

ENVIRONMENTAL STUDIES TEXTBOOK

Unit-1 Our Surroundings and Culture

CHAPTER 1

Movement of Families

Exercise

Write the correct answers:

1. inheritance
2. Gregor Johann Mendel, Dr. Har Govind Khorana
3. (d) From all of the above
4. Mausiji
5. A family consisting of parents and their one or two children is called a nuclear family. A family in which parents, grandparents, uncles, aunts, cousins live together is called a joint family. In a nuclear family, only parents are there to take care of the children, whereas in a joint family, everyone cooperates in the upbringing of the children.

Examination Type Questions

1. **Tick (✓) the correct option:**
a. iii. joint family b. i. twins c. ii. Johann Mendel
2. **Fill in the blanks:**
a. nuclear family b. grandmother c. Gregor Johann Mendel d. Physical
3. **Identify the given pictures and write their names:**
Gregor Johann Mendel, Dr. Har Govind Khorana
4. Nowadays, families are migrating to cities in search of work (business) or to get higher education. In cities, most of the houses are small in which few people can live, so joint families are converting into nuclear families. There are many other reasons for the splitting of joint families such as the huge number of family members, their habits, behaviour, financial condition, spending capacities and continuous change in the ways of celebrating festivals, etc.

CHAPTER 2

Movement of Families

Exercise

Write the correct answers:

1. Earlier, the basic needs of people were food, clothing and a house, but now, the basic needs have become food, clothing, shelter, education, employment and other comforts. Due to this reason, many people have moved away from their hometowns and started living at other places.
2. Beyond the reasons listed in the chapter, people might settle in new places due to factors like: family reunification, seeking better healthcare, escaping political persecution, pursuing educational opportunities, environmental concerns, cultural immersion, retirement lifestyle, religious freedom, natural disaster displacement, and proximity to loved ones; essentially, any factor that could significantly improve their quality of life compared to their current location.
3. people face several challenges when they settle in a new place, including:
Emotional Challenges – Families experience homesickness and struggle to adjust to a new environment.
Cultural Differences – They may find it difficult to adapt to new customs, traditions, and languages.

Housing Issues – Finding a suitable and affordable place to live can be challenging.

Employment Struggles – Securing a stable job in an unfamiliar place takes time.

Education Adjustment – Children may find it hard to settle into a new school and make friends.

Social Isolation – Building a new social network and feeling a sense of belonging can be difficult.

Legal and Documentation Issues – Families may face challenges in completing paperwork and registrations.

Examination Type Questions

1. Tick (✓) the correct option:

a. ii. Fakhruddin b. i. Gujarat c. iii. both of these

2. Write 'T' for true and 'F' for false statements:

a. T b. F c. T d. F

3. Earlier, the basic needs of people were food, clothing and a house, but now, the basic needs have become food, clothing, shelter, education, employment and other comforts. Due to this reason, many people have moved away from their hometowns and started living at other places.

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5. The Somnath Temple is located in Prabhas Patan, Veraval, in the Saurashtra region of Gujarat, India. It's situated on the coast of the Arabian Sea.

6. The Kadana Dam was built in Gujarat, India, between 1979 and 1989.

CHAPTER 3

We are a bit Different

Exercise

Fill in the blanks:

1. Louis Braille, six

2. Pen, stylus.

Examination Type Questions

1. Tick (✓) the correct option:

a. i. b. iii

2. Answer the following questions:

a. In Braille script a pointed pen is used to write. It is known as stylus.

b. The type of scale used in Braille script is a unique 'scale' with a set of six dots in a line. This scale helps guide the placement of dots for forming Braille letters when using a stylus.

3. Write 'T' for true and 'F' for false statements:

a. T b. T c. F d. F

4. a. EYES b. SCHOOL

CHAPTER 4

Clean Together

Exercise

Write the correct answers:

1. We organized a cleanliness campaign in our school with proper planning and teamwork. A committee of teachers and student volunteers was formed, and awareness was created through speeches, posters, and discussions. Students were divided into groups to clean classrooms, playgrounds, and common areas. Additional dustbins were placed, a tree plantation drive was conducted, and hygiene sessions were held. Parents and local authorities were also involved. The campaign ended with rewards for active participants and a plan for maintaining cleanliness regularly. It successfully instilled a sense of responsibility and hygiene among students.
2. We take the following resolutions to make cleaning our habit:
 - We will not throw papers, pencil shavings, toffee wrappers, etc. in our class.
 - We will not write on the furniture, walls and floors, and will not make dirty them.
 - We will not spit everywhere and will not throw garbage here and there.
 - We will take a bath daily and will wear neat and clean clothes.
 - We will not use plastic bags.
 - We will contribute to keeping our streets, houses, schools and other public places clean.
 - When we go to the market to buy vegetables, groceries or other household items, we will always carry a cloth bag.
3. When a person visited Gandhiji's ashram, first of all, he was given the task of cleaning the toilet. Only after completing this work satisfactorily, he was given any other task because Mahatma Gandhi gave of most importance to cleanliness.
4. The **Swachh Bharat Mission** is a commendable initiative aimed at promoting cleanliness, hygiene, and sanitation across India. It has led to improved waste management, the construction of toilets, and increased awareness about cleanliness. This mission not only enhances public health but also boosts tourism and national development. Its success depends on collective responsibility, and every citizen must contribute to keeping India clean. A cleaner India means a healthier and brighter future for all.

Examination Type Questions

1. Tick (✓) the correct option:

a. i. 2 october b. i. healthy

2. Write 'T' for true and 'F' for false statements:

a. F b. F c. T

3. Here are three habits to keep their surroundings clean:

- We will not throw
- papers, pencil shavings, toffee wrappers, etc. here and there.
- We will not spit everywhere and will not throw garbage here and there.
- We will not use plastic bags.

4. Here are three materials that can be used instead of plastic to make carry bags:

- **Jute:** A strong, eco-friendly material often used for reusable bags.
- **Cotton:** Soft, durable, and biodegradable, making it a great alternative to plastic.
- **Hemp:** A natural, sustainable material that's tough and biodegradable, perfect for reusable bags.

5. Here are three items commonly found in household garbage that can be recycled:

- **Paper:** Newspapers, magazines, cardboard boxes, and office paper can all be recycled.
 - **Plastic Bottles:** Empty plastic bottles and containers can be recycled to make new products.
 - **Glass Bottles and Jars:** Glass items like bottles and jars can be recycled and reused in various forms.
6. Do it Yourself
 7. When a person visited Gandhiji's ashram, first of all, he was given the task of cleaning the toilet.
 8. Do it Yourself

CHAPTER 5

Come, Let's Play Games

Exercise

Write the correct answers:

1. **Indoor games** - char-bhar, chaupad, singh-bakri, ashta-changa, carom,
Outdoor games - Kabaddi, sitoliya, gilli-danda, Archery, Hockey.
2. Do it Yourself
3. Yoga develops the art of living. A positive attitude towards life also develops by it. Yoga also helps in the physical, mental, intellectual and spiritual development.
4. Here are a few tasks that can be done by blowing:
 - Fire can be lit by blowing.
 - Fire can be extinguished by blowing.
 - Musical instruments can be played by blowing.
5. Bhakti Sharma, Sachin Tendulkar

Examination Type Questions

1. **Tick (✓) the correct option:**
 a. i. gilli - danda b. ii. 21 June c. iii. both of these
2. **Write 'T' for true and 'F' for false statements:**
 a. T b. F c. F d. T
3. **Identify the given sports personalities and write the names of the games they play:**
 M.S. Dhoni-Cricket, Dhyan Chand-Hockey, Saina Nehwal-Badminton

CHAPTER 6

Seed Becomes a Plant

Exercise

Write the correct answers:

1. The necessary conditions for seed germination are:
 - **Water:** Seeds need moisture to soften the seed coat and activate enzymes for growth.
 - **Temperature:** Seeds require a suitable temperature to start the germination process (usually between 15°C and 30°C).
 - **Oxygen:** Seeds need oxygen for respiration, which provides the energy required for growth.
 - **Light (in some cases):** Some seeds need light to germinate, while others require darkness

2. A plant that grows without seeds is the potato.



3. Seeds are scattered at different places by strong wind, flowing in water, sticking to back of the birds and bodies of animals. This is called dispersal of seeds.
4. Humans eat various fruits and vegetables and throw their seeds after eating. These seeds when get adequate condition for germination, grows to become plants. In this way humans help in seed dispersal.
5. Tea, Coffee, Lady finger, Cauliflower, Peas
6. Seeds of the carrot grass

Examination Type Questions

1. Tick (✓) the correct option:

a. iii. iron b. i. Eucalyptus c. i. Africa

2. Write 'T' for true and 'F' for false statements:

a. T b. F c. T d. F

3. Here are some foods that come from plants and the parts of the plant they come from:

Roots: Sweet potato

Stems: Sugarcane

Seeds: Peas

4. Benefits of eating sprouts are -

- Highly nutritious
- Rich in fiber
- Enhances immunity
- Helps in weight loss
- Helps in digestion

Sprouts are rich in vitamins A, C, E, and K and minerals like iron, potassium, and magnesium. They also provide good dietary fiber, protein, and antioxidants.

5. Tea, Coffee, Lady finger, Cauliflower, Peas

CHAPTER 7

Glory of Trees

Exercise

Write the correct answers:

1. The relationship between plants and animals on the basis of their food is called Food Chain.
Example-
Carrot (Plant)-> Rabbit-> Fox-> Lion
2. A nature reserved area that provides protection or conservation to animals and birds is called a sanctuary.

3. Long time ago, the king of Jodhpur needed wood to construct his palace. So, he ordered to cut down the Khejari trees. The people of Bishnoi community protested against it. On the king's order, soldiers went to Khejari village to cut trees. As soon as, they started cutting down the Khejari trees, Amrita Devi Bishnoi hugged a tree and said, "Before cutting down the trees, you will have to cut me." The other people of the village also embraced the trees. The king's soldiers cut Amrita Devi and the other villagers along with the trees. along with Amrita Devi, sacrificed their lives to save the Khejari trees. In history, there is no such other incident where people have happened in which people have sacrificed their lives for trees. People got inspired by this incident and launched the Chipko Movement.
4. Trees give us fruits, flowers, cereals, vegetables, wood, medicines and oxygen.
5. Amrita Devi Bishnoi, a brave woman from the Bishnoi community, protected khejri trees in Jodhpur, India, at the cost of her life.
6. The land around the village is protected by naming it after folk God, Goddess, saint, and great men. This land is called an oran.
- 7.

| PARKS / SANCTUARIES | DISTRICTS |
|---|-------------------|
| 1. Ranthambore Tiger Reserve National Park | Sawai Madhopur |
| 2. Keoladeo National Park, Ghana Bird Sanctuary | Bharatpur |
| 3. National Desert Park | Jaisalmer, Barmer |
| 4. Sariska National Park | Alwar |

8. Amla Navmi
9. Food chain were first introduced by the Arab philosopher Al-Jahiz in 10th century.
10. There are 50 districts in Rajasthan.

Examination Type Questions

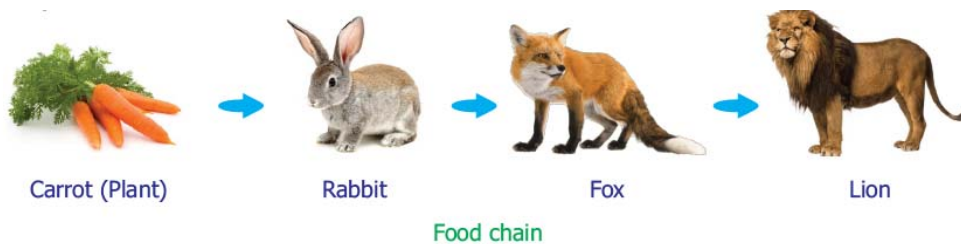
1. Tick (✓) the correct option:

a. i. Amrita Devi b. iii. Jaisalmar, Barmer c. i. plants

2. Fill in the blanks:

a. Conserve b. Alwar c. Meat d. Food Chain

- 3.



4. Keoladeo Ghana National Park, Sariska National Park, Bharatpur Bird Sanctuary.

CHAPTER 8

Unique World of Living Organisms

Exercise

Write the correct answers:

1.

| S. No. | Name of living beings | Way of obtaining food | Walk/swim/fly |
|--------|-----------------------|--|---------------|
| 1. | Bird | seeds, berries, fruit, insects, other birds, aquatic vegetation, grain, dead animals, garbage etc. | fly |
| 2. | Fish | live foods, flake food, pellets etc. | swim |
| 3. | Peacock | fruit, berries, grains, small mammals, reptiles, small snakes and insects. | fly |
| 4. | Lizard | foods from plants, like fruits and vegetables, insects and small animals | Walk |
| 5. | Butterfly | Nectar of the flower | fly |
| 6. | Mosquito | plant nectar like juices from flowers and fruits, plant sap, honeydew and blood | fly |
| 7. | Dog | meat and plant-based foods | Walk |

2. small mammals , largest land animals, small passerine bird , grow about 11 cm (4.3 inches) long
3. When the bats fly at night, they make a high frequency sound that reflects back after striking any object. This produces an echo. The bats follow this echo and fly easily in the dark.

Examination Type Questions

1. Tick (✓) the correct option:
a. i b. ii c. iii
2. Write 'T' for true and 'F' for false statements:
a. T b. F c. F d. T
3. Paste the pictures of any three insects and write any one characteristic of each of them:



Housefly



Mosquito



Butterfly

Housefly: they can see in all directions.

Mosquito: they can see in all directions.

Butterfly: they have a pair of antennae and an exoskeleton.

4. We are mostly feeding food for domestic animals, animals in the zoo, sanctuary etc, because they are not free and they can't find food themselves.

Unit-2 Precious Water

CHAPTER 9

Sources of Water

Exercise

1. hand pump
2. hand pump
3. square
4. machine

Examination Type Questions

1. **Tick (✓) the correct option:**
a. iii. both of these **b. i.** Parcha Bawadi **c. ii.** electricity
2. **Answer the following questions:**
 - a. Taps, tanks, hand pumps, tube wells, wells, Step wells, ponds, rivers, lakes etc.
 - b. To meet the water needs of the increasing population, big dams are constructed over the rivers.
 - c. Here are two ways to conserve water:
Rainwater harvesting: Collect and store rainwater for later use. This can be done using rooftop harvesting, check dams, or recharge pits.
Fix leaks: Repair leaky pipes, taps, and toilets.
3. **Write 'T' for true and 'F' for false statements:**
a. F b. F c. T d. T
4. Do it yourself.

CHAPTER 10

Water flows from Upside toward Downside

Exercise

Write the correct answers:

1. we can use this in tab and some other things like waterfall , fountains etc
2. Ratchet is a wheel-like structure which is used at a well or baori. Several water containers are attached to it. When they are dipped into water, they get filled. Outside, when these containers come downwards through a moving wheel, water flows on the wall of the well. From there, water reaches to the fields though drains. Bull is used to run it. If in the middle of it, a sugarcane machine is attached, sugarcane juice is obtained and if mustard is used, we can get oil.
3. Ratchet is a wheel-like structure which is used at a well or baori. Several water containers are attached to it. When they are dipped into water, they get filled. Outside, when these containers come downwards through a moving wheel, water flows on the wall of the well. From there, water reaches to the fields though drains. Bull is used to run it. If in the middle of it, a sugarcane machine is attached, sugarcane juice is obtained and if mustard is used, we can get oil.
4. The supply of water to land to help the crops grow

Examination Type Questions

1. (i) What is sprinkler system ?
(ii) Describe the sprinkler system of irrigation.
(iii) How do sprinkler system work?
2. (i) What is ratchet system ?
(ii) Describe the ratchet system of irrigation.
(iii) How do ratchet system work?

3. pea, gram, onion
4. Ratchet is a wheel-like structure which is used at a well or baori. Several water containers are attached to it. When they are dipped into water, they get filled. Outside, when these containers come downwards through a moving wheel, water flows on the wall of the well. From there, water reaches to the fields through drains. Bull is used to run it.

CHAPTER 11

Life in Water

Exercise

Write the correct answers:

1. Lotus, Jalkumbhi
2. Dolphin, crocodile, tortoise
3. Do it yourself

Examination Type Questions

1. False
2. True
3. Plants found in water: Jalkumbhi, Lotus, Water Chestnut, Kumudini.
Plants found on land: Marigold, Neem, Rose, Moss, Mango, Khejari.
4. land
5. cold

CHAPTER 12

Dirty Water Spreads Diseases

Exercise

Write the correct answers:

1. Water in homes is purified by straining and boiling. These days, water is also purified through water purifiers fixed at homes.
2. Female anopheles
3. In stagnant water, we see small insects and mosquitoes. Mosquitoes lay their eggs, there, from which larva (newborn mosquitoes) come out. Larva, when grown, become mosquitoes.
4. Jaundice, Diarrhoea, Worms in stomach, Polio etc.

Examination Type Questions

1. 1. Mosquito bites 2. Mosquito bites 3. Contaminated
2. 1. Diarrhoea 2. Polio 3. Jaundice
3. 1. Jaundice 2. Diarrhoea 3. Worms in stomach
4. 1. Stomach pain, Fever, Nausea and vomiting 2. abdominal pain, weight loss, diarrhoea and fatigue
5. 1. Polio 2. chikungunya 3. Worms in stomach

CHAPTER 13

Play with Water

Exercise

Write the correct answers:

1. Things which dissolve in water: salt, sugar, coffee, vinegar, alcohol, lemon juice, honey, baking soda, food coloring and glucose.
Things which float on water: wood, paper, plastic bottles, ice, oil, sponge, cork, Styrofoam (thermocool), leaves and most types of boats.

Things which get drowned in water: Iron, Copper, Lead, Granite, Marble, Quartz, Glass, marbles, Raw potatoes, Eggs (if not buoyant), Coins

2. Oil floats on water because it is less dense than water; meaning, for the same volume, oil weighs less than water, causing it to rise to the surface.

Examination Type Questions

1. Things which float on water: feather, paper, leaf, piece of wood, pencil
Things which get drowned in water: rock, piece of glass, coin, bangle, chalk
2. False.
3. Objects float if they are less dense than water, and sink(drowned) if they are more dense. Density is how much "stuff" is packed into a space.
4. Hot water makes sugar dissolve faster because its molecules move more quickly, bumping into the sugar and breaking it down more efficiently.

Unit-3 Our Food and Our Food Habits

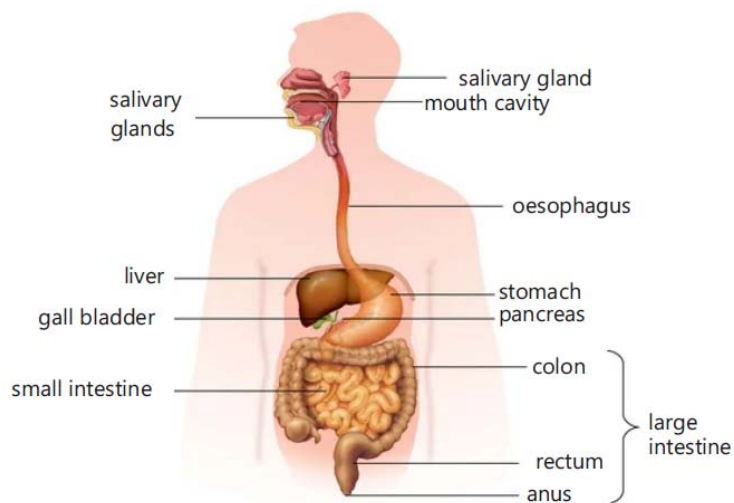
CHAPTER 14

From Eating to Digestion

Exercise

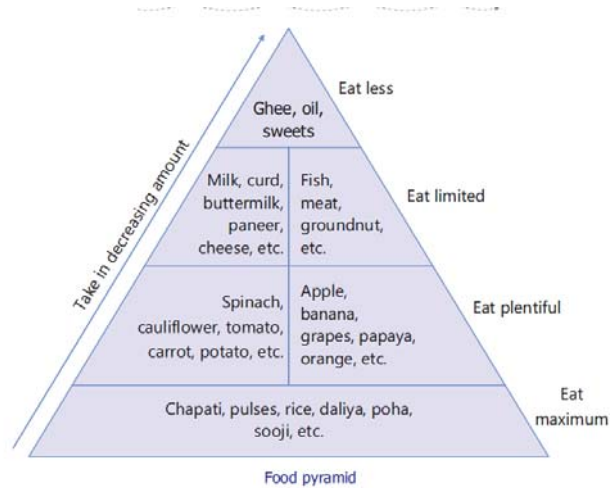
Write the correct answers:

1. Iron Folic Acid (I.F.A.)
2. Albendazole
3. Pulses, cereals, til, green leafy vegetables, walnut, almond, guava, sweet lime, dates, raisins, fish etc.
- 4.



Our digestive system

5.



Examination Type Questions

1. Tick (✓) the correct option:
a. ii. rice b. i. khichadi c. ii. fall ill
2. Write 'T' for true and 'F' for false statements:
a. T b. T c. F d. F
3. spinach, fish
4. green vegetables, dry-fruits, carrots
5. Chapati, milk, dals, rice

CHAPTER 15

Eat Whenever you want

Exercise

Write the correct answers:

1. oil, salt and vinegar
2. oil, salt and sugar
3. We should not waste food. We should take that much food on our plates, we feel to be enough to satisfy our hunger. By this action, our country's food grains get saved."

Examination Type Questions

1. 1. adding sugar 2. dried in sunlight 3. dried in sunlight 4. Keeping bread in an airtight container 5. Store whole onions in a ventilated basket or mesh bag at room temperature in a cool, dark place.
2. Here are the methods of preservation for each item:
 1. **Green Peas** – Blanch and freeze them in airtight bags or containers.
 2. **Ginger** – Store in a cool, dry place, refrigerate in a zip-lock bag, or freeze whole or grated.
 3. **Mango** – Preserve by drying, making pickles, or freezing pulp/slices.
 4. **Cluster Beans** – Blanch and freeze, or dry them for long-term storage.
 5. **Potato** – Store in a cool, dark, well-ventilated place; avoid refrigeration to prevent starch conversion.
3. Here are the methods of preservation for each item:
 1. **Green Vegetables** – Store in the refrigerator in a perforated bag or blanch and freeze for long-term storage.
 2. **Butter** – Keep refrigerated in an airtight container; for long-term storage, freeze it.
 3. **Curd** – Store in the refrigerator in a closed container to maintain freshness.

4. **Mango Pickle** – Preserve using oil, salt, and spices; store in an airtight jar in a cool, dry place.
4. To prevent food from getting perished for a long time, we adopt several measures such as adding sugar and preparing jam, preparing syrup, preparing pickle by adding vinegar, salt and oil, etc. Lady fingers, cluster beans, potato chips, mint, fenugreek, etc., are dried in sunlight and thus preserved. Food packed in tin boxes does not get spoiled as it is airtight. Food can also be preserved and conserved for extended time period by the use of chemical preservatives.
5. To avoid food wastage during wedding receptions, you can:
 1. **Plan Properly** – Estimate the guest count accurately to avoid excess food.
 2. **Serve in Portions** – Use controlled serving sizes to minimize leftovers.
 3. **Buffet Monitoring** – Refill dishes as needed instead of overloading the buffet.
 4. **Encourage Guests** – Suggest taking only what they can eat.
 5. **Donate Leftovers** – Arrange to donate excess food to local charities or food banks.
 6. **Use Composting** – Convert unavoidable waste into compost.

Unit-4 Our Pride

CHAPTER 16

Our Pride - III

Exercise

Write the correct answers:

1. Pandit Madan Mohan Malaviya established the Banaras Hindu University (BHU) in Varanasi.
2. Dr. Bhimrao Ambedkar
3. Jija Bai.

Examination Type Questions

1. From the life of Dr. Bhimrao Ambedkar, we learn several important lessons:

Perseverance and Hard Work – Despite facing discrimination and hardships, he remained focused on his education and goals.

Courage to Fight Injustice – He stood against social evils like untouchability and worked for equality.

Value of Education – He believed that education is the key to empowerment and progress.

Determination to Bring Change – His relentless efforts led to the drafting of the Indian Constitution, ensuring justice and rights for all.

Self-confidence and Leadership – He proved that with determination, one can overcome any challenge and achieve greatness.

2. The major social cause behind Dr. Bhimrao Ambedkar's struggles in childhood was untouchability and caste discrimination.

Being born into the '**Mahar**' caste, which was considered "untouchable" in the traditional caste system, he faced severe social discrimination. He was denied basic rights like:

- **Education without discrimination** – He had to sit separately in school and was not allowed to drink water from the same pot as upper-caste students.
- **Equal treatment** – He faced insults and exclusion from society due to his caste.

- **Social dignity** – Untouchables were not given respect or equal opportunities in society.

These injustices motivated him to fight against caste discrimination and work for social equality and justice.

3. Throughout his life, he emphasized the use of indigenous resources so that India could be made completely self-dependent in the field of nuclear science. He also established three nuclear reactors, named ‘Apsara’, ‘Cyrus’ and ‘Zerlina’. He stressed on the peaceful use of atomic power.
4. Pandit Madan Mohan Malviya
5. Pandit Madan Mohan Malviya was a great freedom fighter, educationist, and social reformer. He was deeply committed to preserving Indian culture and values through education. He strongly believed in the power of knowledge and worked to establish an education system that promoted Indian heritage. He played a key role in founding **Banaras Hindu University (BHU)** in Varanasi. To achieve this, he gathered funds from various sources, including a significant donation from the **Nizam of Hyderabad**. His dedication to education earned him the title ‘Teacher of the Nation’.

CHAPTER 17

Our District

Exercise

Write the correct answers:

1. Gram Panchayat is made up of many towns, villages, etc. It provides water, electricity, transport, education, health and cleanliness, etc. in the villages.
2. It is the largest state of India in terms of area. There are 50 districts in Rajasthan. As per census 2011, Its population is 6.85 crore, out of which 5.15 crore is the rural population.
3. Do it yourself
4. Do it yourself
5. Do it yourself
6. Do it yourself

Examination Type Questions

1. Tick (✓) the correct option:
 a. iii. Western b. i. 3,42,23 sq km c. ii. Banks
2. Write ‘T’ for true and ‘F’ for false statements.
 a. F b. F c. T d. T
3. Do it yourself

Unit-5 Our Houses

CHAPTER 18

Types of Houses

Exercise

Write the correct answers:

1. A house may be kachcha or pucca but there should be an arrangement for light and fresh air in all of them as this keeps us healthy.
2. The roofs and walls of the houses of such places where stone is easily available are made of stone. Where stone is not available easily, houses there are made of mud and bricks.
3. Do it yourself
4. To build a house, the following building materials are needed:

- Bricks or Concrete Blocks – Used for constructing strong and durable walls.
- Cement – Acts as a binding material to hold bricks, stones, and other materials together.
- Sand – Mixed with cement for making mortar and concrete.
- **Steel (Iron Rods)** – Provides strength and support to the structure, especially in pillars and roofs.
- **Wood** – Used for doors, windows, and furniture inside the house.
- **Glass** – For windows and decorative elements to allow natural light.
- **Roofing Materials (Tiles, Metal Sheets, Concrete)** – Protects the house from weather conditions.
- **Paint** – Enhances the appearance and protects walls from damage.
- **Plumbing Materials (Pipes, Taps, Fittings)** – Necessary for water supply and drainage.
- **Electrical Materials (Wires, Switches, Bulbs)** – Essential for lighting and powering electrical appliances.

Each of these materials is important for ensuring the **strength, safety, durability, and comfort** of the house.

5. Do it yourself

Examination Type Questions

1. We use iron, brick, cement and concrete to make the roof of the houses which is called R.C.C. roofs.
2. Igloo
3. The government makes night shelters community houses (night shelters/Rain Baseras) for those who do not have a house of their own. In such houses, they get facilities like drinking water, clothes, shelf for keeping their belongings, toilet, primary health centre and things of recreation as television are also available without any fee. Rain Basera are open for twenty-four hours round the clock. Rain Baseras are built around bus stands, railway stations and other such public places.
4. It keeps us safe from bad weather such as rain, sunlight, storm and other natural disasters.
5. When building a house, besides the basic design and layout, you should also consider factors like: site conditions (soil type, drainage), energy efficiency, structural integrity, proper insulation, natural lighting, ventilation, storage space, accessibility, local building codes, budget constraints, materials selection, contractor expertise, and potential future needs for the house.
6. Government houses in Rajasthan are typically built by various government **agencies**, including the Rajasthan Housing Board.

CHAPTER 19

When the Disaster Came

Exercise

1. Earthquake occurs due to the movement inside the earth. This movement starts from a point inside the earth and spreads like the waves of water. This point is called the centre of earthquake. The intensity of an earthquake is measured on the Richter Scale. When the intensity of the earthquake is more than 5, houses can collapse but when it is less than 5, then we will feel the vibrations only. The things are seen to be shaking and cracks appear in the walls of the houses. Earthquake-resistant houses can bear an earthquake of 7 Richter intensity.

2.

1. loss of property and life

2. cracks on the road
 3. Tsunami is arrived in the sea
 4. collapsing of buildings
 5. Volcano eruption
3. Two major reasons for floods are: Heavy Rainfall , Collapsed dams
 4. Steps to Take During a Flood
 - **Ensure Safety First** – Move to higher ground or safe shelters immediately.
 - **Inform Authorities** – Call emergency services like police, tehsildar, or disaster management teams for help.
 - **Evacuate Affected People** – Use boats, ropes, and other rescue materials to shift people to safer locations.
 - **Set Up Relief Camps** – Temporary shelters should be arranged in government buildings, schools, or tents.
 - **Provide Essential Supplies** – Distribute food, clean drinking water, medicines, and blankets to affected people.
 - **Search and Rescue Operations** – Authorities should locate missing persons and provide medical help to the injured.
 - **Prevent Waterborne Diseases** – Clean water sources and use disinfectants to avoid infections.
 - **Restore Cleanliness** – Organize cleanliness drives to remove mud, debris, and foul smells from flooded areas.

Taking these steps can **save lives and help communities recover quickly** after a flood.

Examination Type Questions

1. Tick (✓) the correct option:
 - a. i. 26 January, 2001 b. iii. both of them c. ii. Richter scale
2. Write 'T' for true and 'F' for false statements.
 - a. F b. T c. T
3. We will provide food items, clothes, medicine etc. to help people during disaster like earthquake.
4. If a flood occurs in my village, I would help the victims by:
 - **Rescuing and Assisting** – Helping people reach safe places and providing first aid.
 - **Providing Essentials** – Distributing food, clean water, clothes, and medicines.
 - **Informing Authorities** – Calling emergency services for rescue and relief support.
 - **Helping in Shelters** – Assisting in setting up temporary shelters and relief camps.
 - **Participating in Cleanliness Drives** – Helping clean water sources and affected areas to prevent diseases.

By working together, we can **ensure safety and quick recovery** for everyone.

5. We can face natural calamities like **earthquakes** and **floods** by taking the following measures:

During an Earthquake:

- **Drop, Cover, and Hold** – Take cover under a sturdy table or stand in a doorway.
- **Stay Away from Windows and Heavy Objects** – These can break and cause injuries.
- **Evacuate Safely** – After the shaking stops, move to an open area away from buildings.
- **Emergency Kit** – Keep food, water, a flashlight, and a first-aid kit ready.

- **Build Earthquake-Resistant Houses** – Use strong materials and proper construction methods.

During a Flood:

- **Move to Higher Ground** – Evacuate immediately if flood warnings are issued.
- **Avoid Walking or Driving Through Water** – Floodwater can be deeper and stronger than it appears.
- **Store Essential Supplies** – Keep food, water, medicines, and important documents in a waterproof bag.
- **Listen to Alerts** – Follow weather reports and government warnings.
- **Clean and Disinfect Water Sources** – After the flood, ensure safe drinking water to prevent diseases.

Being **prepared, staying alert, and acting quickly** can help **reduce damage and save lives** during natural calamities

Unit-6 Our Occupations/Jobs

CHAPTER 20

Prosperity from Agriculture

Exercise

1. cooperative society and market
2. Do it yourself
3. Nowadays, chemical fertilizers like urea, D. A. P., etc. are being used to increase crop yields.
4. Some people put food items, leftovers, etc. in plastic bags and throw them out. Animals eat them along with the bags. These plastic bags get collected in their stomachs, due to which their intestines get blocked, and they die.
5. Horse keepers do many businesses like driving horse carts, participating in horse racing, providing horses for sports, and providing horses for brides and grooms in marriages.

Examination Type Questions

1. Tick (✓) the correct option:
a. ii. tractor b. iii. Horse c. iii. camel
2. Write 'T' for true and 'F' for false statements:
a. F b. T c. F d. T
3. Arrange the following steps in the correct sequence by writing numbers from 1 to 7:
1. Ploughing
2. Sowing
3. Spraying insecticide
4. Harvesting
5. Transporting to mandi
6. Packing the grains
7. Transporting from mandi to retailer

Unit-7 Our Means of Transport and Communication

CHAPTER 21

Life is Precious

Exercise

1. While walking on the roads, we should keep the following things in mind:

- **Use Footpaths** – Always walk on the sidewalk or left side of the road.
- **Follow Traffic Signals** – Cross only at pedestrian crossings and when the signal allows.
- **Look Both Ways** – Check for vehicles before crossing the road.
- **Avoid Distractions** – Do not use mobile phones or headphones while walking.
- **Wear Reflective Clothes at Night** – Helps drivers see you in low light.
- **Stay Alert** – Be aware of your surroundings and avoid running on roads.

Following these rules ensures **safety for yourself and others**.

2. While passing in front of a school, we should take the following precautions:

- **Drive Slowly** – Reduce speed as children may suddenly cross the road.
- **Watch for Pedestrians** – Be alert for students, teachers, and parents walking.
- **Obey School Zone Signs** – Follow speed limits and traffic rules near schools.
- **Avoid Honking** – Loud noises can disturb students and create panic.
- **Stop for School Buses** – Do not overtake or rush near a stopped school bus.
- **Use Pedestrian Crossings** – Always cross at designated zebra crossings.

Following these precautions ensures **safety for school children and others**.

3. Smoke and poisonous gases are released into the air due to vehicles, factories and burning of things. The presence of these things in the air is called **air pollution**

Examination Type Questions

1. Tick (✓) the correct option:

a. i. We should walk on the left side of the road. b. iii. both (i) and (ii)

2. Write 'T' for true and 'F' for false statements:

a. T b. T c. F d. T

3. Do it yourself

4. While walking on the roads, we should keep the following things in mind:

- **Use Footpaths** – Always walk on the sidewalk or left side of the road.
- **Follow Traffic Signals** – Cross only at pedestrian crossings and when the signal allows.
- **Look Both Ways** – Check for vehicles before crossing the road.
- **Avoid Distractions** – Do not use mobile phones or headphones while walking.
- **Wear Reflective Clothes at Night** – Helps drivers see you in low light.
- **Stay Alert** – Be aware of your surroundings and avoid running on roads.

Following these rules ensures **safety for yourself and others**.

CHAPTER 22

How to Save Fuel

Exercise

1. Wood – Used for cooking, heating, and sometimes in small-scale industries.
Coal – Used for electricity generation, heating and in industries like steel production.
Petrol – Used as fuel for cars, motorcycles and some small vehicles.
Diesel – Used in buses, trucks, trains and generators.
2. It was believed that many years ago, due to motion of the Earth and earthquakes, many plants and trees got buried under the ground. There was no air. The temperature and pressure were

also very high. As a result, these plants and trees transformed into coal. This is known as coal. Some people make coal from pucca firewood at home. This is called kachcha coal.

3. Petrol Vehicles:

- Cars (Sedans, Hatchbacks, SUVs)
- Motorcycles & Scooters
- Auto-rickshaws
- Small boats
- Some small generator engines

Diesel Vehicles:

- Trucks
- Buses
- Tractors
- Trains
- Large boats & ships
- Construction vehicles (e.g., bulldozers, cranes)

4. Ways to Conserve Petrol and Diesel:

- Use public transport instead of private vehicles.
- Carpool or use bicycles for short distances.
- Maintain vehicle engines to improve fuel efficiency.
- Avoid unnecessary idling of vehicles.
- Use fuel-efficient vehicles or switch to electric vehicles.
- Follow proper traffic rules to reduce fuel wastage.
- Promote renewable energy sources.

Examination Type Questions

1. Tick (✓) the correct option:

a. i. using bicycles for short distances b. i. dead plants

2. Write 'T' for true and 'F' for false statements:

a.T b.T c.F d.T

3. adopt eco-driving practices

4. Motorcycle-Petrol

Bus-Diesel

Sigri (Furnace)-Wood or Coal

CHAPTER 23

Our Heritage

Exercise

1. 1. Lohagarh Fort (Bharatpur, Rajasthan)

- Built in the 18th century by Maharaja Suraj Mal.
- Known as the "Iron Fort" because it was nearly invincible.
- Withstood multiple British attacks.
- Famous structures inside: Ashtadhatu Gate, Kishori Mahal, Moti Mahal.

2. Kumbhalgarh Fort (Rajsamand, Rajasthan)

- Built by Rana Kumbha in the 15th century.
- Has the **second longest wall in the world** (after the Great Wall of China).

- Birthplace of Maharana Pratap.
- Located in the Aravalli Hills with strong defenses.

3. Sonar Fort (Jaisalmer Fort, Rajasthan)

- Known as the "Golden Fort" because of its yellow sandstone walls.
- Built in 1156 AD by **Raja Rawal Jaisal**.
- One of the **few living forts** where people still reside.
- Famous for its **Raj Mahal, Jain temples, and Havelis**.

4. Jaigarh Fort (Jaipur, Rajasthan)

- Built by **Maharaja Jai Singh II** in 1726.
- Houses the world's **largest cannon on wheels – Jaivana Cannon**.
- Connected to Amer Fort via underground tunnels.
- Used as a military stronghold to protect Jaipur.

2. Historical monuments are our national heritage, and their safety is the responsibility of every citizen.
3. Do it yourself

Examination Type Questions

1. Tick (✓) the correct option:

- a. i. Chittor Fort b. iii. Maharana Kumbha

2. Fill in the blanks:

- a. palaces b. 7 c. Jodhpur d. museum

3. Match the following:

- a. Ranthambore Fort → (ii) Trinetra Ganesh Temple
 b. Chittor Fort → (i) Eye of Mewar
 c. Kumbhalgarh Fort → (iii) Unique example of architecture

4. Name any four museums of India:

Ahad Museum(Udaipur), Bhartiya Lok Kala Museum (Udaipur), Albert Hall Museum (Jaipur), Mehrangarh Fort Museum (Jodhpur)

5. Identify these heritage sites and name them:

Kirti Stambh, Jaigarh Fort, Lohagarh Fort

CHAPTER 24

Traveling in the Mountains

Exercise

1. Climbing mountains is challenging and dangerous. Many people have lost their lives climbing Mount Everest. Reaching the summit of Mount Everest is extremely dangerous due to its steep slopes, extremely cold weather, icy winds, and difficulty in breathing due to low pressure at high altitudes.
2. It is essential for a mountaineer to have certain qualities such as being disciplined–risk, taking capacity, patience and tolerance.
3. Mt. Everest (29,029 ft/8,848 m.), Mt. K2 (8,611 m /28,251 feet), Mt. Kangchenjunga (28,169 ft /8,586 m), Mt. Lhotse (27,940 ft/8,516 m), Mt. Makalu (27,825 ft/8,481 m), Mt. Cho Oyu (26,906 ft/8,201 m.), Mt Dhaulagiri (26,795 ft/8,167 m.)
4. Mountaineers have to carry oxygen cylinders with them to breathe properly.

Examination Type Questions

1. Tick (✓) the correct option:
a. i. Mount Everest b. ii. Bachandri Pal
2. Fill in the blanks:
a. Edmund Hillary (New Zealand) , Tenzing Sherpa (Nepal) b. equipment c. garbage
3. Match the following:
a. Premlata Agarwal → (ii) First Indian woman to climb Mount McKinley
b. Santosh Yadav → (iii) First youngest woman to climb Mount Everest
c. Bachendri Pal → (i) First Indian woman to climb Mount Everest
4. Identify and name them:
Santosh Yadav, Bachendri Pal, Premlata Agarwal

CHAPTER 25 Our Earth and the Space

Exercise

1. Sun
2. Sunita Williams, Kalpana Chawla, Rakesh Sharma ,Ravish Malhotra, Gopichand Thotakura etc.
3. We cannot see stars during the day because of the bright light of the Sun. We can see them only in darkness.
4. Saturn
5. Rakesh Sharma was the first Indian astronaut who travel to space.

Examination Type Questions

1. Tick (✓) the correct option:
a. i. moon b. iii. Rakesh Sharma
2. Fill in the blanks:
a. Sun b. Saptarishi Constellation c. lunar
3. Name the eight planets of our solar system:
Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.
4. Draw the phases of moon from Amavasya to Purnima:
Do it yourself