# **Teacher's Manual** (Class 1 to 5)



Moto

Garh Road Meerut B.O. C-49, Preet Vihar, Delhi Email: support@mastermindpublications.in Web.: http://www.mastermindpublications.in (A BOOK OF ENVIRNMENTAL STUDIES)

### **TEACHER'S HELP BOOK**

### MOTO ECO FRIENDLY-1

Unit-I : Me and My Body

#### **CHAPTER 1: KNOWING YOURSELF**

**A. 1.** (a) **2.** (b)

#### **CHAPTER 2 : MY BODY**

A. 1. (b) 2. (a) B. 1. skin 2. think 3. turn 4. carry 5. playing С. 1. Head 2. Hand 3. Face 4. Shoulder 5. 6. Tummy Chest 7. Flbow 8. Foot D. Do it yourself.

#### **CHAPTER 3 : HOW OUR BODY WORKS?**

**A. 1.** (b) **2.** (a) **B. 1.** legs **2.** hands **3.** legs **4.** hands **C. 1.** *X* **2.** √ **3.** *X* **4.** *X* 

#### **CHAPTER 4 : OUR SENSE ORGANS**

A. 1. (b) 2. (c) B. 1. skin 2. ears 3. nose 4. tongue 5. eyes C. 1. eyes 2. tongue 3. nose 4. skin 5. ears

#### **CHAPTER 5 : GROWING UP**

**A. 1.** (b) **2.** (c) **B.** 2, 4, 1, 3 **C. 1.** Ali is fat. **2.** Razia has fair skin. **3.** Ali has short hair. **4.** Razia is thin. **5.** Ali has dark skin. **CHAPTER 6 : GOOD CARE OF BODY** 

A. 1. (b) 2. (b) 3. (a) B. 1. teeth 2. chew 3. rest 4. body
5. face, eyes. C. 1. We must have good habits to keep our body fit and fine. 2. We must brush our teeth twice a day.
3. Exercise keeps us fit so we must exercise everyday. 4. We must take rest when we get tired. 5. Walking, running and swimming are good exercises. D. 1. Clothes 2. Everyday
3. Nails 4. Fit 5. Eight hours. E. 1. Bath 2. teeth twice 3. healthy
4. playing 5. bed F. 1. little 2. mouth 3. finger 4. sleep 5. good 6. eating 7. plenty 8. early 9. brush

#### Unit-II: My Needs

#### **CHAPTER 7 : FOOD WE EAT**

A. 1. (b) 2. (b) B. Do it yourself C. 1. Food is our basic need.
2. Eggs and Meat we get from hen. D. 1. Milk 2. Water 3. Sugar 4. Apple 5. Egg

#### **CHAPTER 8 : CLOTHES WE WEAR**

A. 1. (b) 2. (a) 3. (c) B. Do it yourself C. 1. hot 2. raincoat3. woollen clothes

#### **CHAPTER 9 : MY SWEET HOME**

A. 1. (c) 2. (b) B. 1. home 2. shelter 3. clean C. Do it yourself

**D.** Do it yourself.

#### Unit-III: My Neighbourhood

#### **CHAPTER 10 : MY SCHOOL**

A. 1. (a) 2. (c) B. Do it yourself. C. 1. The Teacher teach us.
2. Clean our house. 3. The librarian issue books to us. 4. The Peon gives service in office work.

#### CHAPTER II : PEOPLE WHO HELP US

A. 1. (b) 2. (c) 3. (a) B. 1. carpenter 2. mechanic 3. cobbler 4. tailor
5. barber C. 1. The postman 2. shopkeeper 3. doctor 4. teacher 5. driver D. 1. Driver 2. Doctor 3. Tailor 4. Carpenter
5. Cobbler 6. shopkeeper

#### **CHAPTER 12 : WHERE WE PRAY**

A. 1. (c) 2. (b) 3. (a) B. Do it yourself. C. 1. Temple 2. Mosque

**3.** Gurudwara **4.** Church

#### **CHAPTER 13 : FESTIVALS WE CELEBRATE**

A. 1. (b) 2. (c) B. 1. Deepawali 2. Christmas 3. Id 4. Gurupurav

C. 1. Id 2. Deepawali 3. Christmas 4. Gurupurav Moto Eco Friendly (1 to 5) 3

#### **CHAPTER 14 : NATIONAL FESTIVALS**

**A. 1.** (b) **2.** (c) **B. 1.** 2nd October **2.** 26th January **3.** 15th August

### **Unit-IV: Transport And Communication**

#### **CHAPTER 15 : TRANSPORTS**

A. Do it yourself B. Do it yourself C. 1. land 2. water 3. air CHAPTER 16 : SAFETY ON THE ROAD

A. (b) B. 1. footpath 2. green 3. yellow 4. green C. 1. False 2. True
3. False 4. True

#### **CHAPTER 17 : MEANS OF COMMUNICATION**

A. 1. (b) 2. (b) 3. (a) 4. (b) B. 1. telephone 2. post 3. newspaper
4. television 5. telephone C. 1. Hindustan times 2. Amar Ujala
D. 1. Telephone 2. Letter 3. Fax

#### **Unit-V: Environment**

#### CHAPTER 18 : PLANTS AROUND US

A. 1. (a) B. 1. water 2. shrub 3. fruits 4. creeper C. 1. Mango2. Rose 3. Money plant 4. Lotus

#### CHAPTER 19 : ANIMALS AROUND US

A. 1. (c) B. 1. Domestic Animals– Cow, Horse, Dog. 2. Wild Animals– Lion, Tiger, Bear, 3. Insects – Butterfly, Ant, Snake
4. Pet Animals– Cat, Rabbit, Fish C. 1. (b) 2. (c) 3. (e) 4. (a)
5. (d)

#### **CHAPTER 20 : CARRING FOR ANIMALS**

**A. 1.** (a) **2.** (c) **B. 1.** Cow **2.** Sheep **3.** Camel **4.** Dog **5.** Hen **C.** Do it yourself.

#### **CHAPTER 21 : OUR EARTH**

**A. 1.** (c) **2.** (b) **B. 1.** land and water **2.** man-made things **3.** breathe **4.** natural things **C.** Do it yourself.

#### **CHAPTER 22 : THE SKY**

**A. 1.** (b) **2.** (c) **B. 1.** bright **2.** stars **3.** clouds **C. 1.** True **2.** False **3.** True **D. 1.** Sun, Moon and stars. **2.** The sun gives us heat, light and energy. **3.** Rainbow is a band of seven colours in the sky. **4.** Lightning is a flash of every bright light during a storm or rain.

## MOTO ECO FRIENDLY-2

Unit-I: Me and My Body

#### **CHAPTER I: ME AND MYSELF**

Do it yourself.

#### **CHAPTER 2 : PARTS OF MY BODY**

A. 1. (a) 2. (a) B. Do it yourself. C. 1. see 2. nose 3. cold 4. sweet 5. ears D. Tongue, Nose, Skin, Eye, Ear

#### **CHAPTER 3 : BE HEALTHY**

A. 1. (b) 2. (b) B. Do it yourself. C. 1. eight 2. twich 3. filtered 4. strong D. Do it yourself.

#### **CHAPTER 4 : SAFETY AND YOU**

A. 1. (a) 2. (b) B. 1. false 2. true 3. true 4. true 5. false C. Do it yourself. D. 1. Antiseptic lotion 2. Cotton 3. Bandages

#### CHAPTER 5 : FOOD

#### Unit-II: My Needs

vourself. 1. (c) 2. (a) Β. Do it Α. 3. (a) C 1. Potato 2. Tomato 3. Carrot 4. Pea 5. Onion 6. Brinjal D. 1. Curd 2. Ghee 3. Butter 4. Cheese 5. Cream 6. Saturated Milk

**CHAPTER 6 : CLOTHES WE WEAR** 

A. 1. (b) 2. (c) 3. (a) B. Do it yourself. C. 1. Rainy season 2. Winter
3. Summer 4. Marriages and festivals.

#### **CHAPTER 7 : MY SWEET HOME**

A. 1. (b) 2. (a) B. 1. Igloos 2. Houseboat 3. Pucca house 4. Tent house 5. Kachcha house C. 1. True 2. False 3. True 4. True D. Do it yourself.

#### Unit-III: My Neighbourhood

#### **CHAPTER 8 : CARE OF NEIGHBOURHOOD**

A. 1. (a) 2. (b) 3. (b) B. 1. Machanic 2. Medical Representative
3. Coolie 4. Petrolpump 5. Post office C. Do it yourself. D. Do it yourself.

#### **CHAPTER 9 : NEIGHBOURHOOD PLACES**

**A. 1.** (c) **2.** (b) **3.** (a) **B. 1.** neighbours **2.** sick **3.** post office **C. 1.** True **2.** True **3.** False **D. 1.** A good neighbourhood has many places such as a market, hospital, bank, post office, police station, fire station and park. **2.** Bakery, tailor and sweet shop are found in a neighbourhood market. **3.** People deposit their money in a bank. they can also borrow money from the bank so banks useful to us. **4.** Policemen take care of our neighbourhood. They catch thieves and robbers and put them in jail. They maintain law and order. They also search for lost people or things.

#### **CHAPTER 10 : OUR SCHOOL**

A. 1. (c) 2. (c) B. Do it yourself. C. 1. d 2. c 3. a 4. b CHAPTER II : CELEBRATING FESTIVALS

A. 1. (b) 2. (c) B. 1. Diwali 2. Holi 3. Dussehra 4. Raksha Bandhan
5. Christmas C. 1. (b) 2. (c) 3. (d) 4. (a) D. 1. Holi 2. Diwali
3. Dussehra 4. Raksha Bandhan 5. Id-ul-Fittr 6. Christmas
CHAPTER 12 : NATIONAL FESTIVALS

A. 1. (b) 2. (a) B. 1. 15th August 2. 26th January 3. 2nd October
C. 1. Independence Day, Republic Day and Gandhi Jayanti
Moto Eco Friendly (1 to 5)

are national festivals. **2.** On this day, the Prime Minister hoists the National Flag at the Red Fort in Delhi. **3.** A big parade is held at Vijay chowk in New Delhi on this day. **4. 1.** Independence Day **2.** Republic Day **3.** Gandhi Jayanti **4.** 1947 **5.** Mahatma Gandhi.

#### **CHAPTER 13 : OCCUPATIONS**

A. 1. (b) 2. (a) B. 1. All people have to do work for their living. they get money for the work they do. 2. Do it yourself. 3. Any job or work that helps to earn money is called an occupation. C. 1. Potter 2. Milkman
3. Medical Representative 4. Post man 5. Greengrocer

#### **Unit-IV: Transport and Communication**

#### CHAPTER 14 : MEANS OF TRANSPORT

A. 1. (a) 2. (b) B. 1. Aeroplanes, helicopters, rockets 2. Car,

Bus, Truck C. 1. Aeroplane 2. Train 3. Camel 4. Cycle 5. Bul CHAPTER 15 : COMMUNICATION

**A. 1.** (b) **2.** (a) **3.** (b) **4.** (b) **B. 1.** Mobile **2.** Newspaper **3.** Computer

#### **Unit-V: My Natural Environment**

#### CHAPTER 16 : PLANTS AROUND US

**A.** (c) **2.** (a) **B. 1.** Trees are tall plants with woody stem. Mango, banyan, neem, etc are trees. **2.** Small and bushy plants are called shrubs **3.** Rose **4.** Lotus **5.** Plants need air, water and sunlight to grow. **C.** Do it yourself. **D. 1.** Green **2.** Air **3.** Woody **4.** Shrubs **5.** Climbers

#### CHAPTER 17 : ANIMALS AROUND US

A. 1. (d) 2. (c) B. 1. Cow, Buffalo 2. Donkey, Mules 3. Hen, Duck

4. Horses, Bullocks 5. Bufflow, Camel Moto Eco Friendly (1 to 5) 7

#### **CHAPTER 18 : THE EARTH**

**A. 1.** (b) **2.** (c) **B. 1.** A Desert is a vast area of land covered with sand and dust. **2.** A forest is a big area covered with plants and trees. **3.** The earth looks after our needs like a mother so we should take care for earth. **4.** A Velley is V-shaped hollow between two mountains. **C. 1.** Ocean **2.** Seas **3.** Rivers **4.** Lakes **D.** Do it yourself.

#### **CHAPTER 19 : SEASONS**

**A. 1.** (b) **2.** (a) **B. 1.** (e) **2.** (a) **3.** (d) **4.** (c) **5.** (b) **C. 1.** True **2.** False **3.** True **4.** True **5.** False

#### **CHAPTER 20 : IN THE SKY**

A. 1. (a) 2. (b) B. 1. Rainbow 2. Sun 3. Moon 4. Stars 5. Clouds
C. 1. Sun, Light 2. Moon, Stars

#### **CHAPTER 21 : LAND OF INDIA**

A. 1. (a) 2. (a) B. 1. Plains 2. South 3. Lotus C. 1. True 2. True 3. False D. 1. Himalayas 2. (i) The Arabian sea (ii) The Bay of Bengal 3. Hindi and English 4. Lotus, Tiger, Peacock, Banyan tree, Mango, Tricolour. F. 1. (d) 2. (f) 3. (b) 4. (a) 5. (c) 6. (e)

### MOTO ECO FRIENDLY-3 Unit-I: Me and My body

#### **CHAPTER I : MY BODY**

1. (b) 2. (b) 3. (b) B. 1. see 2. hear 3. smell Α. 4. 5. taste weather and С. 1. temperature (i) Rasqulla (ii) Chocolate 2. (i) Lemon (ii) Orange 3. (i) Namkeen (ii) Samosa 4. (i) Bittergourd (ii) Methi D. 1. Eves, ears, nose, tongue and skin are sense organs of the body. 2. Head, Neck, Chest, Hands, Legs, are external parts of the body. 3. Heart, brain, lungs, pancrease and liver are internal parts of the body. Moto Eco Friendly (1 to 5) 8

#### **CHAPTER 2 : HEALTH AND HYGIENE**

A. 1. (a) 2. (b) 3. (d) B. 1. machine 2. balanced 3. properly rub 4. Oil 5. Rest C. 1. True 2. True 3. True 4. False 5. True 6. False D. 1. Sleep, rest, exercise, balanced diet are all important to be fit and strong. 2. Our body needs rest after work or play, so sleep and rest important to us. 3. Exercise and yoga help to improve themselves fit. It improves blood circulation in our body and make us strong. 4. Drink at least six glasses of water everyday. 5. It helps us to refresh the mind.

#### **CHAPTER 3 : LIVING THINGS**

**A. 1.** (b) **2.** (c) **3.** (c) **B. 1.** stomata **2.** gills **3.** lungs **C. 1.** false **2.** true **3.** true **4.** true **D. 1.** Green plants make their own food. **2.** If a human being feels pain, he expresses it by crying. **3.** (i) Plants–Plants make their own food with the help of air water and sunlight. (ii) Animals–Animals eat grass or plants in the fields. **4.** Animals have lungs to breathe and plants have stomata and they breathe through it.

#### **Unit-II: Our Needs**

#### **CHAPTER 4 : FOOD**

**A. 1.** (d) **2.** (a) **3.** (c) **B. 1.** (b) **2.** (c) **3.** (d) **4.** (e) **5.** (a) **C. 1.** (i) Rice (ii) Bajra **2.** (i) Meat (ii) Eggs **3.** (i) Tomato (ii) Potato **4.** (i) Butter (ii) Ghee **D. 1.** Food is our basic need. **2.** Milk is a complete food. **3.** Fruits and vegetables are washed properly before use because if we don't washed them properly before use than it may cause harm us. **4.** Rice, jwar, maize, bajra etc. are cereals. **5.** We cover the food items properly because harmful organism and chemicals damage the food.

#### **CHAPTER 5 : WATER**

A. 1. (b) 2. (a) 3. (c) B. 1. True 2. False 3. False 4. True C. 1. (i) Moto Eco Friendly (1 to 5) 9 Pond (ii) River **2.** (i) Rice plant (ii) Water lily **D. 1.** (i) Bathing (ii) Drinking (iii) Cocking (iv) Washing (v) Cleaning **2.** Don't through rubbish or any waste materials into the water. Keep the stored water covered with lid. **3.** People throw garbage in water. The waste water of factories contains germs in it. **4.** Typhoid and jaundice, malaria are the diseases caused by polluted water.

#### **CHAPTER 6 : AIR**

A. 1. (c) 2. (a) 3. (a) B. 1. c 2. d 3. b 4. a. C. 1. • Burning of chemicals, substances and papers also add to pollution.
• Smoke emitted by vehicles, factories and chemneys in homes. 2. Plants help to clean the air by taking in carbon-dioxide from the air and giving out oxygen. 3. All living things need air to live. 4. (i) Burning of chemicals. (ii) smoke CHAPTER 7 : SHELTER

A. 1. (a) 2. (b) 3. (c) B. 1. sanitation 2. mop 3. lids
4. cross ventilation 5. dampness C. 1. True 2. True 3.
False 4. True D. 1. A house protects us from rainfall, sunlight, cold and storms so our house useful to us.
2. Proper ventilation, enough sunlight and good sanitation are basic need should a house have. 3. Ventilation is a process which provides fresh air inside the house. 4. (i) We must keep our house clean. (ii) Mop the floor daily. (iii) Cleaning agent like phenol should be used at least once a week. (iv) Dispose off the garbage daily.

#### **CHAPTER 8 : CLOTHES**

A. 1. (b) 2. (a) 3. (c) B. 1. True 2. True 3. True 4. True 5. True
C. 1. Clothes cover our body and protect us from heat and cold.
2. Lehnga-Choli is the main dress of women in Gujarat. 3. Uttar Pradesh and Gujarat wear Gandhi caps. 4. Ghagra choli (Lancha) is the popular dress of women in Uttar Pradesh. 5. Himachali caps are famous for their beautiful embroidery.

#### **Unit-III: Recreation**

#### **CHAPTER 9 : MEANS OF RECREATION**

**A. 1.** (b) **2.** (b) **3.** (c) **B. 1.** Chess, Ludo, Carrom **2.** Cricket, Badminton, Football **3.** Lotpot, Chacha Chodhry, Fairytales **4.** Starplus, Zee Tv, Star Gold **5.** Hindustan Times, Amar Ujala, Danik Jagran **6.** Ninja Hattori, Doremon, Pokemon **7.** Bal Ganasha, Jungle book, Return of hanuman **8.** Salman khan, Shrukhan, Akashy kumar. **C. 1.** Doing something which we enjoy makes us happy is called recreation. **2.** Movies, listening songs, cartoon and other entertainment channel we can watch on the television. **3. Indoor Games** : Some Games are played in our homes. They are called indoor games, chess, ludo, carrom etc. **Outdoor Games** : Some games are only played in the ground. Cricket, badminton, football etc. are outdoor games. **4.** We go to zoo to watch the wild life. **D.** Do it youself.

#### CHAPTER 10 : COMMUNITY SERVICES

**A. 1.** (c) **2.** (a) **3.** (c) **B. 1.** polite **2.** Panchayat **3.** exercise **4.** emergency **5.** duties **C. 1.** Ideas, values, culture, tradition and thoughts we learn from each other. **2.** There are many families living close to each-other in a neighbourhood its called a community. **3.** (i) Panchayat (ii) Police-Station (iii) Fire station **4.** The police guard the neighbourhood. They help the people to find their lost things and we must help the police whenever we can. **5.** When a fire breaks out, we make an emergency call at the fire-station the fire fighters at the fire station reach immediately the place and put off fire and save the lives of the people. **D.** Do it yourself.

#### **Unit-IV: Transport and Communication**

#### CHAPTER II : MEANS OF TRANSPORT

A. 1. (b) 2. (c) 3. (b) B. 1. True 2. False 3. True 4. True
5. True C. Do it yourself. D. 1. The means of travelling

and carrying things from one place to another are called means of transport. **2.** An Aeroplane is the fastest means of transport.

#### **CHAPTER 12 : MEANS OF COMMUNICATION**

A. 1. (a) 2. (b) 3. (c) B. 1. television 2. phone 3. computer 4. philo Taylor farnsworth 5. mobile C. 1. train 2. pencil. 3. satellite
4. cock 5. auto-rikshaw 6. post office 7. uncle 8. black-board
D. 1. Communication means sending or receiving messages to one-another. The ways through which we can send or receive messages are called means of communication. 2. Post office 3. We can through e-mail an urgent message be sent.
4. Newspaper is the cheapest means of communication. 5. E-mail is the fastest means of communication.

#### **CHAPTER 13 : SAFETY RULES**

A. 1. (a) 2. (b) 3. (c) B. 1. False 2. True 3. False 4. True 5. False
C. 1. careless 2. cross 3. dangerous 4. accident 5. helmet
D. 1. Safety means taking care against danger or any other mishappening. 2. Cross the road at the zebra crossing. Cross it when it is clear and no vehicle is coming from both directions. Obey the traffic lights and look both ways before you cross the road. 3. Seat belts save us in case of an accident.
4. It pretects us from head injuries so helmet is useful to us.
5. Do yourself.

#### **Unit-V: Nature Around Us**

#### **CHAPTER 14 : THE HEAVENLY BODIES**

(a) **3.** (c) **B. 1.** movements **2.** 365<sup>1</sup>/<sub>4</sub> Α. **1.** (b) **2.** 3. light, planets 5. С. moon **4**. smaller 1. Blue 2. Rotation 3. Have Natural Spherical 4. 5. D. 1. False 2. False 3. True 4. True 5. False E. 1. The earth, the sun, the moon, the stars and other planets exist Moto Eco Friendly (1 to 5) 12 in the space. These are called heavenly bodies. **2.** The spinning of the earth on its axis is called rotation. **3.** The movement of the earth round the sun is called revolution. **4.** More than two third's of the earth is water and rest is land. It looks like a blue surface from the space. It is sometimes called a 'blue planet'.

#### CHAPTER 15 : NATURAL RESOURCES

A. 1. (a) 2. (c) 3. (b) B. 1. Hydro 2. Humus 3. Green Revolution 4. White revolution 5. Iron, steel 6. Coal, Petroleum 7. Uttar Pradesh, Bihar 8. Wood, Paper 9. Second C. 1. Alluvial soil 2. Central part of India. 3. Jharkhand, Uttar Pradesh Rajasthan 4. White Revolution 5. Iron, coal, mica and bauxite 6. India D. 1. Producing electricity is the main use of water resources. 2. Humus is the dead and decayed parts of plants and animals. It adds to the fertility of the soil. 3. Soil is another important resource of India. Soil is the top most fertile layer of the earth's surface. Soil is necessary to grow plants. It stores food and water for plants and supports their roots. 4. Wheat, rice, sugarcane, pulses, vegetables are some of the main crops of India. 5. The Products we get from agriculture are in raw form. We process them into finished and usable from in an industry; for example, we grow cotton crops in the soil. Then, this cotton is used to make, clothes, bed-sheets, bags and other products in a factory. 6. They are formed due to the decay of dead animals and plants millions of years ago. These resources take a long time to form. 7. Wood- to make furniture. Paper- to write. Medicines- to sick people.

#### **CHAPTER 16 : SEASONS AND CLIMATE**

A. 1. (b) 2. (c) 3. (b) B. 1. change 2. Rainy season 3. Spring season 4. climate C. 1. False 2. False 3. True 4. False D. 1. If there is similar weather for one or more months, it is called a season we have four different Moto Eco Friendly (1 to 5)

seasons-summer, winter, spring, and the rainy season.
2. In winter season, it is very cold, we need more heat, we like to have hot drinks, tea or coffee. We wear woollen clothes. They keep us warm. We use room-heater when it is too cold.
3. Flowers as flowers start blooming in the season.
4. In summer people like to wear loose, cotton clothes. They keep us cool. We us fans, coolers and air conditioners to keep ourselves cool. People go to hill stations in summers.
5. If a place has similar weather over a long period of time, it is called its climate. Example- (i) In the hills and mountains, the climate is cool and pleasant. (ii) Desert have a very hot or a very cold climate.

#### **CHAPTER 17 : PARTS OF A PLANT**

**A.** 1. (b) 2. (a) 3. (c) **B.** 1. The shoot 2. fibrous 3. roots 4. stem 5. store food in their 6. fruit **C.** 1. True 2. True 3. True 4. True 5. False **D.** 1. Root is an important part of a plant which grows below the ground. 2. When a number of thread like roots grow from the base of the stem, they are called fibrous roots. Example- grass, rice. 3. When a long main root grows from the main root, it is called a tap root. Examplemango, pea. 4. The stem bears the branches, leaves, buds, flowers and fruits. 5. The green leaves make food for the plant by the process of photosynthesis.

#### Unit-VI: The story of fire and wheel

#### **CHAPTER 18 : THE STORY OF FIRE**

**A. 1.** (c) **2.** (b) **3.** (c) **B. 1.** fire **2.** stone **3.** coal **4.** cave **5.** mankind **C. 1.** True **2.** False **3.** False **4.** True **5.** True **6.** True **D. 1.** (c) **2.** (e) **3.** (d) **4.** (a) **5.** (b) E. **1.** Fire was discovered in stone age stone age is the period when people lived in jungles. When man

first saw fire, it was either due to friction of two stones or the lightning of the sky. Its uses- (1) Fire keeps men warm. (2) Fire provides light. (3) Animals were afraid. (4) Cooking food. 2. Fruits of the plants or animals early man eat. 3. People lived in jungle before the discovery of fire. 4. A little carelessness in handling it, may cause danger. 5. People lived in jungle if fire was not discovered. 6. Stone age is the period when people lived in jungle. For food they had to depend either on fruits of the plants or on animals. The stone age people hunted the animals with the help of serval kinds of arms which were made up of stone. 7. With the time, use of fire has also changed. The means of fire have also changed. Example- (i) Use of coal (ii) Wood (iii) Kerosene (iv) Gobar Gas (v) L.P.G. (vi) Petroleum (vii) Matchstick or a lighter (viii) Fire as source of energy. F. (i) Lighting fire with stones. (ii) Lighting fire with petroleum. (iii) Lighting fire with a matchstick. (iv) Lighting fire with a lighter.

#### **CHAPTER 19 : THE STORY OF WHEEL**

A. 1. (a) 2. (c) 3. (c) B. 1. art of farming 2. logs 3. tree trunk
4. 300 BC 5. camel-cart, tonga C. 1. Early man realised the need of transportation after he settled down with agriculture.
2. Sledge and wheels. 3. A sledge was the first means of land transport. 4. The early man realised that a stone or a boulder rolls over the ground and on rough surface easily.

#### **Unit-VII: Our Maps**

#### **CHAPTER 20 : READING A MAP**

A. 1. (b) 2. (a) 3. (c) B. 1. Jammu and Kashmir 2. Tamil Nadu
3. Gujarat 4. Nagaland 5. Delhi 6. Chennai, Mumbai, Delhi, Kolkata 7. (i) Carbet National Park (ii) Sanjay Gandhi National Park 8. (i) Godavari (ii) Ganga C. 1. East, West, North and South are the four main directions. 2. A map is very useful

for us. We can locate places easily on a map and it helps us to reach these places. **3.** As a map represents big places on a small scale, it uses many symbols for cities, towns, hilly areas, railways and road routes. The table of these symbols is called legend. **4.** We used symbols to locate a place on a map. **5.** The collection of maps is called an atlas.

### MOTO ECO FRIENDLY-4

#### **Unit-I: Our Nature**

#### **CHAPTER 1: LIVING AND NON-LIVING THINGS**

A. 1. (b) 2. (a) 3. (b) B. 1. touch-me-not 2. living thing 3. made up 4. gills 5. animal's C. 1. False 2. False 3. False 4. False 5. True D. 1. food 2. gills 3. soil 4. space 5. matter E. 1. (i) They need for food and water. (ii) They both breathing. (iii) They both have feelings. (iv) They reproducing. 2. All living things reproducing- Example-Human beings and mammals give birth of their young. 3. Example- The bodies of living things react to extreme heat and cold. 4. All living things breathe but is different ways : (i) Human beings and some animals use lungs to breathe. (ii) Fish have gills for breathing. (iii) There are small pores on the leaves of plants which help them to breathe. 5. Differences between living and Non-living things- (i) Living things breathe in different ways, non-living things do not breathe. (ii) Living things need food to live, non-living things do not. (iii) Living things move, while non-living things cannot move. (iv) Living things reproduce, but non-living things do not produce copies of themselves. E. 1. food 2. gills 3. seedling 4. space 5. matter

#### **CHAPTER 2 : FUNCTIONS OF A PLANT**

A. 1. (c) 2. (b) 3. (a) B. 1. shoot 2. leaf buds 3. roots 4. stem
C. 1. Fruits grow from flower. They have seeds inside them. 2. The nectar is like honey and food for insects like butterflies.
3. A baby plant is found inside a seed. 4. Flowers produce the fruits and seeds from which new plants grow. 5. There are two kinds of buds– (i) leaf buds (ii) flower buds. D. 1.
Stem– The stem is the support for the branches which grow out of it. 2. Leaves– Leaves make food for the plants with the help of sunlight, air and water. 3. Roots– The root is the part of the plant which is found below the ground.

#### **CHAPTER 3 : THE WORLD OF ANIMALS**

A. 1. (c) 2. (a) 3. (a) B. 1. lungs 2. water and food 3. air 4. feet 5. some C. 1. False 2. False 3. False 4. True 5. True D. 1. (e) 2. (d) 3. (a) 4. (b) 5. (c) E. 1. Animals are found in all the parts of the world. Like plants, animals also have different features that help them to live in the surroundings they are in. These features are called adaptations. 2. Animals grouped as terrestrial arboreal, aerial aquatic and amphibians according to their habitat and herbivores, carnivores, omnivares and parasites according to their feeding habits. 3. (i) A camel has thick skin to protect it from desert sun and also from cold. (ii) It has long legs which keeps its body much above the hot sand. (iii) its padded feet help it to walk comfortably on the soft sand. (iv) its eyes are protected by large eyelashes. 4. Penguins have thick and oily skin to survive in the icy water of Antarctica. They huddle up together to keep themselves warm. 5. Some birds living in very cold places such as in Siberia, cannot survive in the cold winter. So they leave their homes in winter and fly to warmer climates. They go back again when winter ends. These regular trips every year are known as migration.

#### CHAPTER 4 : THE WORLD OF BIRDS

**A. 1.** (b) **2.** (a) **3.** (c) **B. 1.** different **2.** flightless **3.** webbed **4.** teeth **5.** woodpecker **C. 1.** True **2.** True **3.** False **4.** False **5.** False **D. 1.** d **2.** c **3.** a **4.** e **5.** b **E. 1.** The unique feature of birds is that they have wings which make them able to fly in air. **2.** Birds of pray like eagle, vulture, hawk and owl have very strong feet with sharp claws called talons to catch and hold their prey firmly. **3.** There are three kinds of feathers- (i) **Down feathers :** These feathers cover the body and keep it warm. They are small and fluffly. (ii) **Body feathers :** These feathers cover the body and give a shape to it. (iii) **Flight feathers :** Flight feathers are long and flat feathers in the wings and tail. They help the bird to fly. **4.** Kiwi, Ostrich, Penguin. **5.** Different kinds of birds have different kinds of beaks. The shape and size of the beak of a bird depend on the kind of food the bird eats.

#### Unit-II: Our Food, Health and Internal Organs

#### **CHAPTER 5 : SOURCE OF FOOD AND WATER**

A. 1. (b) 2. (a) 3. (c) B. 1. energetic, diseases 2. fruits 3. seeds 4. mutton 5. building C. 1. False 2. True 3. False 4. False 5. True D. 1. (i) Barley (ii) Paddy 2. (i) Mango (ii) Apple 3. (i) Spinach (ii) Cabbage 4. (i) Wheat (ii) Rice E. 1. Nutrients are special substances in food. 2. Early man hunted animals for their meat. He ate whatever he found such as : Fruits, roots, barries and honey. 3. Barley, paddy, soyabean, wheat.
4. Water is also an essential part of our diet. Nutritions or healthy food is called nutritions food because it contains the important nutrients to keep us healthy. It is a balanced diet when a meal includes sufficient nutrients. 5. Fibre is another necessary item that we get from food. Fibre gives us something called roughage. We get fibre from fresh fruits and vegetables. We do not digest fibre. But it is needed because it helps us to get rid of waste matter from the body.

#### CHAPTER 6 : SAFE STORAGE AND HANDLING OF FOOD AND WATER

**A. 1.** (c) **2.** (c) **3.** (b) **B. 1.** stored **2.** deep frying **3.** germs **4.** 10 **C. 1.** False **2.** True **3.** False **4.** True **D.** Do it yourself **E. 1.** The germs and dirt are separated from the water with the help of a water filter. **2.** If you cut vegetables and keep them for a long time before cooking, the nutrients, will be lost. So we should cook vegetables quickly after cutting them. **3.** Think of how lucky you are to have enough food never waste food, Remembers these rules.

- Take a little food at a time and a second helping only when you finish. Do take a bite of something and then throw it away.
- Do not heap your plate with too much food.
- If there is left over food that can not be used, do not throw it into the garbage bin. A poor person or animal would be happy to get it.
- Do not let food spoil and go waste. Store cooked and uncooked food properly.

#### **CHAPTER 7 : MAIN INTERNAL ORGANS**

A. 1. (b) 2. (a) 3. (d) B. 1. bones 2. lungs 3. juices 4. carbondioxide 5. internal parts C. Do it yourself D. 1. The brain controls all the functions of the body. 2. The lungs help us to breathe 3. The heart pumps blood to the body 4. The neck connects the head to the trunk. 5. Their work is to purify the blood and get rid of waste matter in the from of urine. E. 1. The parts of the body which can not be seen are called internal organs. 2. The head consists of the skull. The skull is actually a group of bones. It is very important because it has the brain inside it. The skull protects the brain. The brain is the 'control centre' of the body, because it controls the work of all the other parts. 3. There are two lungs in the chest. They help us to breathe. Air fills the lungs, when we Moto Eco Friendly (1 to 5) 19 breathe in. This air has oxygen, which is necessary for life. The lungs contract when we breathe out. This air contains carbon-dioxide. **4.** The stomach, liver, kidneys and intestines are the important organs in the abdomen. **5.** The food we eat goes into the stomach, where it is mixed with juices so that it is digested.

#### **Unit-III: The Environment**

#### **CHAPTER 8 : PHYSICAL FEATURES AND NATURAL PHENOMENA**

A. 1. (b) 2. (a) 3. (d) B. 1. structure 2. makes a complete rotation in 3. spectrum 4. produced C. 1. True 2. False 3. False 4. True D. 1. canals 2. two 3. earth 4. colour 5. sun's E. 1. (i) A canal is an artifical water course, to supply water to areas where there is a shortage. (ii) canals are also used as water ways for transport by boats and ships, to carry people and goods. 2. A dam is a man-made structure built across a river to control the flow of water. It's main purpose is to supply water to dry areas. It is also used to produce electricity and prevent floods. 3. Common natural phenomena include day and night, a rainbow and thunder and lightning. 4. Thunder and lightning are produced during a thunder-storm. There is heavy rain and strong winds. There are also electrical discharges between clouds or between a cloud and the ground. This cause thunder and lightning. You can calculate how far away a thunder-storm is by counting the seconds between the sound of thunder and the flash of lightning.

#### **CHAPTER 9 : KEEPING MY SURROUNDING CLEAN**

**A. 1.** (a) **2.** (b) **3.** (b) **B. 1.** degradable **2.** open dumping **3.** water **4.** solid, liquid **C. 1.** False **2.** True **3.** False **4.** True **D. 1.** If garbage pilse up, it gives rise to flies, mosquitoes and rats. These lead to the spread of diseases. So it is important to keep the surroundings clean and dispose of garbage Moto Eco Friendly (1 to 5) **20**  correctly. **2.** The garbage is thrown in some open places which far away from cities and no people will get affected by it but it is not safe way for dumping the garbage because it pollutes the air by foul smell and breeding germs. **3.** Water, Paper, plastic botal etc. **4.** Paper bages. We should use paper bages insted of poliythen begs because paper bags can be recycled. **E. 1.** clean **2.** healthy **3.** illness **F. 1.** Diseases **2.** Cholera **3.** Degradable **4.** Municipal **5.** Pollution **6.** Serious. **CHAPTER IO : THE STORY OF FIRE** 

**A. 1.** (b) **2.** (c) **B. 1.** fire **2.** jungles **3.** early man **4.** mankind **C. 1.** False **2.** True **3.** False **4.** True **D. 1.** They had to depend either on fruits of the plants or on animals. **2.** (i) Coocking food (ii) Fire provides light (iii) Fire keeps men warm. **3.** He learnt to make Fire by rubbing two stone or by rubbing dry stick of wood against each other. **4.** Wood, kerosene, L.P.G, Petroleum products etc. are the source of fire.

#### **Unit-IV: Our Community**

#### **CHAPTER II : TYPES OF HOUSES, BUILDING MATERIAL**

A. 1. (c) 2. (c) 3. (b) B. 1. Igloos 2. shelter, protection 3. high 4. Bungalows 5. ice C. 1. False 2. True 3. False D. 1. Houses in not areas have thick walls because it keep them cool. 2. Some houses have sloping roofs so that the rain water can flow down. 3. Fisherman build temporary houses because they live in boat house 4. The inuits build houses of ice and snow because they live in, Igloos houses. E. 1. A house is very important for us. It protects us from rain, storm, heat and cold. 2. In the city, houses are built of cement, marble, steel etc. as these building materials are easily available. 3. People in villages build houses of wood, thatch, mud and leaves because building materials like steel and cement are not easily found in the village. 4. The kind of house we live in depends on many Moto Eco Friendly (1 to 5) 21 factors like the building material available. Therefore, there are special kinds of houses in different areas. **5.** The floors of houses in the cold areas made of ice. **6.** The walls are painted white to reflect the heat of the sun, when the sun rays are reflected the walls do not absorb the heat.

#### **CHAPTER 12 : OUR SCHOOL**

A. 1. (a) 2. (c) 3. (c) B. 1. members 2. Health camps 3. school 4. teachers C. 1. False 2. True 3. True 4. False D. 1. (b)
2. (c) 3. (d) 4. (a) E. 1. Group song and dance competitions, Debating competitions, Art and Craft competitions etc. 2. The Health club holds health camps twice a year. Doctors come to this camp and give a complete health check-up to each student. The height, weight and general health of the child is recorded in a health report. 3. The health club holds yoga, aerobics and martial art classes for the children.
4. A school not only teaches us to read and write but also teaches us various other things like value education, our duties as a citizen. It also teaches us some skills. These help us to know about our talents and interests. F. 1. Aerobics 2. Hygiene 3. Talents 4. Drives 5. Dramatics 6. Children

#### **CHAPTER 13 : LOCAL AGENCIES**

**A. 1.** (a) **2.** (c) **3.** (a) **B. 1.** provided services **2.** people **3.** sarpanch **4.** property **5.** school **C. 1.** False **2.** False **3.** False **4.** True **5.** True **D. 1.** (d) **2.** (c) **3.** (e) **4.** (a) **5.** (b) **E. 1.** The gram Panchayat meets from time to time discuss and find solutions to local problems. They also settle minor disputes among villagers.

- Providing clean drinking water to villagers.
- Keeping the village clean and disposing off the garbage.
- · Maintaining the street lights and roads.

2. Property, road and toll tax, paid by the citizens. If we own a house or a car, we pay tax. 3. Births and deaths should be registered because this is necessary.

- We should save our public property. 4.
  - We should save our public enviournment.
  - We should educated our children.
  - We should follow government health program.

5. Do it yourself.

#### **Unit-V: Cloths**

#### **CHAPTER 14 : SOURCES OF ROW MATERIALS, TYPES OF CLOTHES**

A. 1. (a) 2. (c) 3. (b) B. Do it yourself C. 1. False 2. True 3. True 4. False 5. False D. 1. We wear clothes made of wool or fur. 2. We wear light coloured clothes. 3. We use a rain coat over our cotton clothes or carry an umbrella to stay dry in the rain. E. 1. The importance of clothes in our life -

- · Safeguard us from extreme temperatures, rain and other weather conditions.
- Protect us from insect bites.
- Keep out dirt, dust and pollution.

2. Silk is obtained from silkworms which grow on mulberry leaves for about five weeks. 3. The states of south india have a warmer climate, cotton and silk clothes are most comfortable for this kind of weather. **4.** The northern most state of india have an extreme climate. They are very cold in winter, people wear woollen clothes in cold places like Kashmir.

#### **CHAPTER 15 : MAINTENANCE OF CLOTHES**

A. 1. (b) 2. (a) B. 1. winter 2. cotton, silk, woollen 3. Naphthalene balls, neem 4. woollen C. 1. False 2. False 3. False 4. True D. 1. Clothes protect us from extreme heat, cold and bad weather. 2. Clothes get dirty because of dirt, Moto Eco Friendly (1 to 5) 23

sweat or stains. they need regular and proper cleaning. We must take proper care of our clothes, so that they last longer and serve us better. **3.** The moth is an insect. There are several stages in its life. The mothworm which comes out of moth's egg causes most destruction. It eats the cloth fibres. A full grown moth can not eat the clothes. **4.** If the clothes are very dirty, they should be soaked in warm water with detergent, for some time.

#### **Unit-VI: Our Activities and Needs**

#### CHAPTER 16 : FESTIVAL AND NATIONAL DAYS, RECREATIONS IN LOCALITY

A. 1. (c) 2. (a) 3. (b) B. 1. The return of Rama to Ayodhya after exile of fourteen years. 2. The ten sikh Gurus. 3. Christ was crucified on Good friday but on easter sunday. 4. The harvest festival of kerala is called onam. 5. Our Prime Minister, Pandit Jawahar Lal Nehru 6. The love between brothers and sisters. C. 1. Assam 2. Bengal 3. Tamil nadu 4. Kerala 5. Maharashtra D. 1. True 2. True 3. True 4. False 5. False E. 1. Muslims fast for a month, which is called Ramzan. Ramzan month is sacred of them. On this day, people pray in the mosque and then wish each other 'ID-Mubarak'. 2. On this day at night people light bonfires and burn effigies of 'Holika' on this day. They throw coloured water and gulal on one another and shout Holi! Holi! in joyful manner. 3. The retrun of Rama to Ayodhya after exile of fourteen years. People clean and decorate their houes and oil lamps and lights are lit everywhere so deepawali is also called the festival of lights. 4. Teacher's day is celebrated on 5th september every year. 5. Saraswati the Goddes of learning is worshipped on Basant Panchami.

#### **CHAPTER 17 : MEANS OF TRANSPORT AND COMMUNICATION**

**A. 1.** (c) **2.** (c) **3.** (c) **B. 1.** They can be used to reach remote places. 2. Satellite phones are useful in hilly places. 3. Items of food are found only in some states, such as apples in the hilly areas. These items are carried in trucks to other parts of the country, so everyone can enjoy them. 4. It is compulsory to wear the seat belt while travelling in a car. It will save you even if there is an accident. 6. To follow road safety rules can help to avoid accidents. C. Do it yourself. D. 1. the wheel 2. passenger 3. goods 4. tankers ships 5. aeroplane, helicopter 6. bicycle E. 1. False 2. False 3. False 4. False 5. True 6. False F. 1. follow 2. land 3. sher shah suri 4. different 5. goods G. 1. In the past time people travel from place to place by bullock-cart or horse- cart or on foot. Many hours took in a little distance but today the world seems very small, it is because of means of transport. 2. The three forms of transport are :

• Land Transport • Water Transport • Air Transport.

**3.** As the term tells you, this means the kinds of the transport that move on land for very short distance we use bicycle or take a cycle-rickshaw, for longer distances people prefer a scooter a car or a bus. In mumbai and chennai people travel by trains. So there are two kinds of land transport

Road transport
 Rail Transport.

**4.** Local trains connect the surrounding areas of a city to the main city. Thousands of passengers travel to Mumbai every day on local trains.

### MOTO ECO FRIENDLY-5 Unit-I: The Environment

#### **CHAPTER I : LIVING AND NON-LIVING THINGS**

A. 1. (a) 2. (d) 3. (b) 4. (b) 5. (b) B. 1. human beings, plants and animals 2. a place is all the animals and plants.
3. chlorophyll 4. breathe 5. carnivores C. 1. True 2. False
3. True 4. False 5. True D. 1. Dependent 2. depend 3. can
4. Herbivores 5. fruits. E. 1. Green plants make their own food, so they are called producers. 2. Non-vegetarians eat vegetarians food, as well as the meat of animals. Since animals feed on plants, even non-vegetarians depend indirectly on plants. 3. Vegetarians which come directly from plants. 4. Difference between plants and animals.

- Plants breathe through tiny pores on their leaves which also give out excess water. Animals have different ways of breathing. Fish breathe though their gills.
- Plants grow, but they do not move as animals do.
- Plants grow from seeds, while animals lay eggs or give birth to their young.

**5.** The process of making food by the plants is called photosynthesis which means building up from light.

#### **CHAPTER 2 : PARTS OF THE PLANT AND THEIR FUNCTIONS**

A. 1. (d) 2. (b) B. 1. main 2. water, minerals 3. thicker 4. breathe 5. plant 6. stomata C. 1. (c) 2. (d) 3. (e) 4. (b) 5. (a) D.
1. True 2. False 3. False 4. False 5. True E. 1. carrot, raddish.
2. bryophyllum, kalanchoe 3. leaves, flowers 4. jamun, mango 5. carrot, radish 6. potatoes, arbi 7. papaya, guava 8. mango, leechi 9. banana, grapes 10. peepal, deodar F. 1. Plants and animals have many similarities :

- Both are living things that are born, grow and die.
- Plants and animals need food and water to live.
- Plants and animals breathe.
- Both are sensitive to stimuli like heat and light.
- **2.** Roots absorb minerals and water from the soil. These are necessary for the growth of the plant.
  - Roots help in holding the plants firmly on the soil.

**3. Roots** : Roots absorb minerals and water from the soil. These are necessary for the growth of the plant. **Stem** : The stem carries water and minerals from the roots to different parts of the plant. • The stem grows in the direction of light. We can understand by the practical. **4.** Jamun, Mango, Leechi, are fruits have only one seed. **5. Shrubs** : Some plants have very hard stems in such plants, branches may arise from the lower part of the stem, like karonda, henna, etc. These plants are called shrubs. **Herbs** : You must have seen that there are some plants which are small and soft. They are called herbs like wheat, spinach, fenugreek plants, grass tomato, sunflower etc.

Herbs have thin but strong stems. They live only for one season and than die.

#### Unit-II: Our Body

#### **CHAPTER 3 : THE ORGAN SYSTEM OF OUR BODY**

A. 1. (a) 2. (c) 3. (c) 4. (d) 5. (b) B. 1. (e) 2. (a) 3. (d) 4. (c) 5. (b) C. 1. True 2. True 3. False 4. True D. 1. The group of organs performing a specific function is called the organ system. We have many organ systems in our body. **Stomach** – stomach help in digestion of food. **Kidneys** – kidneys help to filter the waste material from blood. Heart – Heart helps to pump blood. **Lungs** – Lungs help in breathing. 2. The teeth in the front are called incisors. These are eight Moto Eco Friendly (1 to 5) 27 in number. These help in cutting and biting the food. **3.** Stomach, Heart, Kidneys Lungs. The digestive system such as : (a) Eating always fresh and healthy food at fixed times. (b) Chewing food properly. (c) Drinking sufficient amount of water. **4.** Arteries : The blood vessels which carry blood from the heart to different parts of the body are called arteries. Veins : The Vessels which collect blood from different parts of the body and carry it to the heart are called veins. **5.** The group of organs involves in this process is called excretory system.

- Our body has two kidney. These are located on either side of the backbone in the abdomen.
- The function of the kidney is to filter the liquid waste from blood. This liquid waste is called wine.
- The urine from the kidneys passes through the Ureters and collects in the Urinary bladder.
- The urine collected in the Urinary bladder leaves the body through the Urethra. Urine is light yellow in colour.
- 6. The blood circulates in body :
  - The heart is located in the chest. It is pumping organ and keeps the blood circulating in a uniform direction. Heart is connected with arteries and veins.
  - Veins are blood vessels that carry deoxygenated blood from different parts of body to the heart.
  - Deoxygenated blood reaches the lungs by pumping of the heart. Here oxygen mixes with the blood and this blood goes back to the heart. Arteries carry blood away from heart to different parts of the body.

**7.** The tongue mixes saliva with food particles and helps in swallowing the food. Different parts of the tongue also help

in identifying different tastes, such as sweet, salty, sour and bitter. All parts of digestive organs are linked to each-other.

- Respiration is found in all living beings. Respiration 8. process begins from the nostrils of nose. It passes through bronchi and reaches the lungs. The hair and mucus in nose prevent dust, dirt and germs from getting into the lungs.
  - Nassal cavity opens in tracheas. During respiration • process lungs expand, their volume increases and pressure decreases. As a result the outside atmospheric air enters the lungs throught the nose.
  - Gaseous exchange process is regulated by lungs • through the small and very thin blood vessels. Small blood vessels also known as blood capillaries.
  - After respiration process lungs contract and volume decreases.
  - CO<sub>2</sub> release by lungs but air also present in lungs a least amount.

#### **CHAPTER 4 : THE BONES AND MUSCLES OF OUR BODY**

A. 1. (a) 2. (a) B. 1. 206 2. joint 3. upper leg 4. bones, muscles 5. internal C. 1. True 2. False 3. True 4. True False 5. D. 1. The skeletal system aives shape body and protects our internal organs. to our 2. The stapes in the third bone of the three assicles in the middle ear. The stapes is a stirrup shaped bone, and the smallest in the human body. It rests on the oval window, to which is connected by an annular ligament. 3. Muscles which functions as per our will are called voluntary muscles. Some of the muscles which do not function as per our will are called involuntary muscles. 4. The spinal cord emerging from our brain is similar to a rope made up of neurons or nerve cells. The spinal cord is protected by the important Moto Eco Friendly (1 to 5) 29

organs of the body. All the automatic or reflex actions are controlled by the spinal cord.

- 5. It gives shape and support to the body.
  - It gives protection to internal organs like lungs and heart.
  - Movement is possible due to the muscles.
  - The bone marrow is the place where red and white blood cells are produced.
  - The bones store calcium and phosphorus.
  - The head encloses the brain. Below the head is the trunk, which encloses a number of important organs.

6. Four types of movable joints– 1. The hinge joints are found in the fingers, toes, knees and elbows. In this, the joint moves only in one direction. 2. There is maximum movement in the ball and socket joint like the hip and shoulder joints. 3. The joint between the skull and first two vertebra is called swivel joint. 4. The gliding joint helps us to move the wrist and ankle and any two vertebra.

#### **Unit-III: The Environmental Physical features**

#### **CHAPTER 5 : PHYSICAL FEATURE AND LIFE IN DIFFERENT REGIONS**

**A. 1.** (b) **2.** (c) **B. 1.** different **2.** desert **3.** camel **4.** velleys **5.** plants **C. 1.** False **2.** False **3.** False **4.** False **5.** True **D. 1.** These regions has a different kinds of soil and climate, which influence the ways of living, and the plants and animals. Therefore, those differ from place to place. **2.** Valleys lie between mountains, so they are generally fertile and the climat is moderate. People here grow crops and graze cattle. **3.** A plain is a flat land watered by rivers, and is therefore fertile. So here is also easy to build roads and railways and Moto Eco Friendly (1 to 5) **30** 

travel on the rivers. **4.** The land provides us with • Soil to grow crops, and raise animals. • Space to build shelters, houses and buildings. **5.** The camel called the ship of the desert. This is because it can travel easily on the desert sand and helps man in many other ways.

#### **CHAPTER 6 : EFFECT OF WEATHER AND CLIMATE ON DAILY LIFE**

**A. 1.** (b) **2.** (b) **3.** (a) **4.** (c) **B. 1.** Keep **2.** punjab **3.** spring **4.** Assam's festival **5.** North India **6.** mango **7.** beginning of summer **8.** mosquitoes **C. 1.** True **2.** True **3.** True **4.** False **5.** True **6.** False **7.** True **D. 1.** We enjoy the winter sun, so there are more outdoor activities. It is fun playing outdoor games and going for picnics during the day. **2.** This season is autumn. You know that the revolution or movement of the earth around the sun causes the seasons. **3.** The seasons also bring some problems. **4.** There are many harvest festivals like Baishakhi, Bihu, Pongal, Onam, etc. **5.** The hot winds or the 'Loo' sweeping North India in summer can lead to a heatstroke and even death. 6. Winds, rainfall, cloudiness and atmospheric pressure are some of the weather conditions.

#### **CHAPTER 7 : INTERDEPENDENCE IN ENVIRONMENT**

A. 1. (b) 2. (d) 3. (b) 4. (d) B. 1. interdependent 2. Biotic components 3. food 4. Herbivorous animals 5. Bacteria 6. feed 7. consumer 8. into four C. 1. True 2. True 3. False 4. False 5. True 6. False 7. True D. 1. Both living and non-living things found in our surrounding constitute our environment. 2. Air , sunlight and water 3. Human, animals and plants etc. 4. All the components of the environment depend on one another for survival. Therefore, it is necessary to maintain proper balance between the biotic and a biotic components of the environment. 5. 1. Producers : Plant's leaves make their own food in the process known as Photosynthesis. Animals

and human being do not have this capacity of making food, for this they depend on plants. So, plants are known as the producers of food. 2. Consumers : Animals can not produce food, they depend on others. Man also consumes food. For food, animals and human beings depends on plants so its called consumers. 6. Herbivorous Animals : Eat plants as their food are herbivorous like elephant, deer. Carnivorous Animals : The animals that survive by eating flesh are carnivorous like; lion. Omnivorous Animals : Those who consume both, plants and flesh are Omnivorous. Men are omnivorous. 7. A set of food chains existing a particular environment is called the food web. 8. Today we need more land for agriculture and housing. We start cleaning the land by cutting down trees in the forest. Population, pollution, deforestation, hunting of birds and wild animals and many other factors are harmful for our environment. We can maintain to environment by : • Population control • Forest conservation • Encouraging plantation • Protecting wild life.

#### **Unit-IV: Food**

#### **CHAPTER 8 : COMBINATION OF FOOD ITEMS**

A. 1. (c) 2. (d) 3. (b) B. 1. Plants 2. Plants and animals 3. plants
4. nutrients 5. nutrients 6. seasons 7. water C. 1. Meet, Egg
2. Rice, Maize 3. Cheese, Milk 4. Fruits, Vitamin C 5. Fibre 6. Needed for healthy blood 7. Rice, Mazie 8. Green leafy vegetables and fresh fruit D. Do it yourself
E. 1. True 2. False 3. True 4. False 5. True 6. False
F. 1. food is essential for us because- • It gives us energy to carry out our daily activities. • It provides certain substances which help us to grow. • It repairs the cell in our body. • It develops immunity in our body.
2. Food that is rich in nutrient is known as nutrients. Our meals Moto Eco Friendly (1 to 5)

should be balanced. To maintain good health, we should eat enough to meet the needs of our body and also have a well balanced diet. This means that we must eat the right kind and the right amount of food. It is harmful to eat too much or too little or just one kind of food. 3. Fats : Sources of fats include ghee, oils butter and nuts. Proteins : Plants and animals are both sources of proteins. Examples of plants or vegetables proteins are pulses, soyabean, cheese, curd, milk and nuts. Animals proteins include meat and eggs. 4. Vitamin A: The chief sources are cabbages, eggs, carrots and milk. Vitamin C : The chief sources of this vitamin are cucumbers, beans and fruits, lemons, oranges, grapes and apples. 5. Vitamin E : keep our body cells healthy and strong. 6. Vitamin K : It is very important because it makes our blood clot and prevents severe bleeding. The main sources are tomatoes and green leafy vegetables.

#### **CHAPTER 9 : FOOD TO PREVENT DISEASES**

**A. 1.** (b) **2.** (b) **B. 1.** used **2.** deficiency of nutrients **3.** carbohydrate and protein deficiency **4.** processed **5.** healthy blood **C. 1.** True **2.** False **3.** True **4.** True **5.** False **D.** Do it yourself **E. 1.** Lack of certain foods causes of diseases. **2.** A disease caused due to a deficiency of nutrients is known as a deficiency disease. **3.** Green-leafy vegetables, carrots, fruits like mango and papaya and milk products like curd, butter and ghee give us vitamin A. **4.** Fruits like orange, amla, lemon and tomatoes are rich in vitamin C. **5.** Goitre disease lack of lodine.

#### **CHAPTER 10 : AGRICULTURE**

A. 1. (b) 2. (b) 3. (b) 4. (d) 5. (c) B. 1. large 2. winter
3. food 4. wheat 5. cattle C. 1. True 2. False 3. True
4. True 5. True D. 1. (d) 2. (c) 3. (e) 4. (a) 5. (b) E. 1. In
India, a various crops are grown or a large area, so it is

called an agricultural country. **2.** Two main cropping seasons in India are– Kharif and Rabi. **3.** Cash crops are the crops grown to be sold in the market. They help farmers to earn money. Cash crops in India are sugarcane, jute, cotton and oilseeds. **4.** Some large farms called plantations are used to grow a single crop only. Such crops are called plantation crops. tea, Coffee and Rubber are the main plantation crops. **5.** The goverment of india has been trying to help farmers to increase agricultural production, just after independece. Many multipurpose projects have been built to supply water for irrigation. Farmers are being educated about the benefits of manures and organic fertilizers and how to use them. Loans are provided to them so that they can buy modern agricultural tools and machines, such as tractors.

#### **Unit-V: Community**

#### **CHAPTER II : BUILDINGS IN THE LOCALITY AND THEIR MAINTENANCE**

**A. 1.** (a) **2.** (d) **B. 1.** sending letter, Depositing money in a bank **2.** debates, quizzes, dance and musical **3.** judge minor crimes and find an offender **4.** village **5.** Child care and health issues **C. 1.** city **2.** village **3.** police **4.** SHO **D. 1.** The functions of the panchayat are : • Setting up primary health centres where the villagers are educated about basic health issues. • Providing for sanitation • Running clinics and dispensaries, where people are given free medicines and treated for minor ailments. • Building roads • Supplying clean drinking water • Maintaining ponds • Organising village sports • Establishing libraries • Setting disputes among the villagers. **2.** • It organises health camps which spread awareness about health sanitation.• It maintains hygienic conditions in the community. • Some centres have Mahila Mandals which educate woman on child care and health issues.

**3.** We post our letters in the letter-box. **4.** The health centres schools and the post-office, police-station are important buildings in the neighbourhood. **5.** There is a police-station in every area and colony. It is under a SHO or Station House Officer, with officers and policemen under him.

#### **Unit-VI: Health and Hygiene**

#### **CHAPTER 12 : COMMUNITY HEALTH AND HYGIENE**

A. 1. (b) 2. (c) B. 1. centres 2. health 3. health centres and primary centers 4. Important role 5. The health workers make personal contract to house visit. 6. against 7. a unique hospital on wheels. C. 1. True 2. False 3. True 4. False 5. True D. 1. Health care is important in our country because it deal with health problems. 2. The aims of these health programmes are : • Controlling disease like T.B. Leprosy, Malaria and Blindness. • Helping AIDS and cancer patients • Checking adulteration of food. • Controlling the population • Immunizing children against diseases like polio. 3. Educating the masses and raising awareness of health issues, such as : • Need for immunization • Improtance of balance of a balance diet. • Correct methods of cooking. • Importance of clean drinking water and safe handling of food. 4. Environment sanitation by measures like spraying insecticides and proper disposal of garbage. 5. Many centers now have guilifed doctors who can treat serious diseases. There are clinic for health care in rural areas. 6. Local health care agencies have an important role. 7. Remote areas get health care through mobile dispensaries. These carry medicines and doctors to isolated areas. 8. The lifeline express or Jeevan Rekha Hospital is a unique hospital on wheels. It travels from station to station. It includes a Moto Eco Friendly (1 to 5) 35

dispensary, medicines, equipment and even an operation theatre. The doctors carry out treatment for a variety of diseases like Cataract and Polio.

#### **CHAPTER 13 : OUR HEALTH SERVICE**

A. 1. (d) 2. (a) 3. (d) 4. (a) B. 1. health 2. cause 3. equipped 4. loses a lot of blood 5. preventive C. 1. (d) 2. (e) 3. (a) 4. (b) 5. (c) D. 1. 7th April 2. Clinics treat people for common ailments and like dispensaries, refer complicated causes to the hospitals. 3. Do it yourself 4. Government runs the dispensaries. Dispensaries provide free of cost treatment, they are used by people who are poor and needy. 5. Hospital - •Hospital has better facilities for treatment. • A hospital works round the clock. Mobile van - • Medical equipment and medicines for the treatment of patients are also available in mobile-vans. A doctor also accompanies the van.

#### **Unit-VII: Transport & Communication**

#### **CHAPTER 14 : EFFECT OF ADVANCES OF HUMAN LIFE**

**A. 1.** (b) **2.** (c) **B. 1.** land **2.** railways **3.** air **4.** sound **5.** entertainment **C. 1.** popular **2.** goods **3.** can **4.** radio **5.** should not **D. 1.** Transport means ways moving goods and people from one place to another. **2.** There are different needs which make people travels. People travel for business and work-related purposes. One may need to visit friends and relatives in other places or countries. **3.** The three forms of transport are : 1. Land transport 2. Air transport 3. Water transport **4.** The exchange of ideas and information among individuals or group of people is called communication. **5.** There are a few negative effects of the progress of transport. These are : • Vehicles cause air pollution due to the smoke they give out. This Moto Eco Friendly (1 to 5)

leads to serious health problems like respiratory diseases. Pollution also affects other forms of life. • There has been an increase in the number and severity of accidents. • Oil spills can pollute the ocean water. Oil tankers carry oil across the seas. If there is an accident, oil can spill into the water, causing water pollution. This leads to the destructions of marine life. After the Gulf war, many sea birds died due to oil spills.

#### **Unit-VIII: My Motherland**

#### **CHAPTER 15 : OUR COUNTRY**

**A.** 1. (a) 2. (c) **B.** 1. Indian desert 2. Assam 3. 3200, 3000 4. southern side **C.** 1. True 2. True 3. True 4. False **D.** 1. The Himalayas are to the North, and Tamil Nadu lies in the South. 2. In the East you would notice West Bengal and in the West lies Gujarat. 3. The Ganga, The Yamuna, The Ghaghra, The kosi, The Brahmaputra, The Chambal, The Betwa are some main rivers that flow through the Northern plains. 4. There are three main seasons in our country : Summer, Rainy and Winter Seasons. 5. They are bounded by Aravali hills in North-West. Raj Mahal hills in Chotanagpur in the West and Eastern ghat in the East.

#### **CHAPTER 16 : OUR NATIONAL SYMBOLS**

A. 1. (c) 2. (d) 3. (a) 4. (c) 5. (c) B. 1. three 2. truth, peace 3. faith, strength 4. four 5. Ravindranath Tagore 6. two to three C. 1. True 2. False 3. True 4. True 5. False 6. True D. 1. (d) 2. (a) 3. (b) 4. (e) 5. (c) E. 1. India has a National Symbol. This symbol is taken from Ashoka's Pilar at Sarnath. The symbol has three different directions. If we go into actuality, there are four lions on the pilar. But the fourth one is hidden behind the front lion. There is also a wheel below the lion. This wheel is also in the National Flag. There is a horse standing on the left side of the wheel while there is also a bull on its right side. All the symbols are meaningful. The lions represent Moto Eco Friendly (1 to 5) 37

the majesty and power. The horse represents engergy and speed. Again the bull has signigicance of hard work. 2. Saffron colour : Is the symbol for renunciation, valour and sacrifice. White colour : White colour represents truth and peace. This inspires every Indian to be truthful, pure and simple. Green colour : Green colour represents life fertility and prosperity. It also stands for faith and stringth. 3. In the centre of the flag, there is a wheel. It is navy blue in colour and has 24 spokes. This suggests and inspires us to move forward and lead the nation to progress and prosperity. 4. Ravindranath Tagore 5. Satyameva Jayate 6. Green Colour : Green colour represents life fertility and prosperity. It also stands for faith and strength.

#### Unit-IX: Our Glorious Past

#### **CHAPTER 17 : OUR HISTORICAL MONUMENTS**

A. 1. (c) 2. (a) B. 1. Delhi 2. Agra 3. Delhi 4. Puri(orrisa) 5. The Jataka Stories C. 1. True 2. False 3. True 4. False 5. True **D. 1.** The Red Fort was built in Delhi by the Mughal Emperor Shahjahan, The red lime-stone fort proudly stand amidst Delhi and is a symbol of great architecture and vast genius of its architects. 2. It is symbol of eternal love of the Mughal Emperor Shahjahan for his queen Mumtaz Mahal, that made Taj Mahal a place and symbol of all the people worldwide who know what love it. 3. This world famous 205 feet high temple is located in the holy city of Puri(Orrisa) and is dedicated of the three deities: Lord Jagannath, Balbhadra and Subhadra. These temples are built in Kalinga style of architect. 4. The Sanchi Stupa is in Madhya Pradesh believed to have some relies of Gautam Buddha lying buried in its circular mound. 5. It is at Mehrauli in Delhi. It was built around 1193 by Qutab-ud-din Aibak and then was completed by his son-is law, Iltutmish in 1230 after his death. This five storeys building is 72.5 metres high with Moto Eco Friendly (1 to 5) 38

399 steps. It boasts of the world's tallest free standing stone tower. Its first storey is around 32 metres high. The minar is made of red-stone and white marbel. Each of its five storeys has different designs. Each floor is divided by a projecting balcony and below the balcony are caved stone panels with beautiful writings of the Quran. **6.** Ajanta and Ellora have their caves dedicated to the Jains and the Hindu Gods.

#### CHAPTER 18 : SOME GREAT INDIANS (I) MAHATMA GANDHI

**A. 1.** (b) **2.** (b) **3.** (c) **B. 1.** father **2.** Mohan Das Karam Chand Gandhi 3. diwan 4. Sarva Dharm Sambhav 5. participate in 6. Truth C. 1. (h) 2. (q) 3. (f) 4. (i) 5. (d) 6. (a) 7. (j) 8. (b) 9. (e) 10. (c) D. 1. False 2. False 3. True 4. True 5. True E. 1. Gandhiji's full name is Mohan Das Karam Chand Gandhi. 2. Kailafat movement, Non-co-operation movement, Civil Disobedience movement and Ouit India movement are the major movement lead by Gandhiji. 3. Gandhiji was born on October 2nd 1869 at Porbandar in Gujarat. 4. Truth and non-violence was the main moto of Gandhiji. According to him children should know the value of truth, tolerance and self-reliance. Gandhiji believed that these values will develop self confidence among the children. they must follow these values in their day to day life. 5. On 15th August 1947, India got Independence.

#### CHAPTER 19 : (II) RAJA RAM MOHAN ROY

A. 1. (c) 2. (d) B. 1. Rama Babu 2. social reformer 3. religious
4. Raja C. 1. True 2. False 3. True 4. False 5. True D. 1. He was born on 22 May, 1772 at Radha Nagar village in Bengal.
2. Casteism and child marriage social evils Raja Ram Mohan Roy fight against. 3. He wanted an increase in his salary and allowances from the English East company. He identified Raja Ram Mohan to plead his case with the rulers. He also conferred upon him title of Raja at the time. 4. He tried to oppose unnecessary religious practices and to bring about

reforms in the society. **5.** The great man expired at Bristal on 27th September 1833.

#### **Unit-X: Public Places**

#### **CHAPTER 20 : CARE OF THE PUBLIC PROPERTY**

A. 1. (d) 2. (a) B. 1. walk along the paths 2. boards 3. it is source of water. 4. place where animals 5. rules C. 1. True 2. True 3. False 4. True 5. True D. Do it yourself E. 1. Road, Train, Hospital, Bus are the public property. 2. Public property also need for taking care so we should care public property. 3. If you visit any of these places, take care not to damage trees and plants. • Walk along the paths, instead of over seedlings and flower buds. • Do not throw stones and damage fruit trees. • Follow all the instructions and rules written on boards in parks and gardens • Do not little, or light fires which can harm the environment. • Do not break branches, or carve names on the trunks of trees. 4. Museums are places where things are kept for our education and interest. They are priceless and have great historical and social significance. 5. Sanctuaries are places where animals are allowed to live freely, and protected.

#### **Unit-XI: Our World**

#### **CHAPTER 21: INDIA AND THE WORLD**

A. 1. (b) 2. (c) 3. (c) 4. (d) B. 1. blue 2. continent 3. earth 4. 90°
5. Atlas C. 1. (e) 2. (d) 3. (c) 4. (b) 5. (a) D. 1. True 2. False
3. True 4. True 5. False E. 1. The globe helps us to know the shape, size and location of different continents and oceans. 2. Large land mass baying between oceans is called Continent.
3. The point at the top of a globe is called the North Pole and the one at the bottom is called the South Pole.
4. A globe is the true model of the earth. 5. The circle running horizontally in the middle of the globe is the equator.