

ACTIVITY 1

Fill in the blanks with the following words in the order given: evaporates; transpiration; condenses; clouds; rain; precipitation; infiltration

(Pages 141, 142, 147, 148 and 150)

ACTIVITIES 2-6

These can be discussed and done in the class with the help of the teacher.

(Page 143)

Yes, we should use water judiciously.

(Page 144)

Yes, we can say that rain is the ultimate source of water because it provides the majority of water on Earth through the water cycle, which includes processes like evaporation, condensation and precipitation. Rain replenishes rivers, lakes and groundwater, which are essential sources of water for plants, animals and people.

(Page 145)

The reason for this is the reckless overuse and wastage of water, which has led to this situation. People have been using water without thinking of ways of conserving or replenishing the groundwater.

(Page 146)

Yes, with increasing water contamination, the amount of usable water is becoming lesser and lesser because contaminated water is not safe for drinking or other essential uses. It's important to protect water sources from pollution to ensure there is enough clean water for everyone.

(Page 146)

Yes, brushing teeth with the tap turned off will make a difference to the total water used in a day because leaving the tap running wastes water. Turning off the tap while brushing helps conserve water, making sure we don't waste it unnecessarily.

EXERCISES

A. 1. (c) 2. (c) 3. (c) 4. (a) 5. (d) 6. (c)

- B. 1. Cholera; dysentery 2. ground 3. aquifer 4. population 5. Conservation
 6. hazardous 7. Rainwater harvesting
- C. 1. False 2. False 3. True 4. False 5. True
- D. 1. Water cycle 2. Groundwater 3. Infiltration 4. Water level 5. Aquifers
- E. 1. We can say that water on Earth is found in all three states because it can exist as a solid (ice), a liquid (water) or a gas (water vapour). When it's cold, water freezes into ice, when it's warm, it becomes liquid water, and when it's very hot, it turns into water vapour, which we can't see but is still there in the air. We can feel this water vapour when we place our palm near the mouth and breathe out a few times. If we feel our palm, it will seem wet. That is due to water vapour. So, to reiterate, water can be found as ice, water or water vapour, making it present in all three states on Earth.
 - **2.** Three problems due to water shortage:
 - Crop production is affected. This may cause insufficient supply of food.
 - People have to walk miles to fetch water.
 - People have to stand in long queues to get their daily water.
 - **3.** Underground water comes from aquifers.
 - **4.** Sometimes, water from lakes, rivers and ponds may seep into the ground. The seeped water collects between layers of hard rocks. This is called an aquifer. Aquifers are like huge underground lakes filled with gravel and rocks from which water can be pumped out.
 - 5. The major causes of groundwater depletion are:
 - Rapidly rising population and changing lifestyles: Increase in population has increased the demand for groundwater. More and more groundwater is being extracted for constructing houses, buildings, factories, etc. This leads to depletion of the water table.
 - Agricultural activities: Increase in population has also led to an increase in the crop production. For this, more and more wells and tubewells have been drilled for irrigation in the past two decades.
 - Reducing forest cover: Increase in population has led to rapid expansion of urban areas. For constructing more and more houses, the forest cover is being removed. This results in the removal of soil. As a result, less amount of water is seeping into the ground, thereby causing lowering of the water table. Loss in forest cover also causes soil degradation.
 - Reducing quality of groundwater: Sometimes, toxic substances get dissolved in water which may seep underground. This may result in the contamination of groundwater. Even though water can be treated to get rid of contaminants, this can prove to be very costly. Therefore, we should take care that the water does not get polluted.
 - 6. The Ahar-Pyne system of water conservation is an old system from Bihar. It is about

cleverly using rivers for farming. Ahar is like a catchment area, and Pyne is the channel taking water to the fields. It's a way of sharing river water for farming in a smart and local way.

- **7.** In the dry areas of Rajasthan, people have built Khadins. These are like fields that help rainwater seep into the ground slowly, recharging the water underground. It's like a teamwork of farming and water saving.
- **F. 1.** We should conserve water because it is a precious resource necessary for life, and there is a limited amount available on Earth. Conserving water helps ensure that there is enough for everyone's needs and protects ecosystems that depend on water.
 - **2.** We should not dispose of hazardous things in water bodies because they can pollute the water, making it unsafe for drinking, swimming and supporting aquatic life. This pollution can harm the environment and the health of people and animals who depend on clean water.
 - **3.** Increase in population has increased demand for groundwater because more people need water for drinking, sanitation and agriculture. As a result, we are using groundwater faster than it can be replenished, leading to depletion of aquifers and shortages of water.
- **G. 1 and 2**: Students can do these with the help of the teacher.

THINK AND ANSWER

- H. 1. During severe water scarcity, activities like washing cars, watering lawns, and filling swimming pools should be stopped to conserve water for essential needs like drinking, cooking and sanitation.
 - **2.** The sea level roughly remains the same because the amount of water entering the ocean from rivers and precipitation is balanced by the amount of water leaving through evaporation and formation of ice. This balance helps maintain the sea level and keep it stable over time.

ACTIVITY



Unit VIII: Shelter



Changes in Shelter Pattern

ANSWERS

EXERCISES

- **A. 1.** (b) **2.** (a) **3.** (a)
- B. 1. True 2. False 3. True 4. False
- C. 1. Kutcha 2. government 3. flat or an apartment 4. repairs
- **D. 1.** Most people who live in villages build *kutcha* houses. *Kutcha* houses are built using simple materials like mud, stone, bamboo, straw and leaves. The floors were usually made of clay and coated with cow dung. Village people get materials like mud, straw and leaves from their surroundings, without paying much. Forest products like bamboo and wood are also easily available there. *Kutcha* houses are temporary in nature and need frequent repairs.

Pucca houses, on the other hand, are permanent houses. These are made of bricks, cement, tiles, marble, iron and glass.

The walls of a *pucca* house are made of bricks and then plastered with a mixture of cement and sand. The roofs are made of concrete, asbestos or corrugated iron sheets. The flooring is made of marble or stones.

Pucca houses are more durable and stronger than *kutcha* houses. They do not need repair frequently. They are built with all modern facilities and a proper drainage system. These houses are more expensive.

- **2.** It is difficult to live in slums because they often lack basic amenities like clean water, sanitation, electricity and proper housing. Slums can also be overcrowded, with limited space and resources, leading to poor living conditions, health issues and social challenges for the people living there.
- **3.** Multistoreyed buildings are being constructed in large numbers due to shortage of land in the cities.
- **4.** Two features of a good house:
 - It is well ventilated.
 - It has a strong and sturdy construction to provide safety and protection from weather conditions.

THINK AND ANSWER

E. People living in slums suffer from ill health because slums often lack access to clean water, proper sanitation facilities, and healthcare services. Also, overcrowding and poor living conditions in slums can lead to the spread of diseases and infections, making it difficult for people to stay healthy.

ACTIVITY





The Geographical Features of Our Country

ANSWERS

EXERCISES

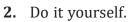
- **A. 1.** (b) **2.** (a) **3.** (c) **4.** (a) **5.** (c)
- B. 1. True 2. False 3. False 4. False 5. True
- C. 1. southern 2. Thar 3. Himalayan mountains 4. a cool 5. central
- **D. 1.** Very high hills are called mountains. Mountains have steep slopes. A plateau, on the other hand, is a nearly flat or uneven surface which is slightly higher than the surrounding area.
 - **2.** The southern part of India looks like a cone. It is surrounded by the Arabian Sea in the west, the Indian Ocean in the south and the Bay of Bengal in the east. Such an area is called a peninsula. A peninsula is a piece of land surrounded by water bodies on three sides.
 - **3.** A large part of our country has flat and level land. These areas are called plains. The Great Plains of India (the Northern Plains) are towards the south of the Himalayan mountains.

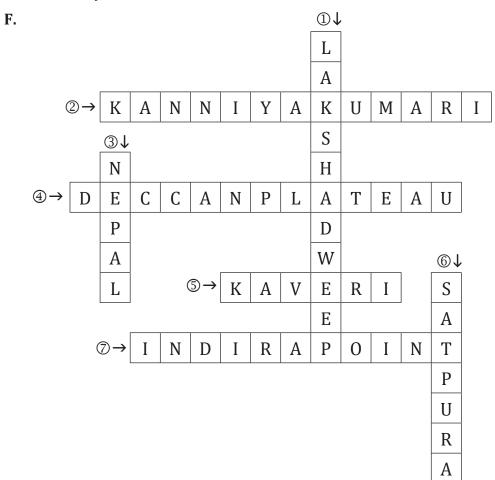
Most of the rivers coming from the Himalayas and central hills flow through this plain area. Some of the rivers are Ganga, Yamuna, Chambal, Narmada, etc. The rivers deposit fertile soil in this plain area. Thus, the Northern Plains are suitable for growing a variety of crops.

- **4.** The climate varies in different parts of India because of differences in geography and seasons. Mountains have cool climates, coastal areas are moderate and the Northern Plains experience hot summers and cold winters. Rainfall also differs across regions.
- **5.** Plain areas are fertile in our country because the rivers like the Ganga, Yamuna, Chambal, etc., deposit fertile soil in this plain area.

THINK AND ANSWER

E. 1. Many rivers have originated from the Himalayan mountain ranges because the Himalayas are the highest and largest mountain range in the world. The melting snow and glaciers in the Himalayas provide a constant source of water, which flows downhill and forms rivers. These rivers then travel through valleys and plains, providing water for drinking, irrigation and other essential needs to people living downstream.





ACTIVITY

Do it yourself.





Reading Maps

20

ANSWERS

EXERCISES

- A. 1. (b) 2. (c) 3. (c)
- **B. 1.** True **2.** False **3.** True **4.** True **5.** False
- C. 1. neighbourhood 2. North 3. an atlas 4. the compass
- D. 1. A landmark is a place/thing that becomes popular among people or that can be recognised easily. It helps us to locate the place we have to reach. It could be a hospital, market, or school. It is difficult to draw all the landmarks on paper. In order to overcome this difficulty, people use symbols for landmarks marked on sketches or maps. Different landmarks have different symbols.
 - **2.** The science of map making is called cartography. The person who creates maps is called a cartographer.
 - **3.** The ratio between the map distance and the ground distance is called the scale of the map.

THINK AND ANSWER

E. A legend or an index is given on a map. It explains the meaning of the different colours used on the map.

ACTIVITY



Unit IX: Travel and Communication



21

The Joy of Travelling

ANSWERS

EXERCISES

- A. 1. (b) 2. (b) 3. (b) 4. (b) 5. (c)
- B. 1. True 2. False 3. False 4. False 5. True
- **C. 1.** One reason why people travel is to meet new people and see new places.
 - 2. Travellers experience new places, people, cultures and adventures during their journeys. They may see beautiful landscapes, taste different foods, meet interesting individuals and learn about the world around them. Travelling brings joy and excitement as people explore and discover new things, making memories that last a lifetime.
 - **3.** Travel is a bridge connecting individuals from different cultures. It offers an opportunity to build connections, make new friends, and understand the world through the eyes of the others.
 - **4.** In our busy life, travel becomes a source of relaxation and joy. It helps to kill boredom.
 - **5.** One thing that travellers can learn about during their adventures is different cultures. They can discover how people in other parts of the world live, their traditions, customs, languages and ways of life. This helps travellers gain a better understanding and appreciation of diversity, fostering empathy and respect for others.

ACTIVITY

1 and 2: Do it yourself.



Unit X: Local Institutions



Together We Can

ANSWERS

EXERCISES

- A. 1. (a) 2. (b) 3. (c) 4. (b) 5. (c)
- **B. 1.** The main differences between a Gram Sabha and a Gram Panchayat are mentioned below.

| | Gram Sabha | | Gram Panchayat |
|----|---|----|--|
| 1. | It has all the adult, wise members of the village. | 1. | It has five people who are elected by the Gram Sabha. |
| 2. | It is a meeting place for discussing certain important issues like the annual budget (funds required for implementing various government schemes) and for making plans for the development of the village. | | It mainly collects taxes from the people and maintains various records, e.g., the record of number of births and deaths in a year. It also implements government schemes, which help in the upliftment of the villagers. |
| 3. | It keeps an eye over the panchayat's working and efficiency. | 3. | All the duties taken up by the panchayat requires the approval of the Gram Sabha. |

- 2. Gram Panchayat, Municipal Corporation and the courts.
- **3.** The Gram Panchayat consists of five elderly people of a village, called the Panchas.
- **4.** The main function of the Panchayati Raj is to manage local governance and development at the village level. This includes making decisions on local issues, implementing government schemes and addressing the needs of the community such as water supply, sanitation, education and healthcare.
- 5. People in villages draw underground water through wells and handpumps.

THINK AND ANSWER

- C. 1. Rahul must have gone to the lower court earlier.
 - 2. After not getting a favourable decision, he would have appealed in the higher court.
 - **3.** The topmost court of the country is the Supreme Court.

4. All these courts come under the judicial organ or judiciary branch of the government.

ACTIVITY