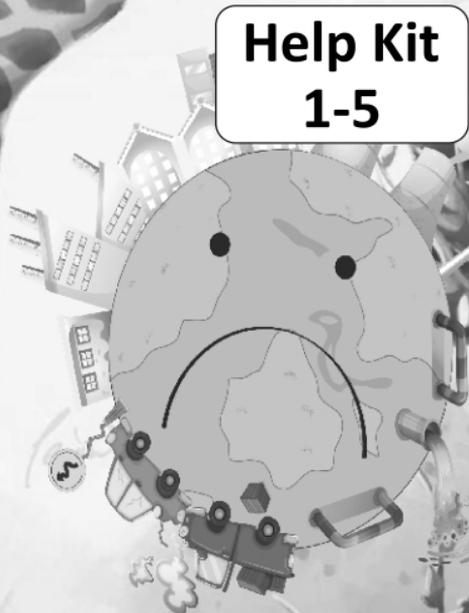




Environmental Buzz

Akanksha Rastogi

**Help Kit
1-5**



Teacher's Manual

Environmental Studies (Class-1)

UNIT I : OUR BODY

CHAPTER I : ORGANS OF OUR BODY

A. Left to right : Face, Neck, arm and hand, Leg and feet; Eye, nose, mouth, Ear **B.** 1. (c) 2. (c) 3. (c) **C.** eyes, hair, lips, mouth, ears. **D.** eyes, nose, mouth

CHAPTER 2 : FUNCTIONS OF SENSE ORGANS

A. 1. (b) 2. (a) 3. (c) 4. (b) **B.** 1. sense 2. five 3. skin 4. one **C.** 1. nose 2. skin 3. ears **D.** see, hear, smell, taste, feel

UNIT II : OUR NEEDS

CHAPTER 3 : THE CLOTHES WE WEAR

A. 1. (b) 2. (a) 3. (a) **B.** 1. smart 2. different 3. woollen 4. raincoat 5. cool **C.** 1. Clothes protect us from heat, cold and rain. 2. We wear cotton clothes in summer. 3. We wear woollen clothes in winter. 4. We wear uniform for school. **D.** 1. frock 2. shirt 3. skirt 4. socks 5. trousers 6. gloves

CHAPTER 4 : THE FOOD WE NEED

A. 1. (b) 2. (b) 3. (c) 4. (c) **B.** 1. potato, tomato, radish 2. apple, banana, grapes 3. chapati, dal, rice, **C.** 1. stale 2. hurriedly 3. uncovered 4. dirty **D.** 1. I take my breakfast in the morning. 2. I take my lunch in the afternoon. 3. I take my dinner at night.

Fun Time : 1. (a) suger (b) chilly 2. (a) rasgolla, cake (b) tomato, lemon

CHAPTER 5 : WE NEED WATER

A. 1. (c) 2. (a) 3. (c) **B.** 1. filter 2. vessels 3. bathing 4. rivers 5. cooking **C.** 1. (e) 2. (c) 3. (b) 4. (a) 5. (d)

PRACTICE SET-I

A. 1. (c) 2. (b) 3. (a) 4. (c) 5. (c) **B.** 1. skin 2. smart 3. cool 4. slowly 5. filter **C.** Clothes protect us from heat, cold and rain. 2. I take my dinner at night. **D.** 1. holding, eating 2. chips, rasgolla 3. shirt, trousers 4. apple, banana 5. rivers, wells

CHAPTER 6 : HABITS OF CLEANLINESS

A. 1. (a) 2. (a) 3. (b) **B.** 1. clean 2. bath 3. hands 4. morning, bed 5. wash **C.** 1. F 2. T 3. T 4. F **D.** 1. (d) 2. (c) 3. (b) 4. (a) **E.** Cross 1. match stick 2. some 3. any 4. without 5. one

CHAPTER 7 : A GOOD HOUSE

A. 1. (a) 2. (d) 3. (c) 4. (c) B. 1. shelter 2. store 3. roof 4. clean 5. good C. 1. receive guests 2. sleep 3. take bath 4. study 5. ease ourselves

Fun Time : 1. bed room 2. study room 3. bathroom 4. drawing room 5. living room 6. toilet 7. study room 8. kitchen

CHAPTER 8 : SAFETY RULES

A. 1. (a) 2. (d) 3. (d) 4. (c) B. 1. F 2. T 3. T 4. F 5. F

Fun Time : We should not play on the road.; We should not get down from a moving bus.; We should not board a moving bus.

UNIT III : OUR FAMILY

CHAPTER 9 : THE FAMILY WE LIVE IN

A. 1. (b) 2. (c) 3. (a) B. 1. family 2. house 3. small 4. help C. 1. cook food, attends household work 2. earns money, also help at home

UNIT IV : OUR NEIGHBOURHOOD

CHAPTER 10 : OUR SCHOOL

A. 1. (b) 2. (c) 3. (a) B. 1. F 2. F 3. T 4. T C. 1. Librarian 2. gardiner 3. pen

PRACTICE SET-II

A. 1. (a) 2. (b) 3. (a) 4. (c) 5. (a) B. 1. bath 2. house 3. store 4. principal 5. help C. 1. F 2. F 3. T 4. F D. 1. cooks food, attends household work 2. mug, soap

MODEL TEST PAPER-I

A. 1. (c) 2. (a) 3. (c) 4. (a) 5. (c) B. 1. five 2. raincoats 3. crops 4. yellow 5. shelter C. 1. We wear cotton clothes in summer. 2. I take my lunch in a afternoon. D. 1. potato, tomato 2. please, thank you 3. earns money, also helps at home 4. bed room, kitchen 5. reading writing

CHAPTER 11 : SERVICES IN OUR NEIGHBOURHOOD

A. 1. (b) 2. (c) 3. (b) B. 1. neighbours 2. services 3. friendly 4. safe, clean 5. park

CHAPTER 12 : OCCUPATIONS

A. 1. (b) 2. (a) 3. (c) B. 1. (d) 2. (a) 3. (b) 4. (c) 5. (e) C. 1. farmer 2. tailor 3. doctor 4. cobbler 5. blacksmith D. 1. (b) 2. (d) 3. (e) 4. (a) 5. (c)

CHAPTER 13 : FESTIVALS

A. 1. (c) 2. (b) 3. (a) B. 1. Christmas 2. Eid 3. Diwali C. 1. (c) 2. (a) 3. (d) 4. (b) D. 1. Onam 2. Pongal 3. Ganesh 4. Durga

CHAPTER 14 : PLACES OF RECREATION

A. 1. (a) 2. (a) 3. (c) B. 1. zoo 2. fresh 3. fair 4. picnic C. 1. hill side or lake side 2. circus 3. zoo 4. fair D. 1. (d) 2. (c) 3. (b) 4. (a)

UNIT V : TRANSPORT

CHAPTER 15 : MEANS OF TRANSPORT

A. 1. (c) 2. (a) 3. (b) **B.** R– car, rickshaw, bicycle, bus; W– ship, boat; A– helicopter, aeroplane **C.** 1. two 2. four 3. three 4. no 5. four 6. four
D. 1. bus 2. train 3. ship

PRACTICE SET–III

A. 1. (b) 2. (b) 3. (b) 4. (a) 5. (c) **B.** 1. neighbours 2. cobbler 3. fresh 4. Christmas 5. aeroplane **C.** 1. The farmer grows food. 2. Diwali is a festival of lights. 3. We see the clowns at a circus. 4. A bus is faster than a bullock-cart. 5. An auto rickshaw has three wheels.

UNIT VI : NATURAL ENVIRONMENT

CHAPTER 16 : PLANTS AROUND US

A. 1. (b) 2. (c) 3. (b) 4. (a) **B.** 1. F 2. T 3. F 4. T 5. F **C.** T, T, S, H, H, S, **D.** Things not obtained from plants– steel grinder, glass of water, plastic bottle, mobile phone

CHAPTER 17 : ANIMALS AROUND US

A. 1. (b) 2. (a) 3. (a) 4. (a) **B.** 1. tree 2. jungle 3. sex 4. water **C.** 1. (c) 2. (d) 3. (e) 4. (a) 5. (b) **D.** rabbit–carrot; dog–bone; monkey–banana; bird–grains; **E.** 1. PARROT BUTTERFLY, SPARROW, HOUSEFLY, RABBIT, FROG, **F.** 1. land 2. land 3. holes 4. land 5. holes 6. water

CHAPTER 18 : CARE OF ANIMALS

A. 1. domestic 2. wool 3. clean, dry 4. teaser 5. bath **B.** 1. F 2. F 3. T 4. F 5. T 6. T

CHAPTER 19 : ANIMAL HOMES

A. 1. (c) 2. (c) 3. (c) **C.** 1. (e) 2. (d) 3. (b) 4. (c) 5. (a) **D.** 1. (f) 2. (g) 3. (b) 4. (a) 5. (c) 6. (e) 7. (d)

CHAPTER 20 : THE SUN, THE MOON AND THE STARS

A. 1. (b) 2. (c) 3. (c) **B.** 1. countless 2. heat 3. moon 4. west 5. light **C.** 1. T 2. T 3. T 4. F 5. F

PRACTICE SET–IV

A. 1. (b) 2. (a) 3. (b) 4. (c) 5. (c) **B.** 1. wild 2. tease 3. stable 4. light 5. hole
C. 1. F 2. F 3. T 4. F 5. T

MODEL TEST PAPER–II

A. 1. (c) 2. (c) 3. (b) 4. (c) 5. (c) **B.** 1. service 2. Id 3. pets 4. bath 5. countless **C.** 1. farmer 2. fair 3. three **D.** 1. F 2. F 3. T

Teacher's Manual

Environmental Studies (Class-2)

UNIT I : OUR BODY

LESSON 1 : BODY ORGANS

A. 1. (c) 2. (b) 3. (a) **B.** 1. bones, muscles 2. skin 3. lungs 4. shoulders 5. trunk **C.** 1. (c) 2. (d) 3. (b) 4. (a) **D.** 1. belly 2. head 3. limbs 4. stomach 5. hips **E.** 1. F 2. T 3. T 4. F 5. T **F.** 1. The heart pumps blood to all parts of our body. 2. Muscles give shape and form to our body. They also help in movement. 3. Our body have five sense organs. 4. The skin covers all part of our body. 5. The work of the tongue is to taste things.

Fun Time : 1. eyes 2. skin and eyes 3. skin and eyes 4. eyes and skin 5. eyes and skin 6. tongue 7. nose 8. ears

LESSON 2 : KEEPING HEALTHY

A. 1. B 2. B 3. B 4. G 5. G **B.** 1. (b) 2. (c) 3. (d) 4. (a) **C.** Circle the fruits, vegetables and milk **D.** We can keep ourselves clean by (i) washing hands and feet after using toilet (ii) cutting nails (iii) brushing teeth every morning and evening (iv) taking a bath every day (v) washing hands before and after eating **E.** Doing exercise daily makes us (i) fit (ii) active (iii) strong (iv) healthy (v) slim **F.** We can keep our surrounding clean by (i) not throwing garbage anywhere (ii) not allowing water to stand (iii) not spitting anywhere (iv) keeping the toilet clean after use (v) growing plants around the house to keep the air clean

Fun Time : 1. clock 2. needle 3. chair 4. comb 5. brush

UNIT II : OUR NEEDS

LESSON 3 : THE FOOD WE EAT

A. 1. (a) 2. (b) 3. (b) 4. (c) **B.** E, P, B, B, E, B, P, E, E **C.** 1. cereals, pulses, fruits 2. milk, fish, eggs 3. cereals, pulses, fruits 4. meat, chicken, eggs **D.** 1. (e) 2. (c) 3. (f) 4. (g) 5. (h) 6. (d) 7. (b) 8. (a) **E.** We need food for energy, strength, protection from disease and growth. **F.** 1. Wash your hands 2. Eat at a fixed time 3. Chew your food well 4. Do not overeat 5. Avoid too many sweets and fast foods.

Fun Time : Order of pictures : 6, 4, 2, 1, 5, 3

LESSON 4 : SAFE WATER FOR DRINKING

A. 1. (c) 2. (a) 3. (c) **B.** 1. on the ground 2. on the ground 3. under the ground 4. above the ground **C.** 1. cleaning the vessel 2. covering the

vessel 3. using a ladle to take out water 4. boiling water to kill germs **D.** 1. hand pump 2. pond 3. lake 4. river 5. tap **E.** 1. filtering 2. boiling

PRACTICE SET-I

A. 1. (b) 2. (b) 3. (c) 4. (a) **B.** 1. bones, muscles 2. food 3. city supply 4. milk 5. filter, boil **C.** 1. stomach 2. lunch 3. river 4. comb **D.** 1. The heart pumps blood to all parts of the body. 2. Three ways to keep myself clean are (a) washing hands and feet after using toilet (b) brushing teeth every morning and evening (c) taking a bath everyday 3. We need food for energy, strength, protection from diseases and growth. 4. Water can be made safe for drinking by filtering and boiling.

LESSON 5 : DIFFERENT TYPES OF HOUSES

A. 1. (c) 2. (a) 3. (b) **B.** 1. kuchcha house 2. tents 3. caravans 4. igloos 5. flats 6. stilt houses 7. houseboat **C.** tents, igloo, kuchcha house, caravan, tents, house boats **D.** 1. (a) 2. (c) 3. (d) 4. (e) 5. (b)

LESSON 6 : OUR CLOTHES

A. 1. (b) 2. (a) **B.** 1. cotton 2. sheep 3. loom 4. tailor 5. winter **C.** 1. summer 2. winter 3. rain 4. going to school 5. hospital **D.** Circle 1. buttons, needle, thread, sewing machine, **E.** Clothes protect us from heat, cold, rain and wind. **F.** We wear clothes to cover our body, look smart and give ourselves a special look. **G.** 1. washing properly 2. ironing properly 3. keeping properly 4. avoid touching with dirty hands 5. avoid sitting at dirty places

Fun Time : 1. doctor 2. policemen 3. leader 4. nurse

UNIT III : OUR FAMILY

LESSON 7 : FAMILY CELEBRATIONS

A. 1. joy, fun 2. birthday 3. hill stations 4. refresh 5. tired **B.** 1. 3 2. 7 3. 3 4. 7 5. 3 **C.** 1. (c) 2. (a) 3. (d) 4. (b) **D.** CAKE, SAMOSA, ICE CREAM, SANDWICH, TOFFY, FRUITS

LESSON 8 : SAFETY AT HOME

A. 1. electric plugs 2. blade 3. fire 4. toys **B.** 1. safety 2. fire 3. on the stairs 4. on the roof **C.** 1. F 2. T 3. T 4. F

Fun Time : Unsafe child : touching the hot press ; touching the electric plugs; cutting paper with scissors, lightning gas with matchstick

UNIT IV : OUR NEIGHBOURHOOD

LESSON 9 : FAMILIES AROUND US

A. 1. (c) 2. (a) 3. (b) **B.** 1. families 2. happily 3. security 4. help **C.**

Neighbours are the people of the families living around us. **D.** The families living around us make our neighbourhood. **E.** We should live with our neighbours happily and peacefully. **F.** We can live happily with our neighbours if we help each other, make friends with them, share happiness with them, live and work with them.

PRACTICE SET-II

A. 1. (a) 2. (c) 3. (b) 4. (b) **B.** 1. igloo 2. hill stations 3. help 4. stilt **C.** 1. tent 2. loom 3. on the stairs 4. tired **D.** 1. We wear clothes to cover our body, look smart and give ourselves a special look. 2. In case of injury, put water park or ice on the injured part. 3. Neighbours are the people of families living around us. 4. Washing and ironing properly, avoiding touching them with dirty hand or dirty places.

MODEL TEST PAPER-I

A. 1. (c) 2. (b) 3. (c) 4. (b) **B.** 1. skin 2. sorry 3. joy, fun 4. ice **C.** 1. head 2. sheep 3. fire 4. big **D.** 1. Doing exercise daily makes us (i) fit (ii) active (iii) strong (iv) healthy (v) slim 2. (i) Wash your hands (ii) eat at a fixed time (iii) chew your food well (iv) do not overeat (v) avoid too many sweets and fast foods. 3. (i) filtering (ii) boiling 4. clothes protect us from heat, cold, rain and wind.

LESSON 10 : SOME IMPORTANT PLACES

A. 1. neighbourhood 2. neighbours 3. shops 4. post offices 5. policemen
B. up to down : left : policeman, neighbour, postman; right : doctor, fireman, shopkeeper **C.** left to right : market, post office, school, park, hospital, police station **D.** left to right : post office, hospital, market, park
E. All religions teach us to speak the truth, be kind to all and help the needy. **F.** 1. market 2. hospital 3. post office 4. park 5. police station

LESSON 11 : THE FESTIVALS WE CELEBRATE

A. 1. (b) 2. (b) 3. (a) **B.** 1. Diwali 2. Holi 3. Eid 4. Guruparv 5. Christmas
C. Left to right : Holi, Christmas, Diwali, Eid **D.** 1. (c) 2. (d) 3. (a) 4. (b)
E. Diwali : decoration, worship, exchange gifts; Eid : prayers, embracing, cooking sewain; Holi : playing with colours, greeting, singing and dancing; Guruparv : decoration, prayers, procession; Christmas : decoration, prayers, exchanging gifts **F.** 1. halwa 2. sewain 3. cake 4. gujhia

UNIT V : TRANSPORT AND COMMUNICATION

LESSON 12 : MEANS OF TRANSPORTATION

A. 1. (a) 2. (b) 3. (c) **B.** 1. (c) 2. (d) 3. (e) 4. (a) 5. (b) **C.** 1. bus 2. train 3. aeroplane 4. boat 5. spacecraft 6. autorickshaw **D.** 1. aeroplane 2. boat

3. autorickshaw **E.** 1. bus, truck, train 2. boat, ship, steamer 3. aeroplane, helicopter, jet **F.** We move from one place to another for work, meeting friends and relatives, business and pilgrimage. **G.** The movement of goods and people from one place to another is called transportation **H.** Three means of transportation are bus, train and aeroplane

Fun Time : animal : Tonga, bullock cart; man : bicycle; cycle-rickshaw; machines : motorcycle, car

LESSON 13 : SAFETY ON ROADS

A. 1. (c) 2. (b) 3. (a) **B.** 1. lights 2. zebra 3. stop 4. move 5. play **C.** 1. T 2. F 3. F 4. T 5. F **D.** Column B pictures up to down : walk on the footpath; sit properly in the bus; cross the road at zebra crossing; wait in a queue for the bus; never play on the road. **E.** Be alert while walking on the road. Never run on the road. Do not talk while crossing the road. **F.** Do not get into or get out of a moving bus. Do not stand on the foot board. Do not lean out of a moving bus.

LESSON 14 : MEANS OF COMMUNICATION

A. Communication means sending messages, information on news to others. **B.** left to right : television, newspaper, radio, telegraph, post box, telephone **C.** 1. letter or e-mail 2. telegram or telephone 3. telephone 4. radio 5. television 6. newspaper

PRACTICE SET-III

A. 1. (b) 2. (a) 3. (b) 4. (c) **B.** 1. neighbours 2. Christmas 3. ship 4. zebra **C.** 1. market 2. on water 3. green **D.** 1. All religions teach us to speak the truth, be kind to all and help the needy. 2. We move from one place to another for work, meeting friends and relatives, business and pilgrimage. 3. Do not get into or get out of a moving bus. Do not stand another stand on the foot board. Do not lean out of a moving bus. 4. Communication means sending messages, information or news to others.

UNIT VI : NATURAL ENVIRONMENT

LESSON 15 : PLANETS AND THEIR USES

A. 1. (c) 2. (c) 3. (b) **B.** 1. (c) 2. (d) 3. (a) 4. (b) **C.** 1. (c) 2. (e) 3. (b) 4. (a) 5. (d) **D.** 1. cereals, pulses, fruits, vegetables, cooking oil 2. fibres, wood, gum, paper, rubber 3. windows, doors, tables, chairs, almira 4. chilly, pepper, ginger, turmeric, cardamom 5. Cotton fibres are spun into yarn, yarn is weaved to make cloth. 6. wood, charcoal 7. tyre, tube, raincoat, gumboots, gloves **Fun Time :** left to right : rose, sunflower, lotus, marigold

LESSON 16 : USES OF ANIMALS

A. 1. (c) 2. (b) 3. (a) **B.** 1. (b) 2. (d) 3. (e) 4. (a) 5. (c) **C.** 1. cow, goat, buffalo
2. cow, buffalo, camel 3. goat, sheep, buffalo 4. donkey, camel, bulls
D. 1. shoes, bags, belts 2. sweater, gloves, socks 3. sori, shirt, kurta 4.
curds, cheese, butter 5. candles, medicine, polish for wood.

LESSON 17 : SURFACE OF OUR EARTH

A. 1. (b) 2. (a) 3. (b) **B.** 1. valleys 2. land, water 3. rivers 4. deserts 5. forests
C. left to right : hills, deserts, sea, valley **D.** 1. rivers 2. round 3. both land
and water 4. three-fourths 5. forests **E.** plain, hill, mountain, valley, plateau,
river, stream, lake, pond, sea

LESSON 18 : MAN MADE CHANGES ON THE EARTH

A. 1. house 2. roads 3. comfort 4. canal 5. mines **B.** 1. F 2. T 3. T 4. F 5.
T **C.** Fields : Man grows different types of crops in fields for food. cloth
etc. Canals : Canals carry water from dame to fields to water the crops.
Factories : Useful things are produced in factories.

PRACTICE SET-IV

A. 1. (c) 2. (b) 3. (a) 4. (b) **B.** 1. mountains 2. honey 3. forests 4. comfort
C. 1. cow 2. three fourths 3. forests 4. groups **D.** 1. Cotton fibres are spun
into yarn, yarn is waveed to make cloth. 2. plain, hill, mountain, valley,
plateau, river, stream, lake, pond, sea 3. cactus, prickly pear 4. camel,
doneky, bull

MODEL TEST PAPER-II

A. 1. (b) 2. (b) 3. (c) 4. (c) **B.** 1. shops 2. Eid 3. stop 4. canals **C.** 1. television
2. mountains 3. milk 4. forests **D.** 1. All religions teach us to speak the
truth, be kind to all and help the needy. 2. Diwali : decoration, worship,
exchange gift; Eid : prayers, embracing, cooking sewain; Holi : playing
with colours, greeting, singing and dancing; Guruparv : decoration,
prayers, procession; Christmas : decoration, prayers, exchanging gifts 3.
The movement of goods and people from one place to another is called
transportation. 4. plain, hill, mountain, valley, plateau, river, stream, lake,
pond, sea



Teacher's Manual

Environmental Studies (Class-3)

UNIT I : OUR BODY

LESSON 1 : EXTERNAL ORGANS

A. 1. (b) 2. (a) 3. (b) 4. (a) **B.** 1. arms 2. walk, jump 3. different 4. head 5. legs **C.** 1. holding, lifting 2. walking, running 3. smelling, breathing 4. testing, speaking 5. seeing, showing, feelings **D.** 1. eyes 2. nose 3. ears 4. tongue 5. skin **E.** 1. (c) 2. (e) 3. (d) 4. (b) 5. (a) **F.** Pictures of 1. leg 2. clap 3. teeth 4. tongue 5. neck **G.** 1. My neck helps me to move my head. 2. We write, hold books, draw with pencil. 3. I have ten fingers and ten toes. 4. Five sense organs are eyes, ears, nose, tongue, and skin. 5. Main functions of the legs are walking, running and jumping. **Activity** : 1. body parts in pairs : eyes, ears, arms, legs

LESSON 2 : HUMAN BEINGS AND OTHER LIVING THINGS

A. 1. hen 2. mimosa 3. cow 4. rain tree 5. dog **B.** plants : 1, 2, 3; **Animals** : 4, 5, 6, 8, 12; Human beings : 7, 9, 10, 11, **C.** 1. stomata 2. girls 3. air tubes 4. lungs **D.** 1. (c) 2. (d) 3. (e) 4. (b) 5. (a) **E.** 1. Three living things are human beings, dog, banana, plant 2. Three non-living things are stones, car, river. 3. Plants need air, water and minerals to live. 4. Different living being reproduce in different ways. Plants reproduce from seeds. Insects, frogs, fishes, birds lay eggs. Women, cat, dog, etc. give birth to babies. 5. A plant is a living thing so it die one day. Stone is not a living thing so it does not die. 6. River water cannot move by itself upwards. So it is not a living thing. **F.** 1. Locomotion : Changing place by animal and humans is called locomotion. 2. Respiration : Using oxygen to burn food and get energy for work and play is called respiration. 3. Living things : Living things are those who take food and water, grow, breathe, move on their own, feel and react, reproduce and die. 4. Non-living things : Non-living things are those which do not take food and water, grow, breathe, move on their own, feel or react, reproduce or die. 5. Reproduction : Producing more of their own kind by plants animals and human is called reproduction. **G.** A cat, a plant and a boy, all (i) take food and water (ii) grow (iii) breathe (iv) move on their own (v) feel and react **H.** 1. A jasmine flower and a cat has different body parts. 2. Jasmine flower takes water and minerals with the help of roots. A cat has a mouth for eating and drinking 3. Jasmine plant makes its own food which it supplies to its flower. A cat eats small animals. 4. A jasmine flower produces seeds which grow to produce a Jasmine plants and flowers. A cat gives birth to babies. 5.

Jasmine plant remains fixed to the soil and its flower is fixed with it. A cat is not fixed to the soil. A cat can change place. **Activity** : left to right : write order 4, 2, 1, 5, 3 C. 1. dog 2. lion 3. cow/bull 4. cat 5. horse 6. hen/cock 7. duck 8. sheep

UNIT III : OUR NEEDS

LESSON 3 : THE FOOD WE EAT

A. Circle 1. bottle 2. honey bottle 3. rice 4. brinjal 5. leechi **B.** R : tomato onion, cucumber, turnip; C : lady's finger, potato, gourd, bitter gourd, brinjal **C.** 1. (c) 2. (a) 3. (b) 4. (b) 5. (c) **D.** 1. cereals, oils 2. body building 3. fruits, vegetables 4. milk 5. healthy **E.** 1. Two energy giving food are cereals and oils. 2. Pulses and eggs are body building foods. 3. Protective foods are fruits and vegetables which protect us from diseases. 4. Nuts can be eaten raw, it means we need not cook them before eating. 5. Five vegetables that can be eaten raw carrot, radish, tomato, onion, cabbage. **F.** We need food to give us energy, make us strong, help us to grow, repair old body parts, protect us against disease and regulate body activities. **G.** 1. Wash hands before and after every meal 2. Eat in a clean plate 3. Chew the food well 4. Do not overeat 5. Do not munch in between meals.

LESSON 4 : WATER FOR LIFE

A. 1. (b) 2. (b) 3. (b) 4. (a) **B.** 1. clean 2. cover 3. safe 4. dirty 5. precious **C.** 1. T 2. T 3. F 4. F 5. T **D.** 1. We cannot live without water because it helps in digesting the food and extracting the waste. 2. Animals need water for drinking and bathing. 3. We should drink clean and pure water. 4. We should not waste water because it is precious. 5. Pond water is not fit for drinking because it is unclean. 6. We should use a ladle to take water from a big vessel. 7. Do not leave the tap open. Do not use too much water for washing and cleaning. **E.** Water is used for drinking, cooking, cleaning utensils, bathing and cleaning clothes. **F.** 1. Clean the vessel before storing water. 2. Cover the vessel with a lid. The vessel should have a spout to take water. 4. Use a ladle to take out water. 5. Do not drink dirty water.

PRACTICE SET-I

A. 1. (b) 2. (a) 3. (a) 4. (a) **B.** 1. head 2. gills 3. body-building 4. milk 5. cover **C.** 1. walking, running 2. hen, snake 3. cow, buffalo 4. cereals, oil 5. drinking, cooking **D.** 1. Body parts in pairs : eyes, ears, arms, legs. 2. River water cannot move by itself upwards. So it is not a living thing. 3. A cat, a plant and a boy, all (i) take food and water (ii) grow (iii) breathe

(iv) move on their own (v) feel and react 4. We need food to give us energy, make us strong, help us to grow, repair old body parts, protect us against disease and regulate body activities. 5. Pond water is not fit for drinking it is unclean.

LESSON 5 : CLEAN AIR

A. 1. (c) 2. (a) 3. (a) 4. (a) **B.** 1. garbage 2. oxygen 3. covered 4. trees 5. polluted **C.** 1. F 2. T 3. F 4. F 5. T **D.** 1. Air is present all around us. 2. Air has weight. Air occupies space. 3. We feel air when it moves. 4. Mixing of air with dust, germs, smoke etc is called air pollution. 5. Due to air pollution humans get many diseases like asthma, bronchitis, lung cancer etc. Dust closes the stomata of the plants. They cannot breathe and die. **E.** 1. When we blow air into a flat balloon, it gets larger. Air from the mouth occupies the space in the balloon. 2. Weight a football with no air. Fill air into it and weight it again. Its weight increase. 3. Cover a burning candle with an inverted galss jar. The candle stops burning because the air supply is stopped. **F.** Five ways to purify air : (i) plant more trees (ii) build factories away from cities (iii) get the vehicles checked for pollution (iv) keep the drains covered (v) dump the garbage properly. **G.** Five causes of air pollution : (i) smoke from factories (ii) smoke from vehicles (iii) decaying garbage in the open (iv) stink from the public toilets (v) dust in the air. Five ways to control air pollution : (i) plant more trees (ii) build factories away from cities (iii) get the vehicles checked for pollution (iv) keep the drains covered (v) dump the garbage properly. **Activity** : Big jar has more air so the candle in the big jar will burn for a long time.

LESSON 6 : WE ALL NEED A HOUSE

A. 1. (c) 2. (c) 3. (b) **B.** 1. pacca 2. kuchcha 3. safety, comfort 4. fold **C.** 1. (c) 2. (a) 3. (e) 4. (b) 5. (d) **D.** 1. A house is our shelter. 2. Our house protects us from heat, cold, rain, storms, thieves and wild animals. 3. We get rest, comfort and happiness in our house. 4. We find kuchcha houses mostly in villages. 5. Man makes shelters for domestic animals. **E.** Circle the pictures of 1. dog 2. lion 3. bird 4. elephant 5. monkey

LESSON 7 : DRESSES WE WEAR

A. 1. suit 2. saree 3. turban, cap 4. winter, summer, rainy 5. uniform **B.** 1. (c) 2. (d) 3. (e) 4. (b) 5. (a) **C.** left to right : R, S, W, R, W, S, W, W **D.** 1. F 2. F 3. T 4. T 5. T **E.** 1. We wear clothes to cover our body. They protect us from heat, cold, rain, direct Sunrays, dust and insect bites. We look decent and in clothes. 2. Complete style of the clothes of a person is called his/her dress. In summer we wear dresses made of cotton cloth. In winter we wear dresses made of woollen cloth. 3. Most common dress

of women in cities saree and blouse or salwar kameez-dupatta. 4. The most common dress worn by men is trouser and shirt. 5. We wear special clothes on special functions. 6. We wear raincoats and gumboots in rains. They are made of plastic or rubber. 7. We wear sweaters, cap etc made of wool in winter.

LESSON 8 : KEEPING CLEAN

A. 1. healthy 2. morning, last 3. bath 4. before, after 5. shampoo, comb **B.** 1. (c) 2. (d) 3. (e) 4. (b) 5. (a) **C.** 1. Cleanness is necessary for good health. 2. A daily bath keep our skin clean. 3. Cold and clean water should be used for cleaning eyes. 4. We should use a clean towel or handkerchief to clean our nose. 5. We should wear properly washed clean clothes. 6. Germs grow on and around teeth whole night so we should brush in the morning. 7. Dirt gathers in long nails. **D.** Five good habits to keep clean are : (i) Brush your teeth twice – in the morning and night after the last meal. (ii) Take a bath everyday. (iii) Wash hair regularly. (iv) Wash your hands with soap and water before and after every meal. (v) Always wear clean clothes **E.** Five things that help us to keep clean are brush, comb, nail cutter, towel. cotton buds.

LESSON 9 : SAFETY RULES

A. 1. Carelessness or hurry 2. electrical appliances 3. zebra crossing 4. throwing things 5. safety **B.** 1. It may cut our skin. 2. It will give us shock. 3. We may be hurt by a vehicle. 4. We may fall down. 5. We may be wounded by barbed wires. **C.** 1. Accident are sudden hurts. 2. An accident causes injury and pain. 3. Accident happen when one or other person is careless or in a hurry. 4. We can prevent accidents if we remain careful when we do any work. 5. Safety rules help to avoid the things or situations where you can get hurt. **D.** 1. (i) do not play with sharp things like knives, blades, etc. (ii) Do not touch electrical appliances with wet hands. (iii) Do not go near the fire. (iv) Be careful while lighting crackers. (v) Never play or fly kites on the terrace. 2. Do not run or jump over desks. Do not put one another. Do not throw things on each other. Do not play rough games. Do not slide down the banister. 3. Never play on the road. Walk on the footpath. Cross the road at the zebra crossing. Be alert while walking on the road. Never tease animals on the road.

PRACTICE SET-II

A. 1. (b) 2. (b) 3. (a) 4. (c) 5. (c) **B.** 1. garbage 2. safety, comfort 3. saree 4. health 5. carelessness **C.** 1. Air occupies space. Air has weight. 2. Iron, brick 3. turban, cap 4. brush soap 5. carelessness, hurry **D.** 1. Mixing of air with dust, germs, smoke etc is called air pollution. 2. We get rest, comfort

and happens in our house. 3. We wear clothes to cover our body. They protect us from heat, cold, rain, direct sunrays, dust and insects bites. We look this decent and smart in clothes. 4. A daily bath keeps our skin clean. 5. Accidents are sudden hurts.

MODEL TEST PAPER-I

A. 1. (b) 2. (b) 3. (a) 4. (c) 5. (c) **B.** 1. stomata 2. cereals, oils 3. covered 4. uniform 5. health **C.** 1. tasting, speaking 2. drinking, cooking 3. shed, kennel 4. turban, cap 5. brush, soap **D.** 1. A plant is a living thing so it dies one day. Stone is not a living thing so it does not die. 2. Pond water is not fit for drinking because it is unclean. 3. Our house protects us from heat, cold, rain, storms, thieves and wild animals. 4. Our clothes protect us from heat, cold, rain, direct sunrays, dust and insects bites. 5. An accident causes injury and pain.

UNIT III : OUR FAMILY

LESSON 10 : THE FAMILY : SHARE AND CARE

A. 1. (b) 2. (a) 3. (c) 4. (c) **B.** 1. (b) 2. (a) 3. (a) 4. (c) **C.** 1. They are enjoying picnic in garden. Eating food in the garden is fun. 2. There are wild animals in a zoo. It is fun watching different animals in the zoo. 3. There are animals, clowns and juggler in a circus. They all entertain us with their activities. 4. there are vendors, swings and eatables in a fair. We enjoy eatables and swings in the fair. 5. In the long summer, we go to hill station. The weather is very pleasant at a hill station. **D.** 1. A family is a group of people who are related to each other. 2. A small family of father, mother and one or two children is a happy family. 3. There are more than two children in a large family. 4. In a joint family grandparents live with the family. They love and protect the grandchildren and tell them stories. 5. Different means of recreation are playing indoor games, reading books, listening radio, watching television, singing and dancing. 6. We should always keep a happy smile on our face. 7. Relatives get together in joy and sorrow to help each other. **E.** A small family consists of father, mother and their one or two children. A large family consists of father, mother and their more than two children. A joint family consists of father, mother, their children, grandparents, uncles, aunt and cousins. **F.** Parents provide food, clothes, home, education and care during illness. **G.** Children should help their parents by (i) keeping things properly (ii) dusting the furniture (iii) helping mother in the kitchen (iv) bringing things from the market (v) entertaining guest.

UNIT IV : COMMUNITY LIFE

LESSON II : FAMILIES IN THE NEIGHBOURHOOD

A. 1. family 2. religious 3. help 4. together 5. sharing, caring **B.** 1. F 2. T 3. F 4. T 5. F **C.** 1. The families living near and around us from our neighbourhood. 2. People of the neighbourhood live like a family. 3. Children play together and share their things in the neighbourhood. 4. The best things the children learn in a neighbourhood is sharing and caring for each other. 5. We must be friendly with all neighbours and help them in need.

LESSON I2 : OCCUPATION OF PEOPLE IN THE NEIGHBOURHOOD

A. 1. (c) 2. (b) 3. (a) 4. (c) **B.** 1. teacher 2. librarian 3. painter 4. writer 5. barber **C.** 1. An occupation is a work someone does for earning money. 2. An architect designs houses. 3. A lawyer gives advice on legal matters. 4. A pilot flies an aircraft while a seilor sails a ship. 5. A goldsmith makes gold ornaments. **D.** 1. (e) 2. (d) 3. (b) 4. (a) 5. (c) **Activity :** 1. green grocer 2. vendor 3. plumber 4. mechanic 5. washerman 6. electrician 7. farmer 8. pilot 9. blacksmith 10. fruit seller

LESSON I3 : IMPORTANT PLACE IN THE NEIGHBOURHOOD

A. 1. market 2. hospital 3. post office 4. police 5. park **B.** 1. F 2. F 3. T 4. T 5. F **C.** 1. market 2. dispensary 3. post office 4. garden 5. school **D.** 1. Many shops together form a market. 2. Children go to school to study. 3. People go to the park for walking, jogging and relaxing. 4. Those patients who are very sick or badly injured are kept in the hospital. 5. (a) We call policeman in case of theft, robbery, murder etc. (b) we call firemen in case of fire.

LESSON I4 : THE FESTIVALS WE CELEBRATE

A. 1. (b) 2. (c) 3. (a) 4. (a) **B.** 1. Deepawali 2. Holi 3. Christmas 4. Eid 5. Independence Day, Republic Day **C.** 1. T 2. T 3. T 4. F 5. F **D.** 1. (c) 2. (b) 3. (e) 4. (a) 5. (d) **E.** 1. People worship the goddess Laxmi and Lord Ganesha on Deepawali. 2. Christian celebrate Christmas as the birthday of Jesus Christ. 3. National festivals are celebrated to mark important events of the nation. 4. The Sikhs have ten gurus. 5. Rakshabandhan is the festival of brothers and sisters. **F.** 1. Christmas 2. Guruparb 3. Holi 4. Dussehra

LESSON I5 : CARING FOR THE NEEDY HUMANS

A. 1. (b) 2. (c) 3. (a) 4. (b) **B.** 1. duty 2. work 3. sign 4. Braille **C.** 1. The old, the sick and the differently challenged people are needy people. 2. Old people are those who are unable to do their work properly due to

their age. 3. Sick people are those whose body is unable to perform its functions normally. 4. People who are unable to see, walk, hear or speak are called differently challenged people. **D.** 1. I shall put thread in the needle. 2. I shall bring medicine for my uncle from the market. 4. I shall try to understand her sign language and bring the thing from the shop or go with her to the shop. **E.** 1. Be kind to them. 2. Make friends with them. 3. Spend time taking to them. 4. Help them in doing their work. 5. Bring the thing they need from the market.

PRACTICE SET-III

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A. 1. (c) 2. (a) 3. (b) 4. (b) 5. (b) **B.** 1. help 2. hospital 3. pilot 4. work 5. Deepawali **C.** 1. food, clothes 2. share, care 3. Independence day, Republic Day 4. old people, sick people **D.** 1. We should always keep a happy smile on our face. 2. People of the neighbourhood live like a family. 3. A pilot flies an aircraft while a sailor sails a ship. 4. Christians celebrate Christmas as the birthday of Jesus Christ. 5. People who are unable to see, walk, hear or speak are called differently challenged people.

UNIT V : NATURAL ENVIRONMENT

LESSON 16 : CARE OF THE PLANT AND ANIMALS

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A. 1. fence 2. machan 3. water, phenol 4. hunting, killing **B.** 1. scare-crow 2. trap 3. vaterinary doctor **C.** 1. parasites 2. growing parts of a plant 3. fence **D.** 1. Some people break the tender parts– the growing buds, the new shoots, the young fruits and the developing seed. 2. Wood, barbed wire, wall, plant can be used for fencing. 3. A donkey need more energy rich foods. 4. We should remove the excretory matter daily and wash the shelters with water and phenol. 5. Pests are the insects that destroy the plants and crops. Parasites are like ticks and lice which grow on the skin of animals. **E.** Give plants right kind of soil, proper manuring, proper sunlight and timely watering. Never walk on the plants. Do not break their tender parts. Make a fence. Use scare-crow to scare the birds. Use traps to catch the rats. Use insecticides. Do not let cut trees. **F.** Make shelter for animals. Clean the shelters. Give them clean and fresh food everyday. Keep them clean and give fresh drinking water. Scrub and bath the animal regularly. Take the animals to a veterinary doctor if suffering from a disease.

LESSON 17 : THE SUN, THE MOON AND THE STARS

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A. 1. mild, cool 2. stars 3. star 4. constellations 5. sun, earth **B.** Circle the pictures 1. Sun 2. moon 3. stars 4. moon 5. moon **C.** 1. phases 2. New moon day 3. full moon day 4. constellations 5. moon **D.** 1. The sun

provides us heat and light. 2. Looking directly at the Sun will harm our eyes. 3. We see the moon and the stars at night. 4. The moon gets its light from the sun. 5. The stars are very far from us so they look small.

E. 1. The Sun shines with its own light. It is very bright. The moon shines because it reflects the light of the Sun falling on it. Moonlight is mild.

2. On Purnima we see the full face of moon. On Amavasya, the moon is not seen at all. 3. As the moon grows from new to full moon, it is said to be waxing. As the moon changes from full to new Moon, it is said to be waning.

LESSON 18 : WE AND SEASONS

A. Left to right : summer : fan, cooler; Winter : heater, sweater, gloves, cap; Rainy season : umbrella and gumboots, rain coat. **B.** 1. weather 2. season 3. woollen 4. thundering, lightning 5. cotton **C.** 1. Yes It is changes every day. It may be calm on day. Another day it may be windy. It may be dry one day. Another day may be rainy. 2. When a particular weather remains nearly constant for a few months it is called as season. 3. Seasons affect our food, drinks, clothes and behaviour. 4. The three main seasons are winter, summer and rainy seasons. **D.** 1. cold drinks, ice-creams, fans coolers, cotton clothes 2. hot drinks, heaters, woollen clothes, peanuts, fried foods 3. umbrellas, raincoats, gumboot, fried foods, hot drinks.

UNIT VI : TRANSPORT AND COMMUNICATION

LESSON 19 : LOCATING A PLACE

A. 1. (b) 2. (a) 3. (c) **B.** 1. write, eat 2. hold plate, hold a note book 3. Very simple pictures of land marks are called symbols. 4. A map helps us to locate a place. For example, to locate a town on the map of a country. 5. It is easy to locate a place in the colony with the help of its map. **C.** 1. door, bags, display board 2. bottle, dustbin, map 3. door-left, black board-middle, window-right, model-left, table-middle **D.** 1. boy, house, bench 2. paper boat, fish, bird 3. (a) right (b) right (c) left (d) left (e) right 4. (a) left (b) boy (c) fish (d) right

LESSON 20 : MEANS OF TRANSPORTATION

A. 1. (c) 2. (c) 3. (b) 4. (b) **B.** 1. transportation 2. water 3. cheaper, comfortable 4. progress 5. air 6. spokes **C.** Left to right : L, L, W, A; W, L, L, W; A, L, L, L **D.** 1. bus, truck, car 2. boat, ship, steamer 3. aeroplane, helicopter, jet plane **E.** 1. The early man observed that the around objects could move faster. This gave him the idea of wheel. 2. The three modes of transport are bus, ship, aeroplane. 3. The slowest mode of transport

is water transport. 4. The fastest means of transport is air transport. 5. To travel short distances we use bicycle, rickshaw, bullock cart. 6. Air transport is very expensive. Aeroplanes need airport to take off and land.

Fun Time : A. 1. (d) 2. (c) 3. (a) 4. (e) 5. (b)

LESSON 21 : MEANS OF COMMUNICATION

A. 1. letter box 2. telegram 3. radio, television 4. newspaper 5. instruments

B. 1. T 2. F 3. F 4. T 5. F **C.** Left to right : P, P, M, M; M, P, P, M **D.** 1. radio

2. telegram 3. satellites 4. computer 5. letters **E.** 1. Sending or receiving messages, information on news is called communication. 2. Three means of personal communication are letter, telegram, telephone. 3. Three means of mass communication are radio, television, newspaper. 4. Computers have revolutionised communication. 5. Satellites have changed the face of television. 6. In the personal communication one person communicates with another person. In mass communication, the same messages is communicated to a large number of people at one time.

PRACTICE SET-IV

A. 1. (a) 2. (c) 3. (c) 4. (c) **B.** 1. water, phenol 2. mild, cool 3. comfortable,

cheaper 4. radio, television **C.** 1. wood, barbed wire 2. heat, light 3.

writing, eating 4. bicycle, rickshaw 5. letter, telephone **D.** 1. A donkey

need more energy rich foods. 2. The stars are very far from us so they

look small. 3. A map helps us to locate a place. For example, to locate a

town on the map of a country. 4. The early man observed that the round

objects could move faster. This gave him the idea of wheel. 5. Sending or

receiving messages, information or news is called communication.

MODEL TEST PAPER-II

A. 1. (a) 2. (c) 3. (a) 4. (c) 5. (a) **B.** 1. religion 2. hospital 3. sign 4. star

5. water **C.** 1. teacher, writer 2. school, hospital 3. wood, barbed wire

4. aeroplane, helicopter 5. radio, television **D.** 1. Different means of

recreation are playing indoor games, reading books, listening radio,

watching television, singing and dancing. 2. Children play together and

share their things in the neighborhood. 3. People go to the park for

walking, jogging relaxing. 4. It is easy to locate a place in the colony with

the help of its map. 5. Sending or receiving messages, information or

news is called communication.



Teacher's Manual

Environmental Studies (Class-4)

UNIT I : THINGS AROUND US

LESSON 1 : LIVING AND NONLIVING THINGS

A. 1. (d) 2. (a) 3. (c) 4. (d) **B.** 1. breathing organs 2. life functions 3. non-living things 4. living things 5. animals **C.** 1. (c) 2. (d) 3. (b) 4. (a) **D.** 1. tomato 2. banyan 3. housefly 4. elephant 5. touch-me-not **E.** 1. Living things take food and water, grow, breathe, move on their own, feel and react, reproduce and die. Non-living things do not perform any of these functions. 2. Plants make their own food while animals not. Plants breathe through the stomata of their leaves. Animals breathe through air tubes, gills or lungs plants reproduce through seeds. Animals lay eggs or give birth to babies. 3. Living things may show movement in some parts of whole body. Locomotion is the movement of their whole body from one place to another. **F.** 1. Common features of all living things are taking food and water, growing, breathing, moving on their own, feeling and reacting, reproducing and dying. 2. Three living things are brinjal plant, dog, humans. Three non-living things are stone, glass, pen. 3. Organs of breathing in living things are stomata, air tubes, gills and lungs. 4. Animals move from one place to another for food and shelter and the escape from their enemies. 5. If the chest of dog is moving up and down, it is breathing and alive in sleep. If the chest is not moving up and down, the dog is not alive (sleeping) It is dead.

Activity : Natural things are air, water, stones, plants and animals. Man makes many things from them like house, food products furniture, leather bag etc. These things are man-made.

UNIT II : OUR BODY

LESSON 2 : INTERNAL ORGANS OF OUR BODY

A. 1. (c) 2. (b) 3. (c) **B.** 1. arms, legs 2. oxygen 3. liver 4. brain 5. urine **C.** 1. The brain receives messages from the sense organs and orders the organs what to do. 2. The heart receives impure blood from body organs and send it to the lungs to get oxygen (purified). Then it pumps pure blood to all parts of the body. 3. The liver produces a digestive juice called bile. Extra carbohydrates are stored in the liver in the form of fats. 4. The digestive juice breaks up the food partly in the stomach. 5. The kidneys filter the blood and remove waste products in the form of urine. **D.** 1. The organs found outside the body are called external organs. We

can see them. Some soft organs inside our body cannot be seen with our eyes. They are called internal organs. 2. Five internal organs are brain, heart, lungs, stomach and intestine. Five external organs are eyes, ears, mouth, arms and legs. 3. Major parts of our body are the head, trunk, (chest and abdomen) and limbs (arms and legs). 4. Internal organs are protected by the bone framework. 5. Our heart is located in the middle of the chest with lower part tilted towards the left side. We can feel the expansion and contraction (lubbub sound) of the heart by placing our hand on our chest.

UNIT III : OUR NEEDS

LESSON 3 : THE FOOD WE EAT

A. 1. (b) 2. (c) 3. (d) 4. (c) **B.** 1. various 2. balanced 3. cleanliness 4. dry neem leaves 5. pointed **C.** 1. plant food 2. animal food 3. functions of food 4. fats 5. carbohydrates 6. proteins 7. minerals and vitamins **D.** 1. Carbohydrates provide us heat and energy—potato, wheat 2. Proteins help in body building (growth) and repair—pulses, beans 3. Fats provide us twice heat and energy than the carbohydrates—oils, dry fruits. 4. Minerals and vitamins help the body to fight against disease—fruits, vegetables **E.** 1. Cereals and pulses : Store in clean dry containers with lumps of salt or dry neem leaves. 2. Potatoes and onions : Store in wire basket in open, dry and airy places. 3. Fruits and green leafy vegetables : Store fruits in the fridge. Wrap green leafy vegetables in a muslin cloth and keep them in the fridge. 4. Paneer (cheese) : Wash the paneer and keep in cold water or fridge. 5. Bread : air tight bread box. **F.** 1. Important functions of food : It gives us energy to do work. It help us to grow. It repairs the body parts. It helps to fight diseases. 2. To get enough fats we shall eat nuts, butter, oils, ghee. 3. Things in the food that are useful for our body are called nutrients. Our body needs them to gain energy, grow and to fight diseases. These are carbohydrates, fats, proteins, vitamins and minerals. 4. We need water to help in the digestion of food, throwing out waste from the body, body cell to function properly and to maintain proper body temperature. 5. A diet containing all the nutritions in the right amount with enough fibre and water is called a balanced diet. 6. Take as much food as you need. Do not overeat. Do not leave food in the plate. Cover the food and store properly. **G.** 1. Select food carefully. Throw away spoilt food. 2. Pick the food grains carefully. 3. Wash fruits and vegetables before peeling. 4. Use clean utensils for cooking. 5. Keep the food covered.

LESSON 4 : WATER FOR LIFE

A. 1. (b) 2. (d) 3. (c) 4. (a) **B.** 1. taps 2. tanks 3. ill 4. underground 5. ladle

C. 1. T 2. F 3. T 4. F 5. T **D.** 1. Five uses of water are cooking, drinking, bathing, washing, watering, plants. 2. Rainwater is the purest source of water. 3. Rain water that goes underground is called underground water. 4. Sources of water are rivers, lakes, ponds and underground water. 5. Take as much water as needed. Close the tap when not in use. Do not let the water flow while filling in buckets.

PRACTICE SET-I

A. 1. (a) 2. (c) 3. (d) 4. (c) 5. (c) **B.** 1. seeds 2. oxygen 3. cleanliness 4. dry neem leaves 5. underground **C.** 1. rose plant, dog 2. brain, heart 3. nuts, butter 4. river, lake **D.** 1. Common features of all living things are taking food and water, growing, breathing, moving on their own, feeling and reacting, reproducing and dying. 2. The heart receives impure blood from body organs and sends it to the lungs to get oxygen (purified). Then it pumps pure blood to all parts of the body. 3. A diet containing all the nutrients in the right amount with enough fibre and water is called a balanced diet. 4. Important functions of food : It gives us energy to do work. It helps us to grow. It repairs the body parts. It helps to fight diseases. 5. Store drinking water in clean vessels with lids. The vessel should have a spout or use a clean ladle to take out drinking water. Use a clean glass to drink water.

LESSON 5 : FIBRES AND FABRICS

A. 1. cotton 2. shearing 3. 600; 900 4. synthetic 5. machines **B.** 1. F 2. T 3. F 4. T 5. F **C.** 1. cotton, jute 2. sheep, goat 3. nylon, terene 4. bags, mats 5. takli, charkha 6. handloom, powerloom **E.** 1. Clothes protect us from heat, cold, rain, dust and insect bites. 2. Cotton bolls, jute stem, hair of sheep, cocoon of silkworm, woodpulp and chemicals give us the raw material for cloth. 3. On the basis of origin, the fibres are cotton fibres, jute fibres, silk fibres and synthetic fibres. 4. Fibres are spun into threads. Threads are woven to make clothes. Cloth is manufactured on big powerlooms in cloth mills. 5. We wear cotton clothes in summer as they let air come in and thus keep our body cool. We wear woollen clothes in winter because they keep us warm. They do not let our body heat go out. **F.** 1. Wash dirty clothes properly. 2. Torn clothes should be mended in time. 3. Stains should be removed when fresh. 4. Clothes should be folded properly to keep them wrinkle free. 5. While storing woollen and silken clothes, put naphthalene balls to prevent the attack of insects.

LESSON 6 : A GOOD HOUSE

A. 1. comfortable 2. windows 3. coconut leaves 4. phenyl 5. rains, snow **B.** 1. It kills germs. 2. It removes stuffiness from the house. 3. It removes

dirty water and other body waste. 4. Of availability of space, building materials and climate. **C.** 1. In a climate of heavy rainfall and floods, houses are made with a raised platform on stilts. The roofs are made sloping not to allow rain water to collect. In hot climate, the walls are made of mud and the roof thatched to keep the house cool. 2. Houses are made from the material easily available near by, Mud, bamboo and leaves are used to make huts. In cities, bricks, cement, steel, wood are used to make pucca houses. 3. If the space available is more, then people live in bungalow. But, if the space available is less, then they live in flats. **D.** 1. Sunlight is natural light. It kills germs. Light from the bulbs, tubelights is artificial light. It does not kill germs. 2. kuchcha house is made from mud, bamboo and leaves. It is not very strong. Pucca house is made from bricks, cement, steel and wood. It is very strong. 3. Flat roofs are made in hot and dry climate. People can sleep on them in the hot nights. Sloping roofs are made in areas with heavy rains or snowfall. They do not allow water or snow to collect and make the house damp or cold. 4. In an area of heavy rainfall, houses are made on raised platform on stilts with sloping roof not to collect water on them. In an area having hot weather, houses are made with flat roofs, used a terraces to sleep in the hot nights. 5. In a chawl more people live in small space. In a bungalow, a few people live in a big space. **E.** 1. We need a house to live and to protect us from heat, cold, rain, storm, thieves and wild animals. 2. Our houses provides us rest, comfort, peace and happiness. 3. Sources of light a natural like Sun and artificial like bulb and tubelight. 4. Ventilation means making arrangement for fresh air to circulate. Air enters from one opening and goes out from another opposite or side opening. 5. The factors in the environment that determine the kind of house to be built are (i) availability of space (ii) availability of building material and (iii) climate of the place.

LESSON 7 : FIRST AID

A. 1. (c) 2. (d) 3. (a) **B.** 1. he/she needs free air 2. the wounded man will faint due to much loss of blood. 3. dust and germs will get into it. 4. Insect inject poison into victim's body. 5. mad dog has the germs of the dangerous disease rabies. 6. To let the poison out with the blood. **C.** 1. F 2. F 3. T 4. T 5. F **D.** 1. Press fingers on the wounded path to stop bleeding. Wash it with dettol. Place some cotton soaked in tincture over the wound. 2. Apply a solution of baking soda in water. Apply little antiseptic cream or burnol. Do not tie a bandage. 3. Remove the bee-sting with the tip of a sterilized needle. Put soda bicarbonate or toothpaste. 4. Wash the bite with spirit. Put soda bicarbonate or toothpaste. 4. Wash the bite with spirit. Put carbolic acid to kill the germs. 5. Tie a bandage,

handkerchief or rope above the bite. Put potassium permanganate solution on the wound. Make a cross cut over the snake bite. Keep the victims awake. Give hot tea or coffee to drink. **E.** 1. Accidents happen due to carelessness or hurry. We can avoid accidents if we are careful and follow safety rules. 2. The immediate help given to the victim of an accident before the arrival of the doctor is called first aid. It reduces pain, enhances recovery and saves life. 3. Injuries caused due to dry heat like touching a hot pan are called burns. Injuries caused due to moist heat like falling of boiling water on a body part are called scolds. 4. The area around the bite become red and swells up. It feels like burning a lot. 5. Snake has two long teeth called fangs with which it bites. these fangs leave two tiny holes on the victim's body.

LESSON 8 : SANITATION

A. 1. (a) 2. (c) 3. (d) 4. (a) **B.** 1. insect, germs 2. compost 3. incineration 4. burning 5. eco-mark **C.** 1. air 2. should not 3. reduces 4. biodegradable 5. absence **D.** 1. biodegradable 2. ways of disposing garbage 3. recyclable 4. environment friendly 5. important steps for disposing off garbage **E.** 1. (b) 2. (e) 3. (a) 4. (c) 5. (d) **F.** 1. Cleanliness of the surroundings of environment is called sanitation. 2. Harmful effects of throwing garbage on the road are full smell, breeding of insects and germs which carry diseases. 3. A pit is dug and filled with household wastes, leaves and twigs. It is covered with mud and allowed to decay. After decaying, it turns into compost which is very good manure for the growth of plants. 4. The levelled land over a sanitary land fill is useful for constructing parks. 5. Burning of garbage is useful because the amount gets reduced. Flies, mosquitoes, germs, etc. cannot breed. Burning is harmful because it produces smoke which causes air pollution. **G.** (a) Incineration is to burn the garbage in furnace. Thus the garbage is reduced to smaller heap of ash. It is expensive as it needs a lot of fuel. (b) Things like paper, glass, metal and some plastics can be reused to make new things. This process is called recycling. **H.** Biodegradable products are those which decompose into simple substance and become a part of the soil. For example, plant and animal products. Non-biodegradable products are those which do not decompose and do not mix in the soil, For example, metals, plastics.

UNIT IV COMMUNITY LIFE

LESSON 9 : CELEBRATIONS IN THE SCHOOL

A. 1. (b) 2. (c) 3. (a) 4. (a) **B.** 1. (c) 2. (e) 3. (d) 4. (b) 5. (a) **C.** 1. Games and races 2. Nehru 3. 2nd October 4. Radhakrishnan **D.** 1. Children learn reading, writing, singing, dancing, acting, debate etc in school. 2. Three national festival celebrated in school are Independence Day, Republic Day *Environmental Studies (1-5)*

and Gandhi Jayanti. 3. (a) Birthday of Dr. Radhakrishnan is celebrated as Teacher's day because he was a great teacher and President of India. (b) Birthday of our first Prime Minister Pandit Jawaharlal Lal Nehru is celebrated as Children's Day because he loved children very much. 4. Gandhiji is called the 'Father of the Nation'. 5. Teachers guide and train the children for participating in events. **E.** 1. (a) National festival are those which are celebrated by the whole nation (b) Independence day, Republic Day and Gandhi Jayanti are our national festivals (c) A special assembly is held (d) The National Flag is hoisted on Independence Day and Republic Day (e) Children sing patriotic song [(d) On Gandhi jayanti his portrait is garlanded (e) Children Sing bhajans.] 2. (a) Parents of all the children are invited. (b) An eminent person is invited as a chief guest. (c) A programme of music and dance is presented by the children. (d) There is a prize distribution ceremony (e) National Anthem is sung. 3. (a) Sports Day is held in winters. (b) Many games and races are organised. (c) Many children take part in the sports. (d) Other children cheer up their classmates. (e) In the end, prizes are distributed 4. (a) Our first Prime Minister loved children very much. (b) Children called him 'Chacha Nehru' lovingly (c) On Children's day no studies take place in the school. (d) The children are given a day off or taken out for picnic. (e) Teachers present a programme for children.

PRACTICE SET-II

A. 1. (d) 2. (b) 3. (d) 4. (c) 5. (a) **B.** 1. shearing 2. snow 3. sleepy 4. incineration 5. Nehruji **C.** 1. cotton, jute 2. bricks, cement 3. plastics, glass 4. acting, dancing **D.** 1. Clothes protect us from heat, cold, aine, dust and insect bites. 2. Our house provides us rest, comfort, peace and happiness. 3. Accidents happen due to carelessness or hurry. We can avoid accidents if we are careful and follow safety rules. 4. A pit is dug and filled with household wastes, leaves and twigs. It is covered with mud and allowed to decay. After decaying, it turns into compot which is very good manuer for the growth of plants. 5. (a) Sports Day is held in winters. (b) Many games and races are organised. (c) Many children take part in the sports. (d) Other children cheer up their classmates. (e) In the end, prizes are distributed.

MODEL TEST PAPER-I

A. 1. (d) 2. (c) 3. (a) 4. (a) 5. (a) **B.** 1. kitten 2. ladle 3. sharing 4. phenol 5. Independence **C.** 1. butterfly, housefly 2. pulses, beans 3. bags, mats 4. bee, wasp 5. Independence Day, Republic **D.** 1. The kidneys filter the blood and remove waste products in the form of urine. 2. Carbohydrates provide us heat and energy- potato, wheat. 3. Fibres are spun into

threads. Threads are woven to make clothes. Cloth is manufactured on big powerlooms in cloth mills. 4. Apply a solution of baking soda in water. Apply little antiseptic cream or burnol. Do not tie bandage. 5. Burning of garbage is useful because the amount gets reduced. Flies, mosquitoes, germs etc. cannot breed. Burning is harmful because it produces smoke which causes air pollution.

LESSON IO : THE VILLAGE PANCHAYAT AND MUNICIPAL CORPORATION

A. 1. 18 2. women 3. sarpanch 4. councillors 5. betterment **B.** 1. F 2. T 3. F 4. T 5. T **C.** 1. Village panchayat (a) gets roads and drains constructed (b) provides drinking water (c) runs primary schools (d) run health centre (e) settles dispute among villages. 2. Municipal corporation (a) provides clean drinking water (b) builds roads and streets (c) provides lighting on streets (d) keeps city neat and clean (e) builds hospital and health centres. **D.** 1. The members of the municipal corporation are elected by the people who are over eighteen years of age. 2. A ward is a section of a city where from one councillor is elected. 3. There are 7 to 15 members in a village panchayat. 4. Gram Sewaks and sewikas educate the villagers regarding new ways of farming for better crops. 5. The village panchayat collects money from the villagers. The municipal corporation gets the money from the people by means of house tax, water tax etc. Panchayat and cooperation also get money from the State government for their works.

LESSON II : CARE OF PUBLIC PROPERTY

A. 1. (b) 2. (d) **B.** 1. Taj Mahal, Red Fort 2. useful 3. taxes 4. communication 5. Parliament House and Rashtrapati Bhawan **C.** 1. should not 2. museum 3. public 4. public 5. stops **D.** 1. Do not jump on desks, throw chalks, break window, panes or blackboard. Do not tear pages from library books or magazines. Do not pluck flowers. 2. Do not damage trains and buses by breaking window panes or setting them on fire. Do not remove anything from the train compartment. 3. Some people steal medicines, injections, beddings etc from the hospital. We must catch these people and help the police to arrest them. 4. Do not destroy these monuments and museum. Do not steal anything from them. The people who cause destruction or steal things must be punished. **E.** 1. Public property is a property to which all people have common right to use. 2. Public property can be divided into two classes : (a) The services like roads, railways, electricity, buses, trains, hospitals, tanks etc. (b) Historical buildings like forts, palaces, religious places etc. 3. The public property related to services provides us many facilities and comforts, medical help and education. Historical monuments and museum are sources of education. 4. In the absence of public property our civic life will not run smoothly. Damage to public
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property will stop the growth of the country. It will also put our economy into trouble. 5. When the public property gets destroyed we all shall suffer a lot. If there would be no schools, We should not get education. If there are no buses or train, no body will be able to reach his or her work place on time.

UNIT V : NATURAL ENVIRONMENT

LESSON 12 : OUR NATURAL RESOURCES

A. 1. (c) 2. (d) 3. (b) 4. (d) **B.** 1. sand stone 2. food 3. water 4. bags, mats 5. fuel **C.** 1. Earthworms, rats 2. utensils, jewellery 3. money plant, rose 4. cotton, jute 5. donkey, elephant **D.** 1. (c) 2. (e) 3. (d) 4. (f) 5. (a) 6. (b) **E.** 1. gram 2. pet animal 3. beverage 4. flowers 5. cattle **F.** 1. natural resources 2. marine animals 3. land animals 4. minerals 5. plant products **G.** 1. Useful materials such as Sunshine, air, water, soil, plants, animals and minerals which occur in nature are called natural resources. 2. The sun, air, water, plants, animal, forests, rocks and soil all are our natural resources. 3. Natural resources are used to make food, as fuel and raw materials for the production of finished goods for us. **H.** 1. Air : breathing, burning, drying 2. Water : drinking, cooking, washing 3. Plants : food, beverages, fresh air 4. Animals : food, leather, beasts of burden 5. Sun : gives heat, light, helps in the growth of plants 6. Soil : living place of plants, home for many organism, provides water and minerals to plants. 7. Forest : help in rainfall, prevent soil erosion and flood, provide many things such as medicines, gums, resin etc. 8. Rocks : used to make building, give minerals, break up to form soil.

LESSON 13 : POLLUTION

A. 1. (c) 2. (d) 3. (b) 4. (d) **B.** 1. chemicals, garbage 2. pollutant 3. vehicle, machine 4. pollute 5. pollution **C.** 1. burning of fuels, bursting crackers, dust, spraying insecticides. stinking toilets 2. Noise of vehicles, loudspeakers, radio, television, machines. 3. throwing household wastes, washing clothes and utensils, bathing animals, throwing dead bodies into water sources, going of wastes from industries, fertilisers and insecticide from fields, into water sources. **D.** 1. Air pollution causes diseases like asthma, bronchitis, lung cancer in humans. Water pollution causes diseases like allergies, cholera, typhoid, dysentery in human. Noise pollution causes diseases like headache and deafness in humans. 2. Air pollution block the stomata of plants. This stops their breath and causes them to die. Eater plants get less oxygen due to water pollution and they die. 3. Land animals get less oxygen due to air pollution. Their respiratory system is affected. Water animals get less oxygen due to water pollution and they die. Animals feel restlessness and disturbed sleep due to noise pollution. **E.** 1. Use

smokeless chulha or biogas. Use solar cooker. Factories should have filters in their chimneys. Dispose garbage off properly. Get vehicles checked for pollution regularly. 2. Do not throw garbage into water sources. Do not throw industrial waste into water sources. Never throw dead bodies into rivers. Avoid bathing animals, cleaning utensils and washing clothes into water sources. Do not construct latrines or dumping grounds near water sources. 3. Play radio and TV at low volume. Avoid the use of loudspeakers. Use horn only when necessary. Fit silencers in the vehicles. Factories and airport should be located away from residential area. **F.** 1. It makes environment impure. 2.. The noise of the factory machines will cause noise pollution is residential area. 3. Drinking dirty water causes diseases like allergies, cholera, typhoid, diarrhoea. 4. It will cause deafness. 5. We shall have to breathe in smoke, drink dirty water and live in loud unpleasant sound. **G.** 1. Pollution is the addition of any substance in Access to the normally present in the environment. 2. Pollutants are the substance that cause pollutior. such as dirt, garbage, chemicals etc. 3. Different kinds of pollution are air pollution, water pollution, noise pollution and soil pollution. 4. We need to control pollution to live comfortably : breathe in fresh air, drink clean water, taken a noiseless sleep. 5. Noise is an unpleasant sound. It causes disturbance and lowers efficiency of working.

PRACTICE SET-III

A. 1. (c) 2. (b) 3. (d) 4. (c) 5. (b) **B.** 1. betterment 2. communication 3. food 4. water 5. machine **C.** 1. drinking water, street light 2. services, historical monuments and museums 3. money plant, Rose 4. Earthworms, rats 5. Throwing household wastes, throwing industrial wastes into water sources. **D.** 1. The member of the municipal corporation are elected by the people who are over eighteen years of age. 2. The public property related to services provides us many facilities and comforts, medical help and education. Historical monuments and museum are sources of education. 3. Natural resources are used to make food, as fuel and raw materials for the production of finished good for us. 4. Animal are used for food, leather and beasts of burden. 5. Air pollution causes disease like asthma, bronchitis, lung cancer in humans. Water pollution causes diseases like allergies, cholera, typhoid, dysentery in human. Noise pollution causes diseases like headache and deafness in humans.

LESSON 14 : MOMENTS OF THE EARTH

A. 1. still 2. $365\frac{1}{2}$ 3. axis 4. day, night 5. winter **B.** 1. Earth 2. season 3. rotation 4. direct Sun-rays **C.** 1. As the Earth is round, only a portion of the earth faces the Sun. It has day. The other portion remains away

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from the Sun. It has night. See the diagram page 76 of the text book.

2. Since the axis of the Earth is tilted, the rays of the Sun do not fall directly overhead on all parts of the Earth. The parts of the Earth that have Sunrays falling directly overhead have summers. The other parts which have sunrays falling slanting have winters. **D.** 1. The Earth is not stationary. It rotates on its axis. At the same time it revolves around the sun. 2. The two movements of the Earth are rotation and revolution. 3. The movement of the Earth on its axis is called rotation. The movement of the earth in its orbit around the Sun is called revolution. 4. (a) Rotation of Earth causes day and night on Earth. (b) Revolution of the Earth around the Sun causes seasons. 5. Since the Earth rotates from west to east, the Sun seems to rise in the east and set in the west.

LESSON 15 : THE CHANGING WEATHER

A. 1. (d) 2. (d) 3. (c) 4. (b) 5. (a) **B.** 1. In summers, we humans wear cotton clothes, use fans, coolers or airconditioners and prefer cold drinks and ice-creams. In winters we wear woollen clothes, use heaters and blankets and like to have hot drinks. In rains we use raincoats, gumboots and umbrellas. 2. Some plants shed their leaves in autumn. Most of the plants flower during winter. Too little or too much rain destroy the crops. Crops ready for harvest will be destroyed by heavy rain. 3. In extreme cold winter some birds migrate from cold regions to warmer regions. Some animals like frogs and turtles burrow into the soil and sleep all through the winter. They also remain buried in the mud in very hot summer. **C.** 1. Hibernation : Burrowing of some animals like frogs, turtles etc and sleeping all through the extreme cold winter is called hibernation. 2. Aestivation : In very hot summer, some crocodiles, alligator, turtles and frogs remain buried in the mud. This sleep is called aestivation. 3. Meteorology : Study of weather and weather forecasting is called meteorology. 4. Meteorologist : A person who studies the weather and forecasts it is called meteorologist. 5. Weather forecasting : Knowledge of weather of future date is called weather forecasting. **D.** 1. The condition of air at a place at any time is called the weather of that place at that time. 2. The Sun, wind, clouds and rain are the factors that determine whether. 3. The weather affects the life of human beings, plants and animals to a great extent. 4. Too much rains cause flood, loss of life and property and soil erosion. Rain water collects in points and ditches where mosquitoes breed. They bite us and cause many diseases like malaria and dengue. 5. (a) We wear cotton clothes and use cold drinks and ice-creams. (b) We wear woollen clothes and have hot drinks. (c) We use umbrella, raincoat and gumboots. We make paper boats and let them float on flowing water.

UNIT VI : TRANSPORT AND COMMUNICATION

LESSON 16 : MEANS OF TRANSPORTATION

A. 1. (d) 2. (b) **B.** 1. train 2. airport 3. air transport 4. port **C.** 1. local trains 2. mail trains 3. passenger trains **D.** 1. T 2. F 3. F 4. F 5. T **E.** 1. The three mode of transportation are land transport, water transport and air transport. 2. Two kinds of land transport are road transport and rail transport. 3. Some kinds of land transport commonly used in India are buses, trucks, cars, rickshaws etc. 4. Water transport is the cheapest and the air transport is the costliest. 5. Major ports of India are Kandla, Mumbai, Marmagoa, Cochin, Chennai, Vishakhapatnam and Kolkata. **F.** 1. (a) connects villages, town and cities with each other (b) links even the remote and for off places. (c) provides shorter routes. (d) carries goods and passengers to the nearest point/doorstep. (e) Only means for the essential items to reach hilly areas. 2. (a) Cheaper than both the rail and road transport (b) no cost of building and repairing the water ways. (c) Used for bulky goods such as coal, oil, timber (d) Goods in bulk imported (e) goods in bulk exported 3. (a) Economical and comfortable for travelling to far off places. (b) shortest possible time on land. (c) important role in the field of industries and agriculture. (d) very easy to transport heavy goods such as iron and steel, cement, food grains etc. long distances. (e) connects different parts of the country. 4. (a) quickest means 2. places which cannot be reached by roads or rails can be reached by aeroplanes or helicopters. (c) very useful in times of floods and wars for delivering food packets. (d) take soldiers from one place to another (e) helicopters save passengers from sinking ships and can reach remote areas.

LESSON 17 : MEANS OF COMMUNICATION

A. 1. (c) 2. (c) 3. (a) 4. (b) **B.** 1. personal communication 2. mass communication 3. electronic communication 4. printed paper communication 5. telephones **C.** 1. letter 2. telegram 3. e-mail 4. fax-machine 5. radio 6. internet 7. television **D.** 1. F 2. F 3. T 4. T 5. T **E.** 1. We can send personal messages with the help of letters. We can also send money order, parcels, books and journals through the postal services. 2. A letter takes few days to reach its destination. A telegram is delivered within hours. A letter may be detailed. A telegram is usually short. 3. A fax machine can send and receive printed or written messages (both pictures and documents) to/from another fax machine from one place to another. 4. A computer is used for (a) storing information (b) sending e-mail (c) collecting information from satellites (d) seat reservation in an aeroplane or train. 5. In a television we not only hear but also see the pictures. In a radio we can only hear as there are no pictures. 6.

Communication satellites receive radio signal messages from one location and transmit them to another, world wide. Thus, they can relay many television programmes or billions of telephone calls.

LESSON 18 : INVENTION IN THE FIELDS OF TRANSPORTATION AND COMMUNICATION

chariots Thomas Seva montego faisla brothers selling visas 1886 1926 the options invented the spoked wheels wheels consisted of a dream I have an spokes spoked wheels were lighter and travelling become faster and more comfortable the first spoked wheel are probably made of chariots ful buy horses the mesopotamians bole the first non wheeled vehicle the first wheeled vehicles were cards pulled by ox send it easy to move or to send messages from palace to place because of the modern means of transportation and communication invented by hard working people wheel is found in in bicycles run on the land on fly in air it is the basis of land and air transport steam engine become a source of power for transportation and industry it open the door for the invention of railway engines the design and construction of sailing business improve largest ship with were constructed most of the ship had 3 mast and 3 sails then the marine compass was invented which help in the navigation this lead to great ocean was as an increase in overseas trade and discover of newland gradually big battleship were made which were driven by steam engines and later diesel engines this please the speed of the visible after the invention of telegraph the messages should could be sent over wires in seconds with the speed of electron tricity The telegraph become the chief means of long distance communication.

PRACTICE SET-IV

A. 1. (d) 2. (a) 3. (d) 4. (c) 5. (c) **B.** 1. still 2. stormy 3. short 4. newspapers 5. sailing vessels **C.** 1. rotation, revolution 2. Sun, clouds 3. bus, train 4. newspaper, television 5. spoke wheels, sailing vessels **D.** 1. Since the Earth rotates from west to east, the Sun seems to rise in the east and set in the west. 2. The condition of air at a place at any time is called the weather of that place at the time. 3. (a) connects, villages, towns and cities with each other (b) links even the remote and far off places. (c) provides shorter routes. (d) carries goods and passengers to the nearest point/doorstep. (e) only means for the essential items to reach hills areas. 4. A. fax machine can send and receive printed or written messages (both pictures and documents) to/from another fax machine from one place to another. 5. Steam engines became a chief source of power for transporting and industry. It opened the doors for the invention of railway engines.

MODEL TEST PAPER-II

A. 1. (d) 2. (b) 3. (c) 4. (b) 5. (b) **B.** 1. sarpanch 2. food 3. chemicals 4. water transport 5. television **C.** 1. drinking water, street lights 2. buildings, utensils 3. rotation, revolution 4. wear cotton clothes, have cold drinks 5. mobile phone, television **D.** 1. When the public property gets destroyed we all shall suffer a lot. If there would be no schools, we would not get education. If there are no buses or trains, no body will be able to reach his or her work place on time. 2. Natural resources are used to make food, as fuel and raw materials for the production of finished goods for us. 3. The movement of the Earth on its axis is called rotation. The movement of the Earth in its orbit around the Sun is called revolution. 4. (i) Hibernation : Burrowing of some animals like frogs, turtles etc and sleeping all through the extreme cold winter is called hibernation. (ii) Aestivation : In very hot summer, Some crocodiles, alligators, turtles, and frogs remains buried in the mud. This sleep is called aestivation. 5. Gradually, the design and construction of sailing vessels improved. Larger ships with rubber were constructed. Most of the ship had three masts and three sails. Then the marine compass was invented which helped in navigation, This led to great ocean voyages and increase in overseas trade and discovery of new lands. Gradually big metal ships were made which were driven by steam engines and later diesel engines. This increased the speed of the vessels.



Teacher's Manual

Environmental Studies (Class-5)

UNIT I : OUR BODY

LESSON I : INTERNAL ORGANS OF HUMAN BODY

A. 1. (b) 2. (b) 3. (c) 4. (d) 5. (d) **B.** 1. heart 2. anus 3. liver 4. brain stem 5. airsacs **C.** 1. internal organ 2. Cerebellum 3. Ventricles 4. impure blood 5. narrow tube **D.** 1. control centre of the body 2. Breathing 3. pumping blood 4. helps in digestion 5. Digestion 6. Removes waste products from the blood. 7. Digesting and absorbing digested food. **E.** 1. We can't see the internal organs from outside, we can see the external organs from outside. 2 (a) Cerebrum controls speech, writing, memory, thinking, feelings and sense organs (b) Cerebellum coordinates the movements of our muscles and maintains the balance of the body in upright posture. (c) Medulla oblongata controls the most important activities of your body like heart beat, breathing, swallowing etc. 3. The lungs are spongy and contain tiny bag like structures called airsacs. Airsacs receive the air from outside. The help in the supply of oxygen to different parts. They also help in removing carbon dioxide from our body. 4. Different parts of the heart are two auricles and two ventricles. 5. Special juices in the stomach break down the food into simple forms. This is called digestion. 6. Arteries carry fresh blood containing oxygen to all parts of the body. Veins bring back impure blood containing carbon dioxide from all parts of the body.

UNIT II : HEALTH AND HYGIENE

LESSON 2 : THE FOOD WE EAT

A. 1. (d) 2. (d) 3. (c) 4. (a) 5. (d) **B.** 1. T 2. F 3. T 4. T 5. T **C.** 1. Carbohydrate, proteins 2. Cereals, oil 3. Milk, pulses 4. Fruits, vegetables **D.** 1. Proteins help us to grow. They build new cells. They repair the wear and tear of body tissues. 2. Carbohydrates burn up inside the body to give energy. 3. Iron helps the body to make red blood cells. Calcium is needed for making strong bones and teeth. 4. Fats burn up inside the body to give energy. Fats provide more than twice the energy than the carbohydrates. Excess fat get stored in the body. **E.** 1. food contains substances that perform important functions in our body. 2. Each nutrient performs specific function in the body. 3. They do different functions in the body. 4. Fats provide more than twice the energy than the carbohydrates. **F.** 1. Any item is referred to as food if it is worth eating and nourishes the body. The important characteristic of food are energy giving, body

building and protective against diseases. 2. The food provides energy. It helps in body building. It regulates body activates. It helps us to fight against diseases. It gives us satisfaction. 3. Different food contain different substance that do different functions in the body such as giving energy, building body, protecting from diseases. These substances present in food are called nutrients. 4. The foods on the basis of function they serve are of three types : energy giving food (carbohydrates and fats), body building foods (proteins) and protective foods (vitamins and minerals). 5. No, all the nutrients do not have the same function. 6. The amount of food we eat daily is called our diet. A diet that contains all nutrients in the right amount we need for the proper function of the body is called balanced diet.

LESSON 3 : DEFICIENCY DISEASES

A. 1. (a) 2. (a) 3. (c) 4. (c) 5. (a) **B.** 1. kwashiorkar 2. C 3. rickets 4. balanced diet 5. carbohydrates **C.** 1. night blindness 2. iodine 3. cereals 4. iron **D.** 1. (d) 2. (c) 3. (b) 4. (e) 5. (a) **E.** 1. Kwashiorkar (protein deficiency) 2. Carbohydrate deficiency 3. Vitamin A deficiency 4. Beri-Beri (vitamin B deficiency) 5. Scurvy (vitamin C deficiency) 6. Rickets (vitamin D deficiency and calcium deficiency) **F.** 1. We need nutritious food for our proper growth and to keep healthy and energetic. 2. Various constituents of food are carbohydrates, Fats, proteins, vitamins, minerals and water in proper proportions. 3. A balanced diet includes all the nutrients in required amount to give energy, build body, repair old tissue, protect from disease and promote growth. 4. A disease that is caused due to the lacking of a nutrient in our diet or its inappropriate amount is called a deficiency disease. 5. Deficiency diseases can be corrected by including the nutrients in our diet that are lacking or present in inappropriate amount. **G.** 1. Kwashiorkar; pot belly and enlarged liver; mother's milk; pulses. 2. Night blindness; dryness of eyes, patches in the eye; papaya; carrot 3. Beri-Beri; redness of tongue; loss of appetite; green leafy vegetables; yeast 4. scurvy; sponge and bleeding gums; delay in wounds healing; lemon, amla 5. Rickets; bowed legs; weak knees; milk; exposure to Sunlight. 6. Anaemia; tiredness; pale looks green leafy vegetables; dates 7. Goitre; abnormal enlargement of thyroid gland, swelling in the front of neck; iodised salt, sea foods.

LESSON 4 : COMMUNICABLE DISEASES

A. 1. (a) 2. (c) 3. (b) 4. (d) 5. (b) **B.** 1. superstition 2. small pox 3. immunisation 4. kerosene DDT 5. communicable **C.** 1. (c) 2. (a) 3. (d) 4. (b) **D.** 1. T 2. T 3. T 4. F 5. F **E.** 1. microbes 2. air spread diseases 3. water spread diseases 4. insect spread diseases 5. Charms **F.** 1. Diseases
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spreading from a sick person to a healthy person through spreading from a sick person to a healthy person through spreading of germs are called communicable diseases. 2. Very tiny living organisms not seen through unaided eyes. They are of four types : bacteria, fungi, viruses and protozoa. 3. Disease causing organisms spread through air, food, water, contact and insects. 4. Flies sit on the garbage heap and germs get stuck to their body. When they sit on uncovered food, the germs enter the food and grow. When we eat such food, the germs enter our body and cause diseases. 5. Water becomes dirty by washing clothes and utensils and bathing animals in water sources, throwing industrial wastes in water, drainage of sewage into water sources. 6. ORS is oral rehydration solution. It makes up the loss of water and salt from the body by disease like diarrhoea. 7. We can stop the spread of diseases by isolating the patient, by keeping home, surroundings and ourselves clean, by vaccination (immunisation) and by disinfecting the locality (by killing the germs.) **G.** Beliefs related to diseases that are not based on sound reasoning or logic are called myths and superstitions.. Such beliefs prevent people from proper medical checkup and treatment. They use amulets, talisman, charms, prayers or charity instead. These can prove very harmful in the long run. This can lead to prolonged illness, handicap or even death.

PRACTICE SET-I

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A. 1. (b) 2. (c) 3. (d) 4. (c) 5. (b) **B.** 1. heart 2. proteins 3. rackets 4. small pox 5. immunisation **C.** 1. brain, heart 2. fruit, vegetables 3. apple, banana 4. typhoid, cholera **D.** 1. The lungs are spongy and content tiny bag like structures called airsacs. Airsacs receive the air from outside. They help us in the supply of oxygen to different parts. They also help removing carbon dioxide from our body. 2. The amount of food we eat daily is called our diet. A Diet that contains all nutrients in the right amount we need for the proper function of the body is called balanced diet. 3. A disease that is caused due to the lacking of a nutrient in our diet or its inappropriate amount is called a deficiency disease. 4. Flies sit on the garbage heap and germs get stuck to their body. When they sit on uncovered food. the germs enter the food and grow. When we eat such food, the germs enter our body and cause diseases. 5. We can stop the spread of diseases by isolating the patient, by keeping home, surroundings and ourselves clean, by vaccination (immunisation) and by disinfecting the locality (by killing the germs.)

LESSON 5 : CARE OF BODY PARTS

A. 1. fibrous 2. buds 3. deafness 4. strain 5. fluoride **B.** 1. (d) 2. (c) 3. (e) 4. (b) 5. (a) **C.** 1. It removes all the food particles and keep them clean. 2. It helps to keep the mouth clean by removing all food particles. 3. It harms the eyes and causes their watering. 4. They can injure or damage the ears. 5. It removes dirt and sweat. **D.** 1. Brush your teeth everyday in the morning and at night after the last meal. Do not eat too much of chocolates, ice-cream or sweets. 2. Wash your hair at least two times in a week. Apply coconut oil to keep away dandruff. Keep hair free from lice. 3. Wash your hands with soap and water after using the toilet. 3. Wash your hands before and after every meal. Use a good soap and clean water to clean your legs and toes. 4. Avoid reading while lying down, travelling or in dim light. Do not expose your eyes to very bright light. Keep them away from sharp objects. Use clean cool water to wash your eyes everyday, then wipe them with clean towel. Do not let water enter your ears while bathing. Do not put sharp objects like pencil, pin etc. into ears. Use cotton buds to clean your ears. 6. Never put fingers or any other object into your nose. Wipe your nose with a clean towel after blowing it. In case of cold, use good nasal drops. 7. Use a tongue cleaner to clean your tongue everyday. 8. Bath with clean water and a good soap daily to remove dirt and sweat. Use a clean towel. Always wear clean clothes. **E.** 1. We should visit a dentist if we have dental problems. 2. We should apply coconut oil or almond oil to keep away dandruff. 3. We should not grow our nails. Dirt collects in long nails. 4. Five sense organ are eyes, ears, nose, tongue and skin. We get all the awareness of surroundings through our sense organs.

LESSON 6 : FIRST AID

A. 1. an accident 2. first aid 3. splint 4. ligament 5. artificially respiration **B.** 1. Fracture means the breaking of bone. Sprain is the over stretching or partial breaking of the ligament (the muscles that joins one bone to another.) 2. In mild shock, the victim is thrown off. In server shock, the victim gets burning and other injuries. **C.** 1. Support the injured part with a splint (long pieces of wood or newspaper.) Put a padding, cotton towel between the fractured part and the splint so that splint does not hurt. Tie the sprint a little firmly with a bandage. Keep the victim warm and give something hot to drink. 2. Cool the sprained part with a thick cloth dipped in cold water. Do not move the sprained part. 3. Put the patient flat on the stomach with face on the side. Stretching the arms over the head and raising the middle part of the body with your hands while help in draining out the water from the lungs. Give artificial respiration quickly.

When the victim start breathing, remove the wet clothes. 4. Take the patient to the hospital at once. Keep the packet or bottle which you think containing the poison and a sample of victim's vomit for examination by the doctor. 5. Switch off the current or pull the wire to disconnect the victim from the current. Never touch the victim before he is disconnected. You will get a shock you if you touch the victim. Use a stick, chair or shoes with rubber soles to pull the victim. Check the other injuries and provide first aid for them. **D.** 1. Accidents occur due to carelessness and Hurry or by the chance 2. The outside help takes some time to arrive. If the patient is not helped immediately, he may die. This situation is called an emergency situation. 3. The immediate treatment that needs to be given to the victim is called the first aid. It is considered helpful as it saves life, prevents the condition from becoming worse, reduces pain and helps in early recovery. 4. Be calm while giving first aid. Do not let the crowd stand around the patient. Move the victim to a safe place, if possible, before giving first aid. We provide first aid in fractures, sprains, electric shock, drowning, poisoning etc.

UNIT III : COMMUNITY LIFE

LESSON 7 : IMPORTANT BUILDINGS IN THE COMMUNITY

A. 1. (c) 2. (d) 3. (a) 4. (b) **B.** 1. building 2. postcards, stamps 3. lock-up 4. panchayat ghar 5. government **C.** 1. T 2. F 3. T 4. F 5. F **D.** 1. Children learn activities like art and craft, painting, singing, dancing, dramatics, games and sports. 2. The post office sends and receives letters, parcels and money orders. We can save money and deposit it in the post office savings bank. 3. The policeman catch the thieves, robbers etc and put them in the jail. They maintain law and order 4. Four main functions of the panchayats/nagar palikas/ corporations are to provide regular supply of drinking water, to construct Street and roads, to clean streets, roads, drains and spray insecticides, to arrange lights in the streets and roads at night, to set up school and health centres. 5. In a primary health centre, the doctors examine the patients and the nurses give medicines and make dressings. The routine injuries or illnesses are taken care of at this centre.

LESSON 8 : CELEBRATION OF IMPORTANT DAY

A. 1. (c) 2. (b) 3. (d) 4. (a) 5. (c) **B.** 1. important messages 2. Dr Radhakrishnan 3. WHO 4. educated 5. pollution **C.** 1. (c) 2. (e) 3. (d) 4. (b) 5. (a) **D.** 1. Some of the important days that are celebrated, are Children's Day, Teacher's Day, World Health Day, Literacy Day, World Environment Day. 2. Celebrating important days is significant because these make people aware about the happenings and important issues, broaden the

outlook of people and motivate the people to think about actions. The people in turn become thoughtful and are moved. 3. Children's Day is celebrated on the birthday of Nehruji because he was very fond of children and was lovingly called as Chacha Nehru by children. 4. Blood donation camps, immunization programmes, cleanliness cleaners drive etc are organised on the occasion of World Health Day 5. It is the only educated people who can help in the progress of the country. 6. Issues concerning the environment are controlling pollution of air, water, soil and noise; conservation of forests and other natural resources, protecting endangered species and protecting ozone layer. **E.** 1. Sweets are distributed among children. Many children go to picnic with teachers. Poems are sung and debate is held on children issues. 2. Children prepare a culture programme for teacher followed by snacks. Hard working teachers are honoured. Children present flowers or greeting cards to their teachers. 3. Van Mahotsava is celebrated. Debate on environment issues are held. Immunization programmes, cleanliness drive (personal cleanliness and environment sanitation) are held. 5. A procession is carried out with posters and slogan conveying the importance of education.

LESSON 9 : ROLE OF INDIVIDUALS DURING NATURAL CALAMITIES

A. 1. (d) 2. (b) 3. (a) 4. (d) 5. (b) **B.** 1. calamities 2. Earthquake 3. flood 4. fire extinguishers 5. continuous **C.** 1. F 2. T 3. T 4. F 5. T **D.** 1. Natural calamities are very big mishappenings of chance incidents caused by various natural phenomena. These include Earthquakes, floods, drought, epidemics of diseases, forest fires eetc. 2. We, the human beings cannot control natural calamities. 3. Natural calamities cause a loss of damage to life and property. 4. The community members should take up the duty to help those who are affected. They not only take care of physical injuries but also act as strong emotional support. 5. Community members can play a vital role in helping people who are victims of natural calamities. Calm down the people, neither spread fear nor be afraid, isolate the sick people from healthy people and take help of the local government departments. If neighbours and community members lend a helping hand, victims feel secure and recover early. **E.** 1. Calm down the people. Neither spread fear nor be afraid. Stand away from a tree, a wall or a high building. It may fall upon you. If you cannot escape from the house, hide in a narrow corner or under a study table. Give first aid to the needy immediately. 2. Do not panic. If possible move to a higher place. If you are in a tall building, shift to the upper floors. People living in flood prone areas should keep life saving tubes, enough food, clean water and medicines. 3. If the fire is ordinary, put off by splash of water. If the fire is due to short circuiting,

switch off the mains. Use the fire extinguishers. Inform the fire brigade station. 4. Isolate the sick people from healthy people. Shift the sick people to the hospital. Immunise all the healthy people.

UNIT IV : OUR COUNTRY – INDIA

LESSON 10 : PHYSIOGRAPHY OF INDIA

A. 1. (b) 2. (c) 3. (c) 4. (a) 5. (c) **B.** 1. north 2. Himachal 3. North -eastern hills 4. Delhi, Agra 5. inverted triangle **C.** 1. Western 2. long 3. all 4. Shivaliks 5. Plain **D.** 1. India does not have the same physiography every where. The Himalayan range has lofty peaks and deep valleys found in the north. Level plains are formed near the coasts. There is a level fertile plain formed by the river Ganga. Rajasthan has a desert region. Central India is a plateau. Eastern India is the reason of hills, hillocks, mountains and forests. 2. Landforms are the different physical features present on the surface of Earth such as mountains, plains, plateaus, hills, etc. 3. The region into which India's physiography has been divided are Northern Mountaineous Region, The Alluvial River Plains, The Western Desert, The Peninsular Plateau, The Coastal Plains and the Islands 4. The three Mountaineous ranges running parallel to each other are the Great Himalayas, Lesser Himalayas and Lower Himalayas. 5. Refer to page 52 of the next book. The Rivers flowing from all sides. 6. The name of the great Indian desert the Thar Desert. 7. Central part of Southern India is a large plateau. It is composed of hard rocks. This reason is not as fertile as the plains but cultivation can be carried out in some regions where there is black soil. Major rivers of the region are Maha, Godavari, Krishna, Kaveri, Narmada and Tapi. Many minerals are found in the region. Forest at few places are also found. 8. An island is a place of land surrounded by water on all sides. **E.** 1. Western Coastal plains stretch from the gulf of kachchh to Kanyakumari in the South. Eastern coastal Plains extend from Kanyakumari to the Gangas delta. 2. The Andaman and Nicobar Island is a group of 300 Island in the way of Bengal. Lakshadweep Island is a group of 36 island in the Arabian Sea. 3. The himadri are the highest mountains in the Himalayan ranges. These remain covered with snow throughout the year. The Himachal are not as high as the Himadri. These mountains contain thick vegetation. Hill stations like Srinagar, Kulu, Manali, Mussoorie, Shimla are also found in the Himachal. 4. Mountain ranges parallel to the western coast are called Western Ghats. Mountain ranges parallel also found in the Himachal mountain ranges parallel to The Western coast are called Western ghats mountain ranges parallel to the eastern coast are called Eastern Ghats.

PRACTICE SET-II

A. 1. (c) 2. (c) 3. (d) 4. (c) **B.** 1. fibrous 2. ligament 3. buildings 4. WHO 5. calamities 6. Himachal **C.** 1. school, Police station 2. Himadri, Himachal 3. earthquake, epidemic **D.** 1. We got all the awareness of surrounding through our sense organs. 2. Cool the sprained part with a thick cloth dipped in cold water. Do not move the sprained part. 3. Four main functions of the panchayats/nagar palika/corporations are to provide regular supply of drinking water to construct street and roads, to clean streets, roads, drains and spray insecticide, to arrange lights in the streets and roads at night, to setup schools and health centres. 4. blood donation camps, immunization programmes, cleanliness drive etc. are organised on the occasion of World Health Day. 5. Community members can play a vital role in helping people who are victims of natural calamities. Calm down the people, neither spread fear nor be afraid, isolate the sick people from healthy people and take help of the local government departments. If neighbours and community members lend a helping hand, victims feel secure and recover early.

MODEL TEST PAPER-I

A. 1. (c) 2. (b) 3. (a) 4. (b) 5. (a) **B.** 1. vitamins, minerals 2. balanced diet 3. buds 4. educated 5. fire extinguishers **C.** 1. cerebrum, cerebellum 2. bacteria, fungi 3. Earthquake, epidemics **D.** 1. Any item is referred to as food if it is worth eating and nourishes the body. The important characteristics of food are energy giving, body building and protective against diseases. 2. ORS is oral rehydration solution. It makes up the loss of water and salts from the body by diseases like diarrhoea. 3. Support the injured part with a splint (long pieces of wood or newspaper.) Put a padding, cotton towel between the fractured part and the splint so that splint does not hurt. Tie the splint a little firmly with a bandage. Keep the victim warm and give something hot to drink. 4. Celebrating important days is significant because these make people aware about the happening and important issues, broaden the outlook of people and motivate the people to think about actions. The people in turn become thoughtful and are moved. 5. Central part of the Southern India is a large plateau. It is composed of hard rocks. This region is not a fertile as the plains but cultivation can be carried out in some regions where there is black soil. Major rivers of the region are Maha, Godavari, Krishna, Kaveri, Narmada and Tapi. Many minerals are found in the region. Forests at few places are also found.

LESSON II : THE BOND OF ONENESS

A. 1. (c) 2. (d) 3. (d) 4. (c) 5. (d) **B.** 1. horizontal bands 2. Satyamev Jayate 3. Peacock 4. horse, bull 5. supporters **C.** 1. respect 2. 24 3. stand straight 4. National Emblem 5. rectangular **D.** 1. We celebrate our Independence Day on 15 August and Republic day on 26 January. 2. Our national symbols are the National Flag, National Emblem, National Anthem, National Song, National Animal (tiger), National bird (peacock) and National Flower (Lotus). 3. The shape of the National Flag is rectangular. It has three horizontal bands of separate colours : saffron (uppermost), white (middle) and green (lowermost). The middle band has a blue wheel in the centre. 4. The uppermost colour saffron represent courage and sacrifice. The middle colour white represent truth and peace. The blue wheel is called the wheel of law. The lowermost colour green represent prosperity. 5. Rabindra Nath Tagore wrote our National Anthem. Bankim Chandra Chatterjee wrote our National Song. 6. Our National Emblem has four lions standing back to back (but we can see only three from any one side, the fourth hidden behind.) Under the lions there is a wheel. It is the same wheel which we can see in our National Flag. To the left of the wheel is a horse and to the right is a bull. This emblem has been taken from the lion head on the Ashok Pillar at Sarnath.

LESSON 12 : CONTRIBUTE OF INDIANS IN DIFFERENT FIELDS

A. 1. (b) 2. (c) 3. (c) 4. (a) 5. (d) **B.** 1. Sushruta 2. C.V. Raman 3. Central Asian 4. Historical monuments 5. Shah Jahan **C.** 1. Sushruta 2. algebra 3. J.C. Bose 4. Ashoka 5. Buland Darwaza **D.** 1. Crescograph 2. H. J. Bahbha 3. Kailash Temple 4. Gol Gumbaz 5. Taj Mahal **E.** 1. The ancient system of medicine that originated in India is Ayurveda. 2. Charaka was a famous physician who wrote the book 'Charak Samhita'. Sushrut was a famous Surgeon who wrote the book 'Sushruta Samhita'. 3. In mathematics, Aryabhata Invented algebra where in large numbers are expressed in symbols; evolved a formula for calculating the area of circle; gave the rules for finding square roots and cube roots. In astronomy, Aryabhata stated that the Earth was spherical and rotated on its Axis; the moon is illuminated by the Sun; gave the causes of ellipses in detail. 4. Brahmgupta wrote the book 'Brahmagupta Siddhanta.' He gave the concept of zero. 5. When a ray of light passes through a liquid or gas, it gets scattered. Also, frequency of some of the scattered light is changed. 6. There are engravings on the gateways of stupas of Sanchi and Sarnath. These depict Jataka stories. Beautiful architectre can be seen on the railings of Sanchi Stupa. These are the best specimen of Indian Architecture. 7. Three beautiful temples are Kailash Temple at Ellora, Dilwara Temple near

Mt. Abu and Vitthala Temple, Hampi. 8. Three building constructed by Turks and Mughals are Qutub Minar, Gol Gumbaj and Taj Mahal. Domes, arches and minarest are the special features found in all these buildings. 9. The historical monuments highlight our past glory in the field of art. They remind us of our history. They are the specimen of our rich culture heritage. 10. Never try to steal anything from historical monuments. Never write on the walls of the monuments. Pay the entrance fee. It is used for the maintenance of the monument.

LESSON 13 : STORIES OF FREEDOM FIGHTERS

A. 1. (d) 2. (a) 3. (b) 4. (d) 5. (c) **B.** 1. Arabs, Greeks, Romans 2. Bahadur Shah Jafar 3. Indian National Congress 4. 1945 5. Chauri Chaura **C.** 1. (c) 2. (e) 3. (d) 4. (b) 5. (a) **D.** 1. T 2. F 3. T 4. F 5. T **E.** 1. Indian national Congress 2. Kesari 3. Forward Block 4. 23rd March, 1931 5. Satyagraha
F. 1. European traders came to India to trade in cotton, silk and handicrafts. 2. The European powers fought amongst themselves and British became victorious over the Portuguese, Dutch and French. They came as traders and gradually established their rule in the country. 3. Prominent leaders of the revolt of 1857 were Bahadurshah Jafar, Peshwa Nanasahab, Taty Tope, Rani Laxmibai, Begum Hazrat Mahal, Maulvi Ahmedullah, Kunwar Singh and the Mughal General Bakht Khan. 4. Lal-Bal-Pal wanted quick action to force Britishers to leave India. They use methods like hartals, dharnas etc. They appealed to the people to oppose the British Government unitedly.

UNIT V : NATURAL ENVIRONMENT

LESSON 14 : MAN AND ENVIRONMENT

A. 1. Non-biotic components of the environment 2. Biotic components of the environment 3. Herbivorous 4. Carnivores 5. Consumers **B.** 1. plants 2. omnivore 3. bacteria 4. heterotrophs 5. plants **C.** 1. A groups of living organism together with their physical environment is called the ecosystem. 2. The process of producing food by the green plants using the Sun's energy along with carbon dioxide and water is called photosynthesis. 3. Some organisms decompose the dead remains of plants and animals. These are called decomposers. For example bacteria, fungi. 4. The transfer of energy from one organism to another in an ecosystem is called the food chain. 5. When the energy production and consumption are in a state of perfect balance, this is called ecological balance. **D.** 1. Land, water, air and soil together are called physical environment. Plants, animals and human being together are called biological environment. 2. Autotrophs are green plants which can prepare their own food. Autotrophs are animals and human beings who depend on plants or other animals

for food. 3. Carnivores eat only animal parts. Herbivores eat only plant parts. 4. Bacteria decompose the dead remains of plants and animals and survive on them. Rats survive mainly on grains and other plant parts. **E.** 1. The surrounding in which we live is called our environment. It contains both living (plants, animals, human beings) and non-living (land, water, air, and soil) components. 2. There is constant action between physical and biological environment. Plants, animals and human beings (component of biological environment) breathe in air, at take water and take minerals from soil (components of physical environment). 3. The components of ecosystem are producers, consumers and decomposers. 4. Green plants are called producers because they produce their own food using the Sun's energy along with carbon dioxide and water 5. The energy in a food chain is transferred from producers to consumers. 6. Most human activities like agriculture, industries, urbanization and over population are responsible for disturbing the ecological balance.

PRACTICE SET-III

A. 1. (d) 2. (d) 3. (c) 4. (a) **B.** 1. supporters 2. central Asia 3. Bahadur Shah Jafar 4. biotic 5. 1885 **C.** 1. National Flag, National Emblem 2. Red Fort, Taj Mahal 3. Lala Lajpat Rai, Bal Gangadhar Tilak, Bipin Chandra Pal **D.** 1. Our National Emblem has Four lions standing back to back (but we can see only three from any one side, the fourth hidden behind). Under the lions there is a wheel. It is the same wheel which we can see in our National Flag. To the left of the wheel is a horse and two the right is a bull. This emblem has been taken from the Lion head on the Ashoka pillar at Sarnath. 2. In mathematics, Aryabhata invented algebra where in large numbers of expressed in symbols; evolved a formula for calculating the area of circle; gave the rules for finding square roots and cube roots. In astronomy, Aryabhata started that the Earth was spherical and rotated on its axis; the moon is illuminated by the Sun; gave the causes of eclipses in detail. 3. The European powers fought amongst themselves and the British became victorious over the Portuguese, Dutch and French. They came as traders and gradually established their rule in the country. 4. The surroundings in which we live is called our environment. It contains both living (plants, animals, human beings) and non-living (land, water, air and soil) components. 5. Green plants are called producers because they produce their own food using the Sun's energy along with carbon dioxide and water.

LESSON 15 : CONSERVATION OF NATURAL RESOURCES

A. 1. (a) 2. (a) 3. (c) 4. (c) 5. (d) **B.** 1. resources 2. coal, iron 3. forest land 4. extinction 5. air **C.** 1. useful 2. banned 3. terrace farming 4.

necessary 5. away **D.** 1. Van Mahotsava is a programme where people and children plant trees in villages, towns and cities at a large scale. 2. Chipko Movement is a movement where in people cling to trees that are being cut to protect those trees. 3. Wildlife sanctuaries are the animal park the conservation of species of animals and plants. Hunting and cutting of trees are forebidden in this areas. 4. Soil is made of fine particles of rocks by the gradual breaking of rocks for thousands of years. Plants grow in the soil and prepare food. Minerals are chemical substances that occur naturally underground. These are taken from the Earth by mining and hence called minerals. **E.** 1. Do not cut trees thoughtlessly as they verify air. Do not burn garbage as it causes air pollution. Factories must have filters in their chimneys. Get vehicles checked for pollution. Use smokeless chullahs. 2. Do not waste water. Do not wash clothes or utensils near the sources of water. Do not throw garbage from houses and industries into water. Never throw dead bodies of animals in water sources. Conserve available fresh water by building dams and reservoirs. 3. Stop thoughtless cutting of trees as their roots bind the soil and prevent its erosion. Make bandhs around the field to avoid soil erosion. Avoid overgrazing by cattle on the same piece of land. Convert waste lands into forest land to avoid soil erosion. Avoid soil pollution by not throwing garbage, industrial waste and defecating. 4. Use the wealth of the forest wisely (economically). Prevent forest fire. Do not cut forests for building up towns and for agriculture. Protect forest from overgrazing by animals, plant pests and insects. Plant trees on large scale. Whenever trees are cut, plant new trees to replace them. 5. Do not destroy forests as they are the habitat for so many species of animals. Ban hunting and killing of animals. Make forests free from pollution of air, water and soil to let animals survive. Keep domestic animals in a clean place, bathe them regularly and treat for sickness promptly conserve wildlife in sanctuaries and Zoological parks. 6. Use the mineral wealth wisely. To save oil do not use vehicles for going to short distance. Do not burn coal unnecessarily. Use only as much mineral as much needed. To save oil and coal, use alternative source of energy such as solar energy, wind energy energy, energy of falling water to make electric energy. To save coal in thermal power plants save electricity. **F.** 1. Natural resources are the things that are provided by natural and which sustain life on the Earth. For example, air, water, soil, plants, animals, forests and wild life. 2. While some resources are quickly replaced by nature, Some are not. Many resources are in limited supply and we have to use them carefully and economically : only as much as we need. 3. The efficient and proper use of available resources is known as the conservation of natural resources. 4. Four wild life sanctuaries are Chilka

Lake Bird Sanctuary–Orissa, Periyar Sanctuary–Kerala, Sultanpur Lake Bird Sanctuary–Haryana, Keoladeo Ghana Bird Sanctuary–Rajasthan. 5. Because of over population, the resources are being used at a faster rate.

LESSON 16 : PHYSICAL FEATURE AFFECT OUR LIFE

A. 1. (c) 2. (d) 3. (c) 4. (b) 5. (c) **B.** 1. men 2. woollens 3. thatched roof 4. deserts and peninsular areas **C.** 1. (b) 2. (d) 3. (e) 4. (c) 5. (a) **D.** 1. cereals, crops 2. climate 3. women's dresses 4. men's dresses 5. occupations **E.** 1. The way of life of the people : food, shelters, occupations and clothing of the people are changed in different climates. 2. There is a variety of regions in India : mountaineous, plains, coastal area, desert and plateau, therefore the climate varies place to place. 3. (a) Major crop that grows on plains is wheat. (b) Major crops that grows in coastal areas is rice. (c) Major crop that grows in desert is bajra. (d) Major crop that grows on mountain is apple. 4. In mountaineous region, sloped roof allows rain water or snow to run down smoothly. In flood area, houses are built on a raised platform on stilts so that water cannot enter the house. In hot and humid areas, houses are made of mud having thatched roof to keep them cool. In areas with very hot summer and cold winters, houses are made with flat roofs. Their roofs can be used for sleeping in summer. 5. Physical variations in clothes : In mountaineous regions and in planes (during winter) people wear woollen clothes to keep warm. In coastal areas or in plains (during summer) people wear cotton clothes to keep cool. Culture Variations in clothes : In most parts saree is worn by women, draped differently in different areas. In Kashmir and Punjab, they wear salwar kameez. In Rajasthan they wear a ghagra with odhani. In Gujarat and Madhya Pradesh they wear a thick petticoat with many folds. In cities, young women and girls like to wear modern dresses in a variety of styles, from the culture of all over the country. For example, Salwar-kameej, churidar pyjama-kurta, skirt, jeans etc. The common dress of men is dhoti-kurta or dhoti-kameez. In South India, lungi is common. Kashmiri men wear salwar-kameej. Men in cities, wear shirts, T-shirts, shorts and trousers. 6. As there are thick forests in the mountaineous regions, people are engaged and collecting forest products and selling them far and wide. Growing fruits is also popular occupation. Farming and rearing animal is the main occupation in the levelled and fertile plains. In coastal areas, fishing from the sea is the main occupation. In the plateau region, people are mainly engaged in the mining of huge deposits of minerals.

UNIT VI : TRANSPORT AND COMMUNICATION

LESSON 17 : ADVANCEMENT OF TRANSPORTATION AND COMMUNICATION

A. 1. (b) 2. (a) 3. (d) **B.** 1. markets 2. internal, external 3. tourism 4. socialization 5. aircraft, shape **C.** 1. T 2. T 3. T 4. F 5. T **D.** 1. Advancement in transportation has helped to carry, perishable commodities such as products of fisheries, poultry and dairy industries to distant markets. So these occupations have now turned into full fledged industries. Moreover, manufacture of automobiles, railway locomotives, wagons, aircraft and ships have also developed. 2. Advancement in transportation has helped worker to commute from their home to work place. This has increase employment opportunities. 3. Advancement in transportation has helped persons like dancers, musicians, sportsmen and sportswomen to travel to different states and countries and carry their culture and exchange ideas. 4. Advancement in transportation has helped goods from many countries to reach many other countries. So a wide variety of goods are available everywhere to choose from and enhance the standard of living. **E.** 1. Communication by telephone or fax cannot maintain secrecy because other persons may find what had been communicated. 2. Communication is helpful in maintaining internal security. For example, the police can be contacted at once. 3. In the event of accidents or incidents or fire, immediate help can be asked for and made available through modern means of communication. 4. People have become too much dependent on modern means of communication. If any of the means stop working, they have continuous tension till the equipment is repaired.

F. 1. In transportation, people and goods are carried from one place to another. In communication, messages are carried from one place to another. 2. Transportation helps in carrying goods far and wide. It has helped in the dispersal of industries. It has promoted tourism. Transportation helps in the defence of country as troops can move easily. Transportation helps in the events of flood, earthquake etc to provide relief immediately. 3. Negative effects of transportation are increase in pollution, loss of life and property due to accidents and destruction of forests and farmlands to construct roads and railway tracks. 4. Advancement in communication has promoted business a lot. It has developed social relations among people. In the event of accidents or incidents of fire, immediate help can be asked for. Aircraft and ships are kept in the right direction to move through instructions from the control room. Educational and entertainment programmes are broadcasted over the radio and telecasted on television. Communication is helpful in maintaining security as it enabled the police or army to be in contact from one end of the country to the other. 5. The

disadvantages of the advancement of communication system and loss of secrecy and privacy, too much dependence, health problems caused by television and mobile phones, organised crimes and spread of terrorism. 6. To reduce the negative effects of the advancements in transportation and communication : Do not waste resources petrol, diesel, coal and electricity (electricity is produced from burning coal to produce steam to operate electric generators). Avoid excessive use of mobile phones, computer and TV. Make people aware of the advantages and disadvantages.

UNIT VII : THE EARTH–OUR HOME

LESSON 18 : THE GLOBAL AND THE MAP

A. 1. (a) 2. (c) 3. (b) 4. (b) 5. (a) **B.** 1. globe 2. seven, five 3. Earth 4. grid 5. maps **C.** 1. atlas 2. oceans 3. sub-direction 4. left 5. latitudes **D.** 1. A global is spherical while a map is flat. 2. Northern hemisphere is the northern half and southern hemisphere is the southern half of the Earth. 3. North Pole is the north end of the globe while the South Pole is the South end of the globe. 4. Lines of latitudes are parallel to the equator. Lines of longitude run from the north pole to the South Pole. 5. A key gives the details of the signs and symbols. A legend is a wording on the map explaining the symbols. **E.** 1. Large masses of the Earth are called oceans. 2. Large water bodies on the Earth are called continents. 3. Within the continents, politically divided smaller lands are called countries. 4. The smaller parts of the oceans, near islands or between pieces of lands are sometimes called as seas. 5. A book of maps is called Atlas. 6. The network of lines of latitudes and lines of longitudes on a globe is called grid. 7. The Earth is divided into two halves. Each is called the hemisphere. 8. The dividing line of the Northern and Southern hemispheres is called the equator. 9. The two ends of the globe are called the poles. 10. A legend is the wording on the map explaining the symbols.

F. 1. A globe is a small spherical model of the Earth. 2. The globe is rotated because only half part can be seen at one time while the other half on the other side is hidden. 3. A globe shows continents, oceans, countries, seas, poles, equator, lines of latitude and lines of longitude. Large land masses are continents. Large water bodies are oceans. Politically divided smaller lands are countries. Smaller parts of the oceans between pieces of lands are seas. Northern half of the Earth is northern hemisphere. Southern half of the Earth is southern hemisphere. The dividing line of these hemispheres is equator. The north end of the globe is north pole. South end of the globe is south pole. The lines parallel to equator are lines of latitude. The lines from north pole to South Pole are lines of longitude. 4. A map is a drawing on paper showing a part of or the whole

of the Earth's surface. 5. A map occupies smaller space than a globe. A map can be easily folded and carried from place to place. A map can be rolled and kept anywhere. 6. The language of the map is that we must know to understand the lot of information a map contains. The language of the map consists of directions, scale, colours, signs & symbols. 7. The tools to understand a map are direction, scale, colours and symbols. All maps strictly follow a pattern of directions. North is always at the top of map that is upwards. South is downwards. The side to your left is the west and to your right is east. Every map is drawn to scale. For example, 1 cm = 100 km. The scale indicates how would the distance between two places be measured. The colours provide information far more quickly than the words. Ocean are shown by blue colour and the land by brown colour. A symbol is a sign that is drawn to represent some features. For example, a city is marked by a circle or a dot with a circle around it. The boundaries of countries are shown by lines made of dashes and dots.

PRACTICE SET-IV

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A. 1. (b) 2. (a) 3. (c) 4. (b) 5. (c) **B.** 1. resources 2. extinction 3. sloped 4. socialization 5. grid **C.** 1. air, water 2. jowar, bajra 3. Asia, Europe **D.** 1. Because of overpopulation, the resources are being used as a faster rate. 2. The way of life of the people : food, shelters, occupations and clothing of the people are changed in different climates. 3. Negative effects of transportation are increase in pollution, loss of life and property due to accidents and destruction of forests and farmland to construct roads and railway tracks. 4. Advancement in communication has promoted business a lot. It has developed social relations among people. In the event of accidents or incidents of fire, immediate help can be asked for. Aircraft and ships are kept in the right direction to move through instructions from the control room. Educational and entertainment programmes are broadcasted over the radio and telecasted on television. Communication is helpful in maintaining security as it enables the police or army to be in contact from one and of the country to the other. 5. A globe shows the continents, oceans, countries, seas, poles, equator, lines of latitude and lines of longitude. Large land masses are continents. Large water bodies are oceans. Politically divided smaller lands are countries. Smaller parts of the ocean between pieces of lands are seas. Northern half of the Earth is Northern hemisphere. Southern half of the Earth is southern hemisphere. The dividing line of these hemispheres is equator. The north and of the globe is north pole. South and of the globe is south pole. The lines parallel to the equator are lines of latitude. The lines from north pole to south pole are lines of longitude.

MODEL TEST PAPER-II

A. 1. (c) 2. (c) 3. (d) 4. (c) 5. (c) **B.** 1. Satyamev Jayate 2. Sushrut 3. market 4. farming 5. global C. 1. J. **C.** Bose, H. J. Bhabha 2. coal, iron 3. apple, peach **D.** 1. There are engravings on the gateways of stupas of Sanchi and Sarnath. These depict Jataka stories. Beautiful architecture can be seen on the railings of Sanchi Stupa. These are the best specimen of Indian Architecture. 2. The European power fought amongst themselves and the British became victorious over the Portuguese, Dutch and French. They came as traders and gradually established their rule in the country. 3. There is constant action between physical and biological environment. Plants, animals and human beings (components of biological environment) breathe in air. take water and take minerals from soil (components of physical environment). 4. A Map occupies smaller space than a globe. A map can be easily folded and carried from place to place. A map can be rolled and keep anywhere. 5. The way of life of the people : food, shelters, occupations and clothing of the people changed in different climates.

