# Teachers' Manual 3

# **Blue Planet**

**A Textbook of Environmental Education** 





2647, Roshan Pura, Nai Sarak,Delhi-110006 Phone: 98994 23454, 98995 63454 E-mail: blueskybooks@gmail.com

#### BLUE PLANET-3

# 1. Different People Different Work

A. 1. b 2. b 3. b 4. a 5. c B. 1. catches thieves 2. cares plants 3. designs buildings 4. brings letters 5. drives car, bus etc. 6. treats patients 7. guards house 8. teaches us 9. does household chores—sweeps, clean utensils, etc. 10. mends shoes C. 1. The work we do to earn money is called our occupation. Occupations are also called professions. 2. The people who help us in doing household jobs at our home are called our domestic helpers. 3. Handicrafts are the usable things made by hands of some skilled persons. They are like clothes, bags, baskets, furniture, etc. 4. Some people serve the community for free. They work selflessly for the betterment of the society. They are called social workers; like Mother Teresa, Annie Besant, etc. 5. Some children work to earn money and support their family. D. Do yourself E. doctor tailor teacher gardener policeman HOTS: Mechanic.

# 2. Playing is Fun

**A.** 1. c 2. c 3. c 4. c 5. a **B.** Do yourself **C.** 1. We play games to keep us healthy and fit. 2. Indoor games are played inside the house or under the roof while outdoor games are played outside in an open area like ground or stadium 3. Chess, ludo and badminton are three indoor games. Cricket, football and hockey are three outdoor games. 4. Kanchas, *gilli-danda*, *lattu* and *pitthu* were the games played in the past. 5. Cricket, football and archery are the three games which are played by people as their occupation. **HOTS:** Kanchas, *gilli-danda* and *lattu* type of games are not so common these days because now, we have many more options to play with.

#### 3. Plants: Our Friends

**A.** 1. b 2. a 3. b 4. c 5. c **B.** 1. No 2. No 3. Yes 4. Yes 5. Yes **C.** 1. Some plants need support to stand or to climb up because they have very weak stems. They cannot stand on their own. 2. Plants which grow in water are called water plants. Lotus, water-lily and hydrilla are some water plants. 3. Strawberry, broccoli and kiwi are three plants that were not grown earlier in India. 4. We get fruits, vegetables, medicines, fibres and wood from plants. 5. Three trees whose wood is used for making furniture are teak, sheesham and oak. **D.** 1. Tulsi, 2. Lotus, 3. Cactus, 4. Mehndi **E.** Apple Rose Tomato Pea

#### 4. Leaves

**A.** 1. c 2. b 3. a 4. c 5. b. **B.** 1. big 2. rough 3. stomata 4. roots 5. mehndi **C.** 1. The different parts of a leaf are: leaf blade, side veins, main veins and stomata. 2. The process of making food in plants, using sunlight, carbon dioxide gas and water by chlorophyll is called photosynthesis. 3. Curry leaves, bay leaves and coriander leaves are used to add flavour in food. 4. Mehndi leaves are used to make dye and palm leaves are used to make roofs of houses. 5. A pit that is dug in the ground to let the organic waste decompose and break down into compost (humus), is called a compost pit. **HOTS:** The silkworms feed on shahtoot or mulberry leaves.

#### 5. Insects and Worms

**A.** 1. a 2. c 3. b 4. a 5. c **B.** 1. Yes 2. Yes 3. No 4. Yes 5. Yes **C.** 1. Tiny animals like mosquito, housefly, bedbug, ant, etc. are called insects. 2. Insects have six legs and their body is divided into three parts with wings. They have no bones in their body and have antennae to smell and taste. 3. Tiny animals who have flat head and long soft body without bones are called worms. Their body is divided into many segments, each with a pair of legs to walk or swim. 4. Earthworm and leech are two worms. 5. A lizard is commonly seen crawling on the walls. It eats mosquitoes,

house flies and spiders. It uses its tongue to catch its prey. **HOTS:** Earthworm is seen a lot in the rainy season.

# 6. Birds

**A.** 1. c 2. b 3. c 4. c 5. a **B.** Do yourself **C.** 1. There are many parts in a bird's body; like wings, feathers, beak, legs, and claws. 2. A bird has a very light body with hollow bones and thin plates. It flies with the help of its wings. The wings are joined to the body with strong muscles. They are the modified forelimbs which move upstroke and downstroke. These strokes make the bird fly. 3. Three types of feathers are: **Body feathers** to cover the entire body. Down feathers that are soft and fluffy to keep the bird's body warm. Flight feathers in the tail and wings for flight. 4. The types of beak the birds have: a. Sparrow has short, hard and horny beak to crack open the grains, nuts and seeds. **b.** Woodpecker has strong and chisel shaped beak to make holes in the bark of trees and pull out insects. c. Parrot has curved beak to crack nuts and hard fruits. d. Duck has broad and flat beak with tiny holes at the side to grab the plants and insects from the muddy water. 5. The types of feet and claws the birds have: a. Swimming birds like ducks have three toes in front and one at the back. The three front toes are joined by a thin skin. b. Scratching birds like hens have sharp scratching claws to scratch the ground for insects and grains. c. Wading birds like herons have long legs with little webbed toes to prevent from sinking in the mud. d. Flesh-eating birds like eagles have powerful feet with curved and sharp claws called talons to capture their prey. E. Ostrich, Eagle, Pelican, Cuckoo, Kite. HOTS: Parrots have sharp and hooked beak to crack open the hard fruits and nuts.

# 7. Cooking Food

**A.** 1. b 2. b 3. a 4. c 5. c **B.** 1. Steaming 2. Baking 3. Baking 4. Frying **C.** 1. We cook most food items because cooking makes the food soft, tasty and easy to chew and digest. 2. Different methods of cooking are boiling, baking, frying, roasting, grilling

and steaming. 3. Wok and pressure cooker are two main cooking vessels. 4. Two materials used for making cooking vessels are steel, and aluminium. 5. People living in cities use a gas stove or oven to cook food. **HOTS:** Our food habits are related to the method of cooking as if we regularly eat fried food, it may lead us to obesity. Health conscious people choose only boiled or steamed food to eat.

# 8. Means of Transport

**A.** 1. b 2. a 3. b 4. c 5. b **B.** Do yourself **C.** 1. **Evolution of transport:** Long ago, people used to walk on foot to go from one place to another. With the passage of time they started using animals for help, then invented wheel, later the steam engines. And in the modern time vehicles run on petrol, diesel or CNG. 2. In villages, bullock carts and tongas are used to move from one place to another. 3. The means of land transport are cycle, scooter, motorcycle, car, bus, truck and train. 4. Aeroplane and helicopter are the two means of air transport. 5. Ports are places where boats and ships can dock and carry people or loads to or from land. **HOTS:** We cannot cover long distances by tongas because they are by horse. And animals have a limit of working, they drawn get tired.

#### 9. Means of Communication

**A.** 1. a 2. b 3. b 4. c **B.** 1. Yes 2. Yes 3. Yes 4. No 5. Yes **C.** 1. Communication is a way to tell the other people what we think or feel. It helps to keep in touch with our friends, relatives and rest of the world. 2. People who cannot hear or speak, communicate with their hands, they use their hand movements to say what they want. This is called sign language. 3. The journey of a letter: A written letter is posted in the letter-box. Postman takes it to the post office. There it is stamped and sorted according to the areas. Postman of that area delivers the letter to the written address. 4. An e-mail is the fastest means of sending messages and pictures anywhere at anytime. 5. Books, magazines and news-papers are the printed materials for mass communication.

**HOTS:** STD: Subscriber Trunk Dialling, ISD: International Subscriber Dialling, SMS: Short Message Service

# 10. Pottery

**A.** 1. b 2. c 3. c 4. b **B.** 1. Yes 2. Yes 3. Yes 4. No **C.** 1. The art of making different items using clay on a potter's wheel, is known as pottery. 2. Vases, cooking vessels, pots and toys are four pottery items. 3. The person who makes clay pots is called a potter. 4. The potter first kneads the clay and put it at the center of the wheel. He spins it fast and gives desired shape to the clay with his hands. He removes the ready pot from the wheel with a thin thread. He leaves it to dry and then bake it in the kiln. After baking, he finally polishes and paints the pot. **HOTS:** On Diwali, we use lots of diyas made of clay.

#### 11. Textiles

**A.** 1. a 2. a 3. c 4. b **B.** 1. body 2. fibres 3. dupatta 4. Knitting 5. yarns **C.** 1. Fibres are threads that can be created from many natural sources; like cotton from cotton seeds, wool from sheep's hairs, silk from silk-worms, etc. They can also be created with synthetic methods such as nylon, polyester, etc. These fibres are spun into yarns to make fabric. 2. Weaving is a process of making cloth on handlooms that run on electricity. While knitting is done on knitting machines. 3. We wear clothes to cover our body and protect us from heat, cold, rain and dust. 4. Frock, shirt and pant are three stitched clothes we wear. 5. Saree, dupatta and turban are three unstitched cloths we wear. **HOTS:** In India, turban is considered as a part of honour because it is always worn around head. And head is the most respectable part of our body.

### 12. Weather and Seasons

**A.** 1. a 2. b 3. c 4. a **B.** 1. rainy 2. summer 3. winter 4. spring **C.** 1. Weather is the condition of air at a particular time of a place. The weather of a place keeps changing from day to day. 2. When same type of weather condition continues for a long period of time, it is called a season. 3. Name of five seasons are: summer

season, monsoon, autumn, winter season and spring season. 4. Autumn season is known as fall because most trees shed their leaves in this season. **HOTS:** Afternoon is the hottest time of a day because the sun is over our head.

# 13. Maps and Directions

**A.** 1. c 2. a 3. b 4. a **B.** 1. The names of directions are: east, west, north and south. 2. A map is a drawing of a place on paper. Its top is always north direction. 3. A sketch is a rough drawing of a place. 4. A plan is a detailed map of a relatively small area like room, house or a building. **HOTS:** The building is on Rahul's north, the park is on his south and the market is on his west side.

#### 14. Houses

**A.** 1. a 2. a 3. b 4. c 5. c **B.** 1. Yes 2. Yes 3. Yes 4. Yes 5. No **C.** 1. A simplex is a single storeyed pucca house. It is made of cement, steel, bricks and wood. 2. A houseboat is a house built on a boat. It floats on water. 3. A good house is always clean and dust free. It should be properly ventilated to get enough sunlight and fresh air to breathe. 4. We should keep our house clean by sweeping and moping every day. Toilets and bathrooms should be cleaned with disinfectants every day. Furniture and objects should be dusted daily to remove the dust. And wastes from the dustbin should be emptied and cleaned daily. 5. City people decorate their houses using various objects, like wall hanging, lamps, paintings, carpets, flower vases and decorative plants. **HOTS:** It is important to have wire nettings on windows to keep the mosquitoes and flies away from home and letting the fresh air and light come in.

# **Model Test Paper-1**

**A.** 1. b 2. c 3. b 4. c 5. a **B.** 1. The work we do to earn money is called our occupation. 2. Indoor games are played inside the house or under the roof. While outdoor games are played outside in an open area like ground or stadium. 3. Curry leaves, bay leaves and coriander leaves are used to add flavour in food. 4. Earthworm and leech are two werms. 5. People living in cities use

a gas stove or oven to cook food. **D.** 1. Tulsi, 2. Lotus, 3. Cactus, 4. Mehndi

# **Model Test Paper-2**

**A.** 1. b 2. b 3. c 4. a 5. c **B. Evolution of transport:** Long ago, people used to walk on feet to go from one place to another. With the passage of time they started using animals for help, then invented wheel, later the steam engines. And in the modern time vehicles run on petrol, diesel or CNG. 2. We wear clothes to cover our body. Clothes protect us from heat, cold, rain and dust. 3. Vases, cooking vessels, pots and toys are four pottery items. 4. Autumn season is known as fall because most trees shed their leaves in this season. 5. A plan is a detailed map of a relatively small area like room, house or a building.