

YUVE

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Written by:
Avneesh Kumar
B.Sc. (Physics), M.Sc.

Science *Path*

Help Kit
1-5

Teacher's Manual

Science Time (Class-1)

UNIT I : PLANT LIFE

CHAPTER I: PLANTS AROUND US

Objective Type Questions :

1. (a) ii (b) iii (c) iii

Subjective Type Questions :

1. (a) Trees (b) Shrubs (c) Herbs (d) Grapevine, Pea plant (e) Leaf spines 2. (a) green (b) Herbs (c) tree (d) climber (e) thorns 3. (a) T (b) T (c) F (d) F

CHAPTER 2: PARTS OF A PLANTS

Objective Type Questions :

1. (a) i (b) ii (c) iii

Subjective Type Questions :

1. (a) green (b) buds (c) leaves (d) seeds (e) flowers 2. (a) F (b) T (c) T (d) T

CHAPTER 3: PLANTS GROW FROM SEEDS

Objective Type Questions :

1. (a) ii (b) iii (c) i

Subjective Type Questions :

1. (a) plants (b) one (c) no (d) many (e) few 2. (a) seeds (b) seeds (c) sunlight (d) water (e) many.

CHAPTER 4: PLANTS GIVE US FOOD

Objective Type Questions :

1. (a) i (b) iii (c) iii

Subjective Type Questions :

1. (a) i. wheat ii. rice iii. maize (b) i. grams ii. beans iii. peas (c) i. potato ii. onion iii. radish (d) i. mango ii. guava iii. orange 2. (a) F (b) T (c) F (d) T

UNIT 2 : ANIMALS LIFE

CHAPTER 5: ANIMALS AROUND US

Objective Type Questions :

1. (a) iii (b) iii (c) iii (d) iii

Subjective Type Questions :

1. (a) Insects (b) Fishes (c) Reptiles (d) Cow (d) Snake (e) Tortoise 2. (a) bird (b) six (c) jumping (d) four (e) fine 3. (a) v (b) vi (c) iv (d) ii (e) i (f) iii

CHAPTER 6: FOOD OF ANIMALS

Objective Type Questions :

1. (a) iii (b) ii (c) iii

Subjective Type Questions :

1. (a) i. Cow ii. Goat iii. Rabbit (b) i. Hen ii. Squirrel iii. Pigeon (c) i. Tiger ii. Lion iii. Hyena 2. (a) ii (b) iv (c) v (d) ii (e) i

CHAPTER 7: SHELTER FOR ANIMALS

Objective Type Questions :

1. a) iii b) iii c) ii

Subjective Type Questions :

1. (a) nest (b) burrows (c) web (d) den 2. (a) i. lion ii. tiger iii. bees (b) i. grass ii. twigs iii. threads (c) i. rabbits ii. rats iii. snakes

UNIT 3 : AIR, WATER AND WEATHER

CHAPTER 8: THE AIR AROUND

Objective Type Questions :

1. a) i b) ii c) ii

Subjective Type Questions :

1. (a) No (b) Yes (c) No (d) Yes (e) Yes (f) No (g) No (h) Yes 2. everywhere (b) wind (c) space (d) live (e) necessary

CHAPTER 9: WATER : NEEDS OF LIVING BEINGS

Objective Type Questions :

1. a) ii b) iii c) iii

Subjective Type Questions :

1. (a) substance (b) rain (c) ways (d) water-tank (e) water 2. (a) water (b) lakes (c) salty (d) need

CHAPTER 10: THE WEATHER

Objective Type Questions :

1. a) iii b) ii c) ii

Subjective Type Questions :

1. (a) hot (b) clouds (c) humid (d) windy 2. (a) Hot day, Cold day, Rainy day, Fog day, Windy day, Cloudy day

UNIT 4 : THE UNIVERSE

CHAPTER 11: THE SUN, THE MOON AND THE STARS

Objective Type Questions :

1. a) ii b) ii c) i

Subjective Type Questions :

1. (a) Star (b) larger (c) has (d) can (e) changes (f) heat 2. (a) heat, light (b) east, west (c) Earth (d) Earth

UNIT 5 : THE HUMAN BODY, HEALTH & HYGIENE

CHAPTER 12: OUR NEEDS

Objective Type Questions :

1. a) ii b) i c) iii

Subjective Type Questions :

1. (a) clean (b) disease (c) fresh, storm (d) cold (e) clean (f) heat 2. (a) We need a house for our safety. (b) Food helps us to keep healthy, fit and prevent illness. (c) We need clothes to protect us from dust, heat and cold.

CHAPTER 13: GOOD HABITS

Objective Type Questions :

1. a) iii b) iii c) iii

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Subjective Type Questions :

1. (a) hands (b) follow (c) close (d) waste (e) handkerchief

CHAPTER 14: EXERCISE, RECREATION, REST AND SLEEP

Objective Type Questions :

1a ii 1b iii

Subjective Type Questions :

1. (a) fit (b) work (c) mind, body (d) rest 2. (a) Playing game (b) After work (c) Because rest gives energy and refreshes. (d) Rest

CHAPTER 15: CLEANLINESS FOR GOOD HEALTH

Objective Type Questions :

1a ii 1b iii 1c i 1d ii

Subjective Type Questions :

1. (a) We should brush our teeth in the morning. (b) We should bath everyday. (c) We should wash our hair while bathing. (d) We should keep our nose clean. (e) We should keep our nails clean. 2. (a) brush (b) nail-cutter (c) clean towel (d) shampoo (e) clean clothes 3. (a) health (b) night, morning (c) bath (d) clean, cold (e) before, after

UNIT 6 : SAFETY AND FIRST AID

CHAPTER 16: SAFETY HABITS

Objective Type Questions :

1a ii 1b iii 1c ii

Subjective Type Questions :

1. (a) must (b) must (c) green (d) report 2. (a) lights (b) zebra (c) stop (d) move (e) play



Teacher's Manual

Science Time (Class-2)

UNIT 1 : PLANT LIFE

CHAPTER 1: PLANTS LIFE

Objective Type Questions :

1. a ii b i c iii

Subjective Type Questions :

1. (a) trees (b) herbs (c) creeper, climber (d) cactuses (e) insect 2. (a) Mustard, Brinjal, Sunflower (b) Rose, Jasmine, Oleander (c) Pea, Bougainvillea, Grapevine (d) Neem, Banana, Mango (e) Mushrooms 3. (a) herbs (b) non-flowering (c) insects eating (d) a perennial (e) have weak 4. (a) Neem, Eucalyptus, Jasmine (b) Hibiscus, Rose, Sunflower (c) Cotton, Carrot, Brinjal (d) Wheat, Rice, Maize

CHAPTER 2: USES OF PLANTS

Objective Type Questions :

1. a ii b iii c iii

Subjective Type Questions :

1. (a) Trees give us food and many other things like wood. (b) Neem tree (c) They give us wood for building. 2. (a) energy (b) stem (c) air (d) paper (e) cotton (f) clean, cocoa 3. (a) Potato (b) Cabbage (c) Cauliflower (d) turnip (e) Tea (f) Cotton plant 4. (a) root (b) stem (c) fiber (d) energy-giving food (e) paper 5. (a) mango, apple, orange (b) coconut, wheat, maize (c) cotton, jute, brinjal (d) tea, cocoa, coffee (e) teak, rubber, walnut

UNIT 2 : ANIMAL LIFE

CHAPTER 3: USES OF ANIMALS

Objective Type Questions :

(a) ii (b) iii (c) ii

Subjective Type Questions :

1. (a) Sheep give us wool and meat. (b) Bees collect nectar of flower and convert it into honey. (c) Animals (d) Cow, horse, elephant, mules, donkeys (e) Horse, camel, elephant (f) Goat, sheep, pig (g) Ice-cream, sweet, card (h) woollen, meat 2. (a) T (b) F (c) F (d) T (e) T 3. (a) manure (b) animals (c) wool (d) ducks, hens (e) bees

CHAPTER 4: WILD ANIMALS

Objective Type Questions :

(a) i (b) iii (c) ii

Subjective Type Questions :

1. (a) In jungles (b) Which eat grass only. (c) Which eat only meat. (d) Those eat both meat or grass are called omnivores. 2. (a) Tiger, lion, wolf, zebra (b) Peacock, monkey (c) Elephant, zebra, deer, rhinoceros (d) Elephant, Giraffes, Deer (e) Lion, tigers, foxes 3. (a) plant (b) plant and animals (c) dead animals (d) trees (e) dens

UNIT 3 : AIR, WATER AND WEATHER

CHAPTER 5: WHAT DOES THE AIR CONTAIN ?

Objective Type Questions :

(a) ii (b) ii (c) ii

Subjective Type Questions :

1. (a) Dust, water vapour, smoke and germs. (b) When the sweeper sweeps do the dust particles come from. (c) Steam is very hot water vapour. (d) Vehicles, industries (d) We need pure air for good health. (e) Help to make the air fresh and clean. 2. (a) vapour (b) steam (c) dust (d) smoke (e) fresh (f) oxygen 3. (a) iii (b) iv (c) i (d) ii

CHAPTER 6: MOVING AIR-WILD

Objective Type Questions :

(a) ii (b) ii (c) iii

Subjective Type Questions :

1. (a) Moving (b) force (c) speed (d) storm (e) weather 2. (a) Moving air is called wind. (b) Storm (c) It helps in the movement of sail boats, gliders, parachutes and aircrafts. It makes a windmill work. (d) Storm wind can uproot trees and destroy buildings.

CHAPTER 7: SOURCES OF WATER

Objective Type Questions :

(a) iii (b) iii (c) iii

Subjective Type Questions :

1. (a) Rain (b) Many impurities and germs maybe present in it. (c) Because it is safe to drink. (d) Store water in big tanks. 2. (a) Rain (b) salty (c) boil, filter (d) germs (e) well

CHAPTER 8: FORMS OF WATER

Objective Type Questions :

(a) iii (b) i (c) i

Subjective Type Questions :

1. (a) Solid, liquid, gas (b) It send steam. (c) The changing of water to water vapour is called evaporation. The changing of water vapour to water is called condensation. The change of water to ice is called freezing. (d) It changes into water drops. (e) Water vapour turns into water drop on getting a cold surface. 2. (a) steam (b) evaporation (c) condensation (d) freezing (e) water 3. (a) iii (b) i (c) ii 4. (a) evaporation (b) freezing (c) liquid (d) evaporation

UNIT 4 : OUR UNIVERSE

CHAPTER 9: SUNLIGHT AND SHADOW

Objective Type Questions :

(a) iii (b) i (c) iii

Subjective Type Questions :

1. (a) Light and heat. (b) Morning time (c) Afternoon time (d) Because light is so important for shadows. 2. (a) rises (b) light, heat (c) evening (d) near (e) behind 3. (a) T (b) T (c) T (d) F (e) T

UNIT 5 : ROCKS, SOILS AND MINERALS

CHAPTER 10: KIND OF ROCKS

Objective Type Questions :

(a) iii (b) iii (c) i

Subjective Type Questions :

1. (a) A hard matter is called rocks. (b) Diamond and granite are hard rock. (c) Limestone and sand stone are soft rock. (d) We get different rocks in Earth. (e) Coal fuels are taken from the Earth. 2. (a) It is used for building, road and house. (b) It is used for building, statues, floors. (c) It is used for fuel. (d) It is used for writing like pencil. (e) It is used for buildings. (f) It is used for making jewels. 3. (a) Diamonds (b) slate (c) Coal (d) rough (e) Chalk

UNIT 6 : THE HUMAN BODY, HEALTH & HYGIENE

CHAPTER 11: OUR BODY-A WONDERFUL MACHINE

Objective Type Questions :

(a) iii (b) i (c) ii

Subjective Type Questions :

1. (a) 206 (b) 600 (c) work (d) pump (e) lungs 2. (a) T (b) F (c) F (d) T (e) T 3. (a) v (b) iv (c) i (d) ii (e) iii

CHAPTER 12: EXERCISE AND POSTURES

Objective Type Questions :

(a) iii (b) iii (c) i

Subjective Type Questions :

1. (a) Postures are the way in which we sit, stand, walk as know posture. (a) Correct postures help us to bones grow well. (c) Doing this we make us healthy. (d) We sit, stand and walk incorrect postures. 2. (a) T (b) T (c) F (d) F

CHAPTER 13: FOOD FOR HEALTH

Objective Type Questions :

(a) iii (b) iii (c) iii

Subjective Type Questions :

1. (a) Food makes us grow. (b) We need energy for doing work. (c) Milk, green vegetables and fresh fruits are rich in vitamins and minerals salts. (d) Bee root, carrot, milk which protect us from diseases. (e) Eat fresh food. Do not eat uncovered food. Take your food at fixed hours. Do not eat between the meals. Do not eat hurriedly. 2. (a) fats, carbohydrates (b) proteins (c) vitamins, minerals (d) Balanced (e) extra

UNIT 7 : SAFETY AND FIRST AID

CHAPTER 14: SAFETY HABITS

Objective Type Questions :

(a) iii (b) iii (c) ii

Subjective Type Questions :

1. (a) We should see right and left then we crossing the road. (b) We should walk on our left hand. (c) zebra-crossing. (d) First-aid is the help given to the injured, before the doctor arrives. 2. (a) footpath (b) zebra (c) traffic (d) injury 3. (a) iii (b) i (c) ii

UNIT 8 : HOUSING AND CLOTHING

CHAPTER 15: TYPES OF HOUSES

Objective Type Questions :

(a) i (b) i (c) iii

Subjective Type Questions :

(a) For make comfortable life. (b) Wood, bamboo and mud. (c) Brick and Stones.
(d) Kuchcha house, pucca house, tent house and ideal house. (e) Flat and sloping roofs. 2. (a) shelter (b) nomads (c) skyscraper (d) slopping



Teacher's Manual

Science Time (Class-3)

UNIT 1 : LIVING BEINGS

CHAPTER 1: LIVING BEING AND NON- LIVING THINGS

Objective Type Questions :

1. (a) iii (b) i (c) i

Subjective Type Questions :

1. (a) The animals which breathe through lungs are cow, dog, lion, etc. (b) Tortoises, crocodiles. (c) Brinjal; tomato (d) **Growth**: Animals, plants and human beings take in food, increase in size and grow. This is called growth. **Respiration** : The process of taking in oxygen and giving out carbon dioxide is called breathing or respiration. **Locomotion** : Animals move for food and shelter and to escape from their enemies. This movement is called locomotion. **Reproduction** : Reproduction is a process by which living beings produce their own kind. (e) Car, Computer, Table (f) Mountains, clouds, sun.

(g)

S.No.	Plants	Animals
1.	Plants are fixed to the soil.	Animals move from one place to another place.
2.	Plants do not have a definite form or size.	Animals have a definite form and size as head, trunk and limbs.
3.	Plants prepare their own food (starch) in the presence of sunlight.	Animals Cannot prepare their own food but only depend on plants and other animals for their food.
4.	Plants breathe through stomata in their leaves.	Animals breathe through lungs, gills or breathing holes.
5.	Plants reproduce through seed or spores.	

2. (a) Flower (b) Oxygen (c) Touch-me-not (d) Moon 3. (a) rose (b) duck (c) television (d) monkey (e) air-holes 4. (a) v (b) iv (c) ii (d) i (e) iii 5. Do yourself.

UNIT 2 : PLANT LIFE

CHAPTER 2: PARTS OF A PLANT

Objective Type Questions :

1. (a) ii (b) iii (c) ii

Subjective Type Questions :

1. (a) There are two type of typical plant-shoot and root system. (b) **Root system** : The root is the part of the plant that grows into the soil. When a plant has one big root with many branches at its sides, it is known as tap root system. **Shoot system** : This is the main axis of the plant. It bears branches, leaves, buds, flowers and fruits. **Photosynthesis** : It prepares its own food called starch by a process called photosynthesis. (c) Because the plant make our food itself. With the help of sunlight. That is why plant know as food factory. (d) Cabbage, lettuce, spinach

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(e) Potatoes, Colocasia, Ginger (f) It is good for our health and fruits gives us vitamins. **2.** (a) Root system, Shoot system (b) Starch (c) Stomata (d) Fruits (e) Flower (f) Seeds **3.** (a) system (b) root (c) stem (d) starch (e) seed **4.** (a) iv (b) v (c) i (d) ii (e) iii **5.** Do yourself.

UNIT 3 : ANIMAL LIFE

CHAPTER 3 : ANIMALS AND THEIR HOMES

Objective Type Questions :

(a) iii (b) iii (c) iii

Subjective Type Questions :

1. (a) Because for rest and protection. (b) They try to choose safe place for rest that's why bird build its nest. (c) Snake lives in burrows. (d) In holes. (e) They live inside.(f) Ants, bees and wasps are social insects which live in colonies (groups). They build their colonies. Ant store food in the tunnels or holes for future use. **2.** (a) dens, caves (b) fins (c) tree trunk (d) snakes, rabbits (e) Ants, bees, wasps

CHAPTER 4 : WAYS OF MOVING IN ANIMALS

Objective Type Questions :

(a) iii (b) ii (c) iii

Subjective Type Questions :

1. (a) The movement of animals from place to place is called locomotion. (b) Because they also need safe place. (c) It helps bird to moving these wing up and down. (d) The body of the fish has certain special structures at various fins. (e) It slides to move. **2.** (a) Locomotion (b) legs (c) feathers, wings (d) flight muscles (e) direction (f) Snake, Earthworm **3.** Do yourself.

CHAPTER 5 : ANIMALS AND THEIR FEEDING HABITS

Objective Type Questions :

(a) ii (b) iii (c) iii

Subjective Type Questions :

1. (a) Such Animals which eat plants and other plant parts are called plant eating animals or **herbivores**. Such animals which eat the flesh of other animals are called flesh-eating or **carnivores**. Such animals which eat both plants and animals are called **omnivores**. Some herbivores chew the cud and they are called ruminants. (b) Birds, Snakes, Lizard (c) It moves fast, opens its mouth, puts its tongue outside, catches the insect and swallows it. (d) Birds have beaks which helps them to catch and eat different kinds of food. (e) They have long sucking tube is called proboscis. **2.** (a) gap, teeth (b) strong sharp (c) biting, cutting chewing (d) chewing the cud, cud, chewing (e) teeth, beaks (f) grind **3.** (a) iii (b) i (c) ii (d) v (e) iv

UNIT 4 : HUMAN BODY, HEALTH & HYGIENE

CHAPTER 6 : HUMAN BODY

Objective Type Questions :

(a) i (b) iii (c) iii

Subjective Type Questions :

1. (a) Because our body work just like a machine that is why we say that the body is like a machine. (b) This is made up of different type of bones. The skeletal system gives form, shape and support to the body. It also protects some organs inside our body. (c) It helps us to move about and do many kind of work. (d)

It is ground well in our with and swallowed. In this system the food becomes ready to be used by the body. (e) Sense organs are our eyes, ears, nose, tongue and skin. With the help of these organs we see, hear or feel the things. That is why we say the sense organs all our windows of the world. (f) It helps the brain receive message from the sense organs. It sends out orders to the different part and makes them work. **2.** (a) Digestive (b) Breathing (c) Excretory (d) Spinal card (e) air sacs (f) respiration **3.** (a) v (b) iv (c) ii (d) i (e) iii

CHAPTER 7 : OUR FOOD

Objective Type Questions :

(a) iii (b) ii (c) ii

Subjective Type Questions :

1. (a) Food gives us energy and makes us strong. (b) We eat different kind of food. Every type of food contains some important thing called nutrients. (c) 1. Energy-giving food 2. Body-building food 3. Protective food (d) food containing carbohydrates and fats are called energy-giving foods. Egg wheat, potato, sweet potato are energy giving food. (e) Foods containing proteins are body-building food, Meat, fish, eggs, milk are they eg. of body-building foods. (f) Food rich in vitamins and minerals are called protective foods. Milk, green leafy vege., fruits like banana, orange, guava and vegetable like carrot, beetroot, lady finger rich in vitamins and mineral salts. (g) Because cooking help to kill the disease germs that are present in row food and avoid many disease. (h) Always wash the fruit and vegetables in clean water before cutting and peelings the skin to avoid. Cut fruits should be eaten immediately. They should not be left in the open too long. (i) Water help to maintain the body temperature. It help to repair and build body tissues. (j) It contains proteins, minerals, fats and vitamins. So it is called the complete food. **2.** (a) Nutriels (b) carbohydrates, fats (c) Proteins (d) milk (e) soft, easily digstible (f) carrot, cucumber, tomatoes (g) vitamins **3.** (a) iv (b) iii (c) ii (d) i

UNIT 5 : MATTER AND ITS PROPERTIES

CHAPTER 8 : SOLIDS, LIQUIDS AND GASES

Objective Type Questions :

(a) ii (b) ii (c) iii

Subjective Type Questions :

1. (a)

S.N.	Solids	Liquids	Gases
1.	Solids have a definite shape	They cannot have definite shape	Gases cannot be shaped
2.	Solids have a definite weight	Liquid flow faster than solids	Gases flow faster than liquids

(b) **Matter** □ A solid is matter which has a definite shape and definite volume as known matter. **Solid** □ Materials made a plastic, wood, iron, tin etc. are they ex of solid it have definite shape. **Liquid** □ Liquids do not have a definite shape but get the shape of the container. It flow very faster. **Gas** – Gases do not have definite shape but get the shape of the container, it flow very fast then liquid also.

(c)

S.N.	Solids	Liquids	Gases
1.	Solid have a definite shape	Liquid have a definite shape but get the shape of the container.	Gases do not have definite shape but get shape of the container.
2.	Solid have a definite weight	Liquid have weight.	Gas also have weight.
3.	Solid can be heaped.	Liquids cannot be heaped.	Gases cannot be heaped.
4.	Solid flow slowly.	Liquid flow faster than solids.	Gases flow faster than liquid.

(d) **Use of Solid** □ Iron is used for making the body of buses, cars, ships and other machines. Solid are used for our building also. **Used for Liquids** □ Water is the most important liquid, mainly used for drinking cooking food and for cleaning. **Uses of gas** □ Some gas like 'Gobar gas' and cooking gas are used as fuels for cooking. Hydrogen gas is used to fill hydrogen balloons. (f) Take some ice-cube from the refrigerator and keep them in a vessel. See what happen ? The ice cubes take the heat of the atmosphere and the vessel and slowly melt and into water. Ice which was in the solid form has changed into liquid from cold water. Now keep this vessel with water on the stove & heat it. What happen ? water boil and the stem rise into the air in the form of a gas called water vapour. This stem is the gaseous form of water. **2.** (a) container (b) definite (c) high, low (d) hydrogen (e) solid (f) gas **3.** (a) water (b) stem (c) ice (d) water vapour

UNIT 6 : AIR AND WATER AND WEATHER

CHAPTER 9 : WATER : A WONDERFUL LIQUID

Objective Type Questions :

(a) iii (b) i (c) iii

Subjective Type Questions :

1. (a) A liquid that contains a dissolved substance is called a solution. (b) The substance which dissolves in a liquid is known as a solute. The liquid in which the solute dissolves is called a solvent. (c) Stone, Pieces of glass and pieces of wood are the three solid which is not dissolve in water. (d) Ice cube is a solid which is not dissolve in water easily. But if the ice cube put in water and it give heat so super heat so, that condition solid dissolved in water quickly. (e) The common salt and sugar which dissolve in water do not dissolve in kerosene. (f) We call water is a useful liquid because animals, plants and human beings cannot live without water. That is why we all call that water is a useful liquid. **2.** (a) solutions (b) sand (c) solubility (d) dissolve (e) kerosene (f) kerosene (g) water (h) solid

CHAPTER 10 : WEATHER

Objective Type Questions :

(a) iii (b) ii (c) iii

Subjective Type Questions :

1. (a) Sun, wind, clouds and rain are the four things that weather depend. (b)

Evaporation □ This Process by which is liquid changes into a gas on heating is called evaporation. **Condensation** □ If we cool water vapour or stem. It changes back into water thus process is known as condensation. (c) In Sunny day the evaporation fast. That is why in sunny day our clothes are also dry fast. Sunny day is only a main factor of evaporation fast. (d) The rain is formed by clouds because before the rain come fast cloud will be come. After we that rain is came. So that is why rain is formed clouds. (e) By the heat of the sun, water evaporates from ponds, rivers and seas to from water-vapour. This cycle of events or this long journey of water vapour from the sea and back to the sea through clouds and rain is called the water cycle. (f) Man has been trying to know about the weather in advance. Knowledge of the weather on a future data is called weather forecasting. **2.** (a) Rain, Cloud (b) Sunny (c) Cloud (d) Evaporation (e) bad **3.** (a) T (b) T (c) F (d) T (e) F

UNIT 7 : ROCK, SOILS AND MINERALS

CHAPTER II : SOIL

Objective Type Questions :

(a) iii (b) ii (c) iii

Subjective Type Questions :

1. (a) Soil is formed by the breaking up of rock. (b) Different kind of soil. 1. Gravel soil 2. Sand soil 3. Clay soil 4. Loam soil (c) Dead leaves and decayed bodies of animals and plants from the humans. Humans is also found in soil. (d) Loam is the soil. That is best for growing plant. (e) With the help of urea. In village, farmers use fresh leaves, cow-dung and animal waste as manure for their fields. **2.** (a) gravel (b) Sand (c) hold (d) sand, clay, humus (e) loam (f) leaves **3.** (a) ii (b) i (c) iv (d) iii

UNIT 8 : MEASUREMENTS

CHAPTER I2 : MEASUREMENTS

Objective Type Questions :

(a) ii (b) i (c) iii

Subjective Type Questions :

1. (a) The unit of length is meter. The unit of weight is kilogram. The unit of time is second. The unit of volume is liters. (b) 1 gram = 1000 Milligrams (c) Balance is a equal like weight us measured in gram and kilograms. Which we need a balance. (d) Time is measured in second, minutes and hours. Time is measured in day, months week and years also. We use watches and clock to measure time. (e) The approximate normal body temperature of human body is (98.5F). (f) Rain gauge is the instrument for measuring rainfall. **2.** (a) ii (b) v (c) iv (d) iii (e) i

UNIT 9 : SAFETY AND FIRST AID

CHAPTER I3 : SAFETY AND FIRST AID

Objective Type Questions :

(a) i (b) i (c) iii

Subjective Type Questions :

1. (a) Accident take place when people are careless or are in a hurry. (b) Loose-fitting clothes should we wear while working in the kitchen hear the fire. (c) Do not run or jump over desks. – Do not push one another. Do not play a wrong game. (d) We should cross a road on zebra-crossing. (e) We call a doctor or *Science Time (1-5)*

with the help of first-aid we give to the injured before reaching the doctor. 2. (a) careless (b) accident (c) zebra (d) run and jump (e) terrace (f) it is not stop (g) first (g) traffic

UNIT 10 : HOUSING AND CLOTHING

CHAPTER 14 : AN IDEAL HOUSE

Objective Type Questions :

(a) iii (b) iii (c) iii

Subjective Type Questions :

1. (a) In a house there is kitchen, dining room, store room, bed room, nursery, toy room, sitting room or drawing room. Then we call that our house is ideal house. (b) dining room storeroom toy room drawing room are the different-different room in an ideal house. (c) Drawing room is used for when a visitor or we say guests come he/she sit in drawing room only. It receive the guests. (d) The walls make our house storage and the walls of a good house should be thick, the roof must be high. Then it will be cool in summer. (e) Drains should be use for cleaned with pheny at regular intervals. 2. (a) kitchen (b) pheny (d) door, windows (d) well-covered (e) strong

UNIT 11 : THE UNIVERSE

CHAPTER 15 : THE SUN, THE MOON AND THE STARS

Objective Type Questions :

(a) i (b) i (c) iii (d) ii

Subjective Type Questions :

1. (a) Because they are very far away from earth. (b) When the moon is between us and the sun, the side of the moon we see gets no light. It is the new moon. When the moon is opposite to the sun and is in the sky all night, it is full moon. (c) As the moon grows from new to full, it is said to be waxing and after full it is said to be waning. (d) Because the sun light is high that is why stars in not see in the day time. (e) pole star (f) These groups of stars make some difinite patterns. These groups of a stars are called constellation. (g) Pole Star 2. (a) Sun (b) Part (c) Full moon (d) New moon (e) constellation (f) North Star



Teacher's Manual

Science Time (Class-4)

UNIT I : PLANTS LIFE

CHAPTER I : PLANTS MAKE THEIR OWN FOOD

Objective Type Questions :

1. (a) i (b) iii (c) iii (d) iii

Subjective Type Questions :

1. Photosynthesis □ The green leaves of the plants use this chlorophyll and the light energy from the sunlight and prepare food in the form of carbohydrate. This method of preparing food is called photosynthesis. **Chlorophyll** □ The vast majority of plants are green in colour. This green chemical pigment is called chlorophyll. **Stomata** □ The leaves of most plants are broad and flat. These are many layers of green cells between the upper and lower surface of a leaf. "These tiny holes are called Stomata." **Importance of Photosynthesis** □ Photosynthesis is a very important process because of the following reasons. 1. Sources of energy 2. Production of food 3. Balancing of atmospheric carbon dioxide and oxygen. (c) As green leaves are the main organs of the plant for preparing food they are called food-making factories. **2.** (a) F (b) F (c) F (d) F (e) F (f) F **3.** (a) Living being (b) Chlorophyll (c) Stems, roots, fruits (d) Photosynthesis (e) food, oxygen (f) stem **4.** (a) iv (b) v (c) i (d) ii (e) iii

CHAPTER 2 : THE USES OF PLANTS

Objective Type Questions :

(a) i (b) iii (c) i

Subjective Type Questions :

1. (a) We get food items from plants and crops. (b) We grow many trees for wood so, we get wood from trees. (c) We can make winter clothes with the help of fibers. (d) Wood is very useful for us because with the help of wood we make doors, windows, sports articles etc. (e) The bamboo is a plant of the grass family. This is used for making paper and building huts and matchboxes. (f) Coffee, tea and cocoa are the most popular beverages all over the world. **2.** (a) F (b) F (c) T (d) T (e) F **3.** (a) Medicines (b) Flax (c) Luffa (d) Beverages (e) Wood (f) Jute, Fibres (g) fodder (h) Beverages **4.** (a) v (b) i (c) vi (d) ii (e) iii (f) iv

CHAPTER 3 : DISPERSAL OF SEEDS

Objective Type Questions :

(a) iii (b) ii (c) iii

Subjective Type Questions :

1. (a) The distribution for spreading of seeds to far away places from the mother plant is called dispersal. (b) Seed is dispersed because it helps in the distribution of plants over the earth's surface; it also helps the seedling to grow into healthy plants in suitable places. Which helps them to fly in the air. (c) Because the young plant will not be able to expose their leaves to the sunlight. (d) Dispersal of seeds by wind is very common. The structure of the dispersal seed will be scattered away to a distant place. (e) The seeds dispersed by animals and birds when the animal passes that way or lies down on grass stick to their body surface. Sometimes birds also travel long distances and pass out their seeds, get deposited in

several places. Some of these may be left without gating scatter and into new plant. (f) Human being also help in the dispersal of seeds. Some fruits burst open by themselves when they are dry and scatter the seeds. (g) The outer surface of coconut is smooth & water-proof. The middle region is spongy and fibrous. This region traps the air and make it float. Seed of water lilies are small and light & are scattered in water. Seed of lotus are carried for away on long spongy stalk of the flower. (h) Fruits of bean, pea, bauhinia, balsam, castor and lady finger show explosive mechanism. When ripe, they smell and burst at the slightest touch. These fruits are called explosive mechanisms. **2.** (a) disperse (b) wind (c) wing (d) water (e) explosive mechanism **3.** (a)ii (b)i (c) iv (d) iii

UNIT 2 : ANIMALS LIFE

CHAPTER 4 : REPRODUCTION IN ANIMALS

Objective Type Questions :

(a) ii (b) iii (c) iii

Subjective Type Questions :

1. (a) In the case of these animals, the young ones develop inside the body of their mother (mother's womb). When the development is complete they are born. These animal are called mammals. (b) "Our parents look after us and take care of or need. This is call parental care." (c) The mother cat talking care of it young kitten. They do not allow anyone to go hear their young ones. Parent bird do not allow their enemies to come anywhere near their nest. Mammals show much parental care. **2.** (a) water (b) metamorphosis (c) body (d) hen (e) hen (f) own milk **3.** (a) T (b) F (c) F (d) F (e) F

CHAPTER 5 : THE USES OF ANIMALS

Objective Type Questions :

(a) iii (b) iii (c) iii

Subjective Type Questions :

1. (a) Cow, buffaloes, horses. etc. (b) Vulture, pigeon (c) The domestic animals which help in carrying the loads are called beasts of burden. They are useful for us because they carry load and pull vehicles. Horses, donkeys, elephants are the beasts burden. (d) Those things which made by animals skin knows leathers. Like bag, purses, shoes, footwear made up by leather. (e) Wool is the soft curly hair of animals like sheep, goat known as woollen. Blanket and woollen clothes we get from wool. (f) The dung of certain animal is not a waste but it is useful to use. Cow dung and the dung of buffalo are made Into farmyard manure. We should keep the shelter of domestic animal clean and dry. We should take care of the injuries and elements of the animals. **2.** (a) T (b) T (c) T (d) F (e) F **3.** (a) milk (b) donkey (c) wool (d) egg (e) leather. **4.** (a) iii (b) iv (c) v (d) ii (e) i

UNIT 3 : HUMAN BODY, HEALTH & HYGIENE

CHAPTER 6 : FOOD AND DIGESTION

Objective Type Questions :

(a) iii (b) iii (c) iii

Subjective Type Questions :

1. (a) Carbohydrates fats, proteins, mineral, vitamins and water are the nutrient in the food. The nutrients are very important for human body because it keep us healthy and strong. (b) **Malnutrition** □ Most of the children from poor families in

many countries suffer a condition called malnutrition. **Digestion** □ When we eat something then after eating we intestine we again need food so, it means our food which we eat is digested. The process is known as digestion. (c) Alimentary canal from the mouth to the anus from the digestive system. The mouth the food pipe, the stomach, the small intestine and the large intestine from the alimentary canal. (d) Saliva is a liquid which produced in some gland in the mouth. (e) The stomach is like a bag. Its walls are made of muscles. Then the food starts a digested after digested part of food are absorbed into the blood and remains now is a waste material. (f) When we eat something. So, it will go our stomach and digested process will be start and "The digestion is completed in the small intestine." time. So we say that food is digested in the small intestine. (g) When we eat something. So, it will go our stomach and digested process will be start and "The digestion is completed in the small intestine." **2.** (a) T (b) F (c) T (d) T (e) F (f) F **3.** (a) iv (b) v (c) i (d) ii (e) iii **4.** (a) energy (b) small intestine (c) four (d) six (e) small intestine (f) anus.

CHAPTER 7 : FOOD COOKING AND PRESERVATION

Objective Type Questions :

(a) iii (b) i (c) ii

Subjective Type Questions :

1. (a) Some vegetables like – Cauliflower, cabbage, tomatoes and leafy vegetables should not be overcooked. Cooking at high temperature and over a long period of time destroys the vitamins. (b) 1. Cooking of water 2. Cooking of stem 3. Dry roasting 4. Baking 5. Puffing (c) Low temperature, canning, pickling, salting and chemical preservation. These are the different methods of preservation of food. (d) Salt is a good preservation because micro-organisms cannot live in salt solution. Some vegetables and fruits can be salted and preserved for some time. Dry fish is salted and preserved. (e) Food like- fruits, vegetables and fish are boiled, excess water is removed, sterilised and put into sterile germ free containers and tins. They are sealed pack product. (f) Food grain like rice, wheat maize, bajra, jowar etc. pulses like gram, peas etc. They are then kept in dry containers. Once in a while they should be exposed to sunlight. **2.** (a) F (b) T (c) F (d) F (e) F (f) T (g) F (h) T **3.** (a) Dal, rice (b) Sweets and puries (c) Radish, carrot (d) Bacteria, moisture (e) fruits, vegetables (e) Fruits, jams.

CHAPTER 8 : TEETH AND THEIR CARE

Objective Type Questions :

(a) ii (b) ii (c) ii

Subjective Type Questions :

1. (a) We need teeth for eating and taking. (b) When your strong teeth come after milk teeth is called permanent teeth. (c) Foul smell in the mouth teeth begins to decay. Tooth decay causes toothache and diseases. (d) Brush your teeth in the morning and before going to bed. Use a good tooth paste or tooth powder. Do not allow chocolates and sweets to stick to the teeth. Drink plenty of milk, this will help you, to have strong teeth. (e) Do not eat so much chocolates. Do brush your teeth daily morning and night before sleeping these are the simple rule to avoid tooth decay. (f) Incisor, canine, molar are the kinds of teeth. **2.** (a) Milk teeth are not permanent. (b) Yes (c) It is not necessary to use expensive tooth paste for brushing teeth. (d) clean **3.** (a) milk (b) permanent (c) sweet, chocolates, candy (d) permanent (e) twenty (f) thirty two **4.** (a) ii (b) iv (c) v (d) iii (e) i

UNIT 4 : ROCKS, SOILS AND MINERALS

CHAPTER 9 : SOIL EROSION AND CONSERVATION

Objective Type Questions :

(a) iii (b) ii (c) ii

Subjective Type Questions :

1. (a) Top soil (b) "The action of expanding and contracting of the rocks is called weathering". (c) "The removal of the soil by natural agents such as rain rivers and strong winds is known as soil erosion. (d) Cutting down the trees in the forest is called deforestation. When tree is cut the strongness of land is less that is why deforestation is cause soil erosion. (e) Deforestation help rain and wind to erode the soil. When the high rain fall come. So soil will remove one Place to other place. (f) "The best way of conservation the soil is to preserve the soil from erosion." (g) Water flow down a slope with great force and erodes a lot of soil. To make the water flow slowly terraces are made along the hill slopes. These terrace method water coming draw the top of hill. 2. (a) T (b) T (c) T (d) F (e) T (f) F (g) T 3. (a) Particles (b) weathering (c) rain, wind (d) soil erosion (e) soil erosion (f) soil erosion (g)by making terraces (g) conserve

UNIT 5 : MATTER AND ITS PROPERTIES

CHAPTER 10 : MATTER AND ITS PROPERTIES

Objective Type Questions :

(a) ii (b) ii (c) i

Subjective Type Questions :

1. (a) Matter may be living or non-living thing, it have three states-solid, liquid, gas. (b) Solid, liquid, gas the three state of matter. (c) Because the particles of solid is so close that is why solid have definite shapes. (d) Matter is made of three state liquid, solid or gas. (e) Matter is made up of very small particles called molecule. 2. (a) tiedly (b) conductor (c) opaque thing (d) freely (e) iron 3. (a) ii (b) iv (c) v (d) ii (e) i 4. (a) F (b) T (c) T (d) F (e) F (f) T

UNIT 6 : FORCE, WORK AN ENERGY

CHAPTER 11 : FORCE, WORK AN ENERGY

Objective Type Questions :

(a) i (b) ii (c) iii

Subjective Type Questions :

1. (a) The cause for the movement of an object is called force. (b) To go from one place to another we require energy to walk. We carry load, we need energy to carry load. We require energy to right to life thing and even when we are sleeping without energy no work can be done. (c) 1. Muscular energy 2. Heat energy 3. Fuel energy 4. Wind energy 5. Chemical energy Are the different kind of energy. (d) "The energy to do the work is supplied by the muscles. So it is called muscular energy." (e) The different source of energy are the sun diesel, petrol coal, wood, bio-gas all the fuels which help to give energy to automobiles. 2. (a) force (b) moving (c) sun (d) elastic (e) heat (f) transformation (g) sun (h) required energy 3. (a) T (b) T (c) T (d) F (e) T (f) T 4. (a) vi (b) iv (c) v (d) iii (e) ii (f) i

UNIT 7 : THE UNIVERSE

CHAPTER 12 : OUR EARTH AND SKY-SOLAR SYSTEM

Objective Type Questions :

(a) iii (b) iii (c) ii

Subjective Type Questions :

1. (a) "The white stone which twinkling in the sky at night known as stars." (b) Stars are not only bodies seen in the sky at night. There are few other bodies which give off light continuously but do not twinkle. These bodies are called planets. (c) The all planets like Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune and Pluto are known as Solar System. (d) Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune and Pluto. (e) A subsidiary satellite is a satellite that goes round another satellite any object that orbits round another satellite is called subsidiary satellite. (f) The man-made satellite are called artificial satellites. These satellites contain instrument to help to find out more about space the Sun. The Moon and the Earth. (g) Bhaskara is a artificial satellites. It was sent Into space in June 1979. It was able to collect information for India land, water, forest. SLV-3 was sent into space on July, 18 1988, Rohini I was sent into space July 24th 1981. (h) A coment is a temporary visitor in our solar system. Generally Coments have round head and long tail like broomstick. They revolve round the sun. (i) It shines only because of the light. Moon has no light of its own nevertheless as alighted object in the space the position of the moon is considered only second to that of the sun. Hence, sun is called the king of day while moon is called the king of night. 2. (a) star (b) solar system (c) energy (d) sun (e) light (f) Pluto (g) sun (h) artificial (i) space, earth (j) artificial. 3. (a) x (b) ix (c) vii (d) viii (f) iii (g) iv (h) v (i) i (j) vi 4. (a) T (b) F (c) T (d) T (e) F (f) T (g) T (h) F (i) F (j) T

UNIT 8 : AIR, WATER AND WEATHER

CHAPTER 13 : CLEAN DRINKING WATER

Objective Type Questions :

(a) iii (b) iii (c) i

Subjective Type Questions :

1. (a) Ponds, rivers and lakes became impure day by day because for human being. They wash their clothe, bath, they also bath there animals. That is why river, lakes, ponds become impure. (b) Rivers lakes, and ponds are the three sources of water which take water daily. (c) The polluted water bad for health because If we drink polluted. So we will ill. Our health decreases day by day due to this polluted water. (d) A funnel to a stand. Fold a piece of filter paper into a coin and place it in the funnel. Take some muddy water in a beaker and pour it slowly into the funnel. Look at the water collected in the beaker placed under the funnel. It is clean water. (e) Because all the people wash there clothes on river commonly they bath and they bath with these animals also that is why population is more responsible for polluted of water. (f) We must not waste water because water is very important for all. We should not open the top and take bath in the limited water. 2. (a) T (b) T (c) T (d) F (e) F (f) F (g) T (h) F (i) T (j) T 3. (a) three-fourths (b) urine, sweat (c) storage tanks (d) deases (e) sunlight water plants, fishes (f) germs (g) pollution (h) pollution (i) reservoirs (j) chlorine (k) polluted (l) precious

CHAPTER 14 : THE CHANGES IN WEATHER

Objective Type Questions :

(a) iii (b) ii (c) ii

Subjective Type Questions :

1. (a) Sand (b) When there is less water vapour in the air. So, the weather is dry. (c) When there is more water vapour in air so, the weather is wet. (d) Water vapour (e) Because night is cooled compared to day. (g) Sun is the sources of heat on the earth. 2. (a) T (b) F (c) F (d) T (e) F (f) T (g) F (h) F 3. (a) Pole (b) Sun (c) cool (d) hot (e) convection currents (f) hibernation (g) estivation

UNIT 9 : SAFETY AND FIRST AID

CHAPTER 15 : SAFETY AND FIRST AID

Objective Type Questions :

(a) iii (b) ii (c) iii

Subjective Type Questions :

1. (a) Do not play on road. Always road cross by zebra-crossing. (b) Do not touch hot thing with bare hands. If gas is use, see that the gas, burner is turned off after its use. Avoid keeping combustible materials (Materials that can easily catch fire and burn) near the fire. (c) All electrical equipment should be handled very carefully. All equipments Should be in good working condition. There should be no leak anywhere. Do not try to repair electric wires, plugs and switches. Switches must be put off after use. Do not touch the electric stove, kettle or heater before switching off the current. (d) Swim protected place. Always swim in clean and clear water. Unless you feel fit, do not go for swimming. Do not go too deep into the water. (e) See left and right then cross the road. (f) Our body chak fire very lost if we wear loose clothes. (g) We give he/she first aid. (h) If the cut is deep, a large quantity of blood will flow out. Steps must be taken to stop the bleeding at once. If not, the wounded man will faint because of much loss of blood. (i) Take the person to the doctor or hospital, some temporary aid is to be given. This aid is called first-aid. 2. (a) Injuries (b) proper place (c) sharp (d) off (e) fit (f) synthetic (g) clean (h) first-aid (i) first-aid 3. (a) T (b) T (c) T (d) F (e) T (f) T (g) T (h) F

UNIT 10 : HOUSING AND CLOTHING

CHAPTER 16 : CLOTHING

Objective Type Questions :

(a) iii (b) iii (c) iii

Subjective Type Questions :

1. (a) Cotton and Jute (b) Sheep give use raw material for cloth. (c) Because they are very light and good for our body. (d) Because in woollen we feel hot in winter. 2. (a) Nylon, Rayon (b) Sheep (c) terene, rayon (d) Takli, Charkha 3. (a) Protect (b) Smart (c) Artificial (d) Big Machines (e) Woollen (f) Jute. 4. (a) F (b) T (c) T (d) T (e) T 5. (a) iii (b) iv (c) v (d) ii (e) i



Teacher's Manual

Science Time (Class-5)

UNIT 1 : LIVING BEINGS

CHAPTER 1 : SPECIAL CHARACTERISTICS OF LIVING BEINGS

Objective Type Questions :

(a) iii (b) ii (c) ii

Subjective Type Questions :

1. (a) Offspring (b) lungs (c) gills (d) stimuli (e) oviporous (f) fast. 2. (a) T (b) T (c) T (d) F 3. (a) ii (b) iv (c) i (d) iii 4. (a) They are take births. (b) The increase in size and weight of living beings is known as growth. The plants breathe through the minute holes present on the surface of the leaves which are known as stomata. This process of taking in oxygen and giving out carbon dioxide is known as breathing. (c) Animals which give birth to young ones and feed them with their milk are known as viviparous animals. Animals which lay eggs are called egg-laying animals or oviparous animals. (d) Most animals respond to stimuli by moving away from it or towards it. They are more sensitive than plants.

UNIT 2 : PLANT LIFE

CHAPTER 2 : ADAPTATIONS IN PLANTS

Objective Type Questions :

(a) iii (b) ii (c) iii

Subjective Type Questions :

1. (a) The surrounding in which a plant grows is called its environment or habitat. Plants which live on land are called terrestrial plants. Some plants live in dry conditions or in deserts. They are called desert plants. (b) All plants have special features (adaptations) which help them to live in their habitats. (c) Three water plants which float on the surface of water and their roots are in water are Hydrilla, Ceratophyllum, Nyphaea. (d) Two water plant which remain in fully immersed in water are floating, totally submerge plant. (e) Those plants grown in water is known as water plant. Those plants which grow in deserts are called desert plants. (f) The leaves are reduced to thorns to avoid evaporation or transportation of water. The thorns protect the plant from grazing animals. (g) These are the mountain plants and very tall, their leaves are like a needle. 2. (a) aquatic, hydrophytes (b) deserts (c) upper (d) leaves, avoid transpiration (e) needle (g) hanging down 3. (a) iii (b) iv (c) v (d) ii (e) i

CHAPTER 3 : REPRODUCTION IN PLANTS

Objective Type Questions :

(a) ii (b) ii (c) iii

Subjective Type Questions :

1. (a) In favourable conditions the embryo begins to grow and the seed sprouts. This development of seedling from a seed is called germination. (b) The four whorls of a flower are cotyledons, radicle, plumule, embryo. (c) Pollination : The transference of pollen from the anthers to the stigma of a flower is called pollination. Fertilization : The fusion of male gamete with the female gamete is called fertilization. Vegetative Reproduction : Some plant do not produce seed and grow with the help of their vegetative part such as stem, root and leaves. This

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is called natural vegetative reproduction. (f) The potato is an under-ground stem. It has buds which grow into of ginger also give rise to new ginger plants. (g) All plants do not produce flower and seed plant like mushroom, mosses etc. produce very tiny seed like structure called spores. Spores act like seed. When spores get suitable environment they grow into new plant. (h) The favourable condition is very necessary for the germination of seed. **2.** (a) ovule (b) gamete (c) Wind, insects (d) fertilization (e) cotyledons (f) Mushrooms, mosses **3.** (a) iv (b) v (c) vi (d) vii (e) iii (f) ii (g) i

UNIT 3 : ANIMALS LIFE

CHAPTER 4 : ADAPTATIONS IN ANIMALS

Objective Type Questions :

(a) ii (b) iii (c) ii

Subjective Type Questions :

1. (a) **Arboreal animals** : Monkey and squirrel are tree dwelling they are called arboreal animals. **Terrestrial animals** : Animals which live on land are called terrestrial animals. **Aquatic animals** : Those animals which live in water are called aquatic animals. (b) Aquatic are those animals which live in water like fish. The fish has waterproof scales on its entire body due to these scales, water does not stick on to the surface of the body. A fish has fins at the side and posteriorly which help it in swimming. (c) Camel also called ship of the desert. The desert life is very hard. It can travel long distance without water and food in hot and dry desert. Any other animals is not live in desert. Camel absorbing water and that run many days. (d) With the help of fins the fish is swimming. The tail fin help the fish in maintaining balance and to change the direction in water. Fish live permanently in water. If you take a fish out of water it cannot live for long time. (e) Animal like Yak, polar bear, musk, ox, sheep are the mountain animals. They have skin with thick woolly hair or fur to bear cold and to keep the body warm they also have hard hoof or claws to walk on snow. (f) Bird fly to move from one place to another. They adapt to aerial mode of life due to their body structure bird have boat like body structure. Bird have boat like body. It help them to easily early in the air they have very light and hollow bones. Therefore bird are light bodies. **2.** (a) iv (b) v (c) vi (d) iii (e) ii (f) i **3.** (a) gills (b) arboreal (c) ship (d) lungs (e) tail, fin 6. reptile

UNIT 4 : HUMAN BODY, HEALTH & HYGIENE

CHAPTER 5 : BONES AND MUSCLES

Objective Type Questions :

(a) iii (b) i (c) iii

Subjective Type Questions :

1. (a) **Function of bones:** 1. They give definite shape to the body. 2. They provide surface for the attachment of muscles. 3. They protect the delicate organs like the brain, the spinal cord, the heart and the lungs. (b) The soft fleshy portion of our body is called muscle. The muscles are attached to bones with help of rough white material called tendons. Isometric the contracting muscle retain its original length. Isotonic contraction, the muscle short and mechanical work is performed. (c) **Joint** : Where the bones meet each other is known as joint. **Involuntary muscle** : The muscles whose action are not under the control of our will are called involuntary muscles. **Cardiac muscles** : Which muscles are hard is known as cardiac muscles. **Skeleton** : The structure of bone is known as skeleton.

(d) These are five type of joint : **1. The ball and socket joint** : There joint are found in shoulder and hips and allow the moment of arms and legs. **2. The hinge joint** : The joint is knees, elbows, and fingers which move like a hinge are called hinge joint. **3. The Pivot joint** : It is found between the skull and first two bones of the backbone which facilitates the rotatory movement. **4. The Gliding joint** : The bones of backbone ankle and weist which allow gliding movement are gliding joint. 5. These are twelve pair of long carved bone called ribs. They form rib-cage. All the twelve pair of rib are joined to the backone at its back. Voluntary muscles : The muscles whose action are under the control of our will are called voluntary muscles. **Involuntary muscles** : The muscles whose action are not under the control of our will are called involuntary muscles. **2.** (a) T (b) F (c) F (d) T (e) T **3.** (a) 206 (b) 600 (c) brain (d) joint (e) voluntary **4.** (a) vi (b) iv (c) v (d) i (e) vii (f) ii (g) iii

CHAPTER 6 : BRAIN AND NERVOUS SYSTEM

Objective Type Questions :

(a) ii (b) iii (c) ii

Subjective Type Questions :

1. (a) The system that brings out the co-ordination between the organs of the body is the nervous system. The brain is present in the box-like structure of the skull. The skull is hard and protects the brain. The brain weights about 1350 grams. The human brain contains about ten billion (100 crore) nerve cells. The cerebrum is the largest part of the brain. It is also called 'big brain'. The cerebellum is small. It is also known as a 'small brain'. The cerebellum lies below the cerebrum. The cerebellum is controlled by this cerebrum (big brain). The medulla oblongata is below the cerebellum. This is the smallest part. The spine cord is the continuation of the medulla oblongata. It is about one cm. in diameter. One is communication between the brain and all the parts of the body. The other is reflex action. (b) The human brain contains about ten billion nerve cells. It consists cavities are called ventrids. (c) The cerebrum is the largest part of the brain. It is also called big brain. The cerebrum help us to learn, think, remember thing, speak and feel. It also help us to hear, smell, taste. The cerebellum small. It is also known a small brain the cerebellum lies below the cerebrum. The cerebellum is controlled by the cerebrum big brain. (d) The medulla oblongata is below the cerebellum. This is the smallest part. The medulla oblongata controls the heart beat, the breathing movement. (e) Nervous system are the brain, the spinal card, nerves and these three thing are very important for body for live. That is why the nervous system the most important of our body system. (f) The spinal cord is the contribution of the medulla oblongata. The main of spinal cord : One is communication between the brain and all the part of the body. The other is reflex action. **2.** (a) F (b) T (c) F (d) T (e) F (f) T **3.** (a) brain spinal cord, nerves (b) middle, inner meaning (c) medulla oblongata (d) neurons (e) mixed nerves (f) meter nerves **4.** (a) ii (b) iii (c) v (d) i (e) iv

CHAPTER 7 : DEFICIENCY DISEASE

Objective Type Questions :

(a) ii (b) iii (c) iii

Subjective Type Questions :

1. (a) Nutritious food is the need of all human being. We need to eat a balanced-diet for our proper growth and to keep us healthy. A balanced diet contains the various nutrient like carbohydrates. (b) The various constituent of food all green
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vegetables are very good for health. We get mineral and vitamin from green vegetables. (d) A diet which contain all constituent of food in adequate quantities and in the right proportions is said to be a balance diet. (d) The disease caused due to the shortage in nutrient in the food are called deficiency diseases. (e) Light blindness is a diseases in which the human being is blind their eyes. In this the eyes is not work. Only black-black come the front of our eyes. (f) Proteins in the normal meals of children having age group between six months. The children have potted bellies are very thin legs and hand due to the deficiency of proteins. (g) The anaemia is a disease the children have potted bellies and very thin legs and hands due to the deficiency of proteins. The results in anaemia, diarrhoea and enlarged liver. (h) The diseases caused due to the shortage of nutrient in the food are called deficiency disease. 2. (a) vegetable (b) vitamins D (c) and nutritious (e) mineral (d) vitamin B 3. (a) iii (b) iv (c) ii (d) vi (e) i (f) v

CHAPTER 8 : MICRO-ORGANISMS AND SPREAD OF DISEASES

Objective Type Questions :

(a) ii (b) ii (c) iii

Subjective Type Questions :

1. (a) Most diseases are caused by very tiny organisms called germs. Contagious diseases are caused by four main kind of germs namely bacteria, viruses, protozoa and fungi. (b) The name of the different type of germs : 1. Bacteria 2. Virus 3. Protozoa 4. Fungi (c) Disease germ are spread from one person to another through contaminated food water, air and by contact. 1. Through food 2. Through water 3. Through air 4. Through contact (d) Bacteria are harmful and cause many diseases like pneumonia, tuberculosis, typhoid and diphtheria. Viruses cause diseases like flu, measles, polio and jaundice. Fungi cause disease like patches on the skin, ringwon and sore on the tongue. Protozoa causes diseases like malaria and dysentery. (e) The flies spread diseases from one person to another through contaminated food, water, air and by contact like Through Food : Many diseases of the digestive system spread through eating contaminated food. Flies are the carries of germs of several disease. Through water : Disease of digestive system may also spread through the polluted water. Through Air : When we sit near a person with cough and cold. Through Contact : We many infected if we come in direct contact with an infected person. We may also get infected through contact with the towels, blankets, clothes, combs of the infected person. 2. (a) T (b) F (c) T (d) F (e) F 3. (a) iii (b) i (c) iv (d) iii 4. (a) contiguous (b) Bacteria (c) flu, measles (d) ringworm, fungi (e) water, salts (f) flu, malaria (g) of small box (h) patient, disease 5. (a) bacteria (b) mosquitoes (c) water (d) dog-bite (e) chicken-pox (f) tuberculosis.

UNIT 5 : AIR, WATER AND WEATHER

CHAPTER 9 : AIR AND ITS USES

Objective Type Questions :

(a) ii (b) iii (c) ii

Subjective Type Questions :

1. (a) They are very uses for our life with the help of oxygen we take breath we live and nitrogen gas use to come for automobile tube, bicycle tube, etc. (b) Mixing up of poisonous gas and harmful substance with the air the air to make it impure is called air pollution like air pollution, water pollution, noise pollution. The three name of air pollution : 1. Smoke 2. Dust 3. Garbage (c) The chemical compound

produced in factories and used as manures are called fertilizer. Oxygen, nitrogen, carbon dioxide are the three nitrogen fertilizer. (d) When the piston is moved down the valve at the bottom close and the piston valve opens. Water rise up and fills the space in the barrel above the piston. When the piston is moved up, the piston valve closes and the water flows out through the opening at the top of the barrel. (e) Mountaineers take oxygen cylinder with them because there is no Oxygen gas in mountain that is why Mountaineers take oxygen cylinder with them. (f) Take a medicine dropper-DIP its tip into liquid medicine or water in a small bottle, press the rubber bulb. Air bubble come out of it. The air pressure in the dropper become less than the outside air pressure on the surface of the liquid due to outside air pressure. (g) Doctors use syring for giving injection. An injection syring works by air pressure the piston is pulled out. Drinking through a straw also make use of air pressure put a straw in a glass or bottle containing cold drink. Air pressure inside the straw became less than outside pressure of air. (g) A common lift pump work on the same principle as fountain pen filler or syring. The lift pump has two valve which open only upward and prevent water from going down. 2. (a) iv (b) iii (c) ii (d) i 3. (a) space, weight (b) mixture, useful (c) oxygen, carbon dioxide (d) CO₂, fertility, sun (e) oxygen (f) container (g) nitrogen (g) atmosphere, impure

UNIT 6 : ROCKS, SOILS AND MINERALS

CHAPTER 10 : KINDS AND FORMATION OF ROCKS

Objective Type Questions :

(a) ii (b) iii (c) ii

Subjective Type Questions :

1. (a) Rocks are the large masses of material that make the earth crust. 1. Igneous Rock 2. Sedimentary Rock 3. Metamorphic Rock are the three types of Rocks. (b) The causes of many number of year an account of pressure of upper layer the lower layer become hard and form rock. These are called sedimentary rock these are found normally into the river. (c) The Earth surface throughout crack in the surface when the magma cools down rock are formed. These are called igneous rock. eg mica, copper, tin etc. (e) Minerals are like copper, tin, aluminium, iron are known as minerals quartz, mica, feldspar are the as minerals fertilizers. (d) Due to heat the great pressure on sedimentary and igneous rock, metamorphic rock and formed. Marble, coal, slate are the different kind of Metamorphic Rocks. (f) The metals is use for many ways the automobile is become a pure metals so many watch is made up by metals. (g) Gold, Platinum, Silver, Iron, Nickel, Copper, Zinc, Tin mercury aluminium are contained in the form of are in rock. (h) The Millions of year ago dense forest and swamp got buried in the earth. Due to great pressure and high temperature the dead vegetable matter got changed we dig the earth to get coal. (i) This is mineral oil found in rock. Million of years ago land and sea animal got Buried of in the earth. (j) Petrol is used as fuel in the motorcar, scooters and other engine on the other hand kerosene is used as fuel for cooking many product of petroleum are used in our daily life LPG is the main product. 2. (a) Quartz, mica, feldspar (b) Sandstone, shale, limestone (c) Slate, marble, coal (d) quartz, feldspar, mica 3. (a) iii (b) iv (c) v (d) ii (e) i 4. (a) Rocks (b) rivers (c) Pebbles (d) calcite (e) magma (f) copper (g) Slate (h) Slate

UNIT 7 : FORCE, WORK AND ENERGY

CHAPTER II : SIMPLE MACHINE

Objective Type Questions :

(a) i (b) i (c) ii

Subjective Type Questions :

1. (a) Simple Machine : We can do varieties of work easily by applying either equal force or less force. Such tools are called simple machines. **Levers :** A rigid rod capable of being rotated freely about a fixed point in it is called a lever. **Inclined Plane :** A flat surface with one end higher than the other is called inclined plane. **Screw :** The heavy vehicle to change tyre? They lift the vehicle with screw Jack. **Wedge :** The wedge is a short piece of iron thick at one end which help to do cutting of wood. **Pulley :** A wheel that can move freely on its axis called pulley. (b) The lever in which the load (L) and the effort (E) are on either side of fulcrum (F) is called first kind of lever. A pair of scissors, see-saw, common balance and boring pump. The liver in which the fulcrum (F) and efforts (E) are on either side of load (L) is called Second kind of lever. Nutcracker, bottle opener, door hinges and wheelbarrow etc. When the effort (E) is in the between the fulcrum (F) and the load (L) it is called third kind of lever. Forceps, the broom with a long handle that is used to clean roads, iron. (c) Do yourself. (d) Water with strain from a well directly with the help of rope only. On the other hand a woman is drawing water easily from a well using a rope passed over a pulley. Pulley is a wheel with grooved rim. You observe that it is easier to draw water from a well when the rope passes over a Pulley. The pulley makes it easier to draw water from the well. Hence pulley is a simple machine. (e) The axle is a rod made of iron or wood. It is fixed to the wheel. There is another iron rod on which wheel-axle rotates. Water is drawn by rotating wooden grips on the wheel. The wheel itself is not a machine, but it becomes one when we combine it with an axle. The axle is only a second smaller wheel, fixed tightly to the first so that they turn together.

2. (a) iv (b) iii (c) ii (d) i 3. (a) pulley (b) 1st (c) down (d) Inclined Plane (e) fixed

UNIT 8 : SAFETY AND FIRST AID

CHAPTER I2 : FIRST AID FOR FIRE ACCIDENT, FRACTURE AND SNAKE BITE

Objective Type Questions :

(a) iii (b) i (c) ii

Subjective Type Questions :

1. (a) Two causes of accidents are carefulness and miss behave on road. (b) The immediate help and care that we provide before the arrival of a doctor to a person who has met an accident is called first aid. Breakage of bone is called fracture. Apply antiseptic cream as known as Burns. (c) Apply antiseptic cream like burnol over minor burns. In case of slide burns wet dressing with baking soda solution may be applied continuously. **Severe Burns :** (i) Make the patient lie down. (ii) Wash the burnt area with water immediately. **Chemical Burns :** (i) Wash the burnt area with water immediately. (ii) After washing, cover the burnt area with a clean piece of cloth. (d) Breakage of bone is called fracture. Two kinds of fracture are simple and compound fracture. (e) Bleeding at the bitten points. Two small bleeding points about 2½ centimeters apart. Severe pain at the bitten spot and vomiting. (f) Sometimes the factor may be hidden or the broken bones make project out following are the symptoms of a hidden fracture—There is pain in the injured Portion. The patient cannot move the fractured part. The place of injury swells up and is painful to touch. A fractured bone need proper

support to prevent further injury. If there is fracture in the leg, it should be tied with splints. Make the patient to lie down. Do not move the fractured leg at all. Carry the person having serious fracture to move the hospital on a stretcher. **2.** (a) anywhere, safety (b) steam, boiling (c) slip, fall (d) pain, work (e) roll, blanket (f) venom, nerves (g) severs burns (h) bleeding, gases **3.** (a) v (b) iii (c) i (d) ii (e) iv **4.** (a) F (b) T (c) F (d) F (e) T

UNIT 9 : OUR UNIVERSE

CHAPTER 13 : MAN ON THE MOON

Objective Type Questions :

(a) ii (b) i (c) i

Subjective Type Questions :

1. (a) In 12 April 1961, a Russian, Col, Yuri Gagarin became the first astronaut. (b) The artificial satellite are made by the man. The satellites which are sent into the space for searching new things are known as space probes. (c) The space travel is use for going other planet like moon, mars etc. **2.** (a) F (b) T (c) T (d) T (e) F **3.** (a) v (b) iv (c) ii (d) vi (e) i (f) iii **4.** (a) sputnik I (b) Yuri Gagarin (c) Columbia (d) Valentine Tareshkova (e) space (f) Aryabhata

CHAPTER 14 : LIGHT, SHADOW AND ECLIPSES

Objective Type Questions :

(a) ii (b) ii (c) iii

Subjective Type Questions :

1. (a) When the light touch our body then a body cast a shadow. (b) The size of the shadow depend upon the light like morning the sunlight come inside so shadow become long then afternoon sunlight come top of our head so shadow is start. Therefore the sunlight in evening comes inside like more then again shadow become long. (c) Keep a lighted lamp on a table near a Wall. The Wall is screen. Now hold a book in front of the light. The shadow of the book is cast on the wall. Now remove the book from its place. There is not shadow on the screen. It means an opaque body is needed for the formation of a shadow. Now if you put out the light you will not be able to see the shadow on the screen. (d) Once a while we have the eclipses. We see the eclipse of the sun called the solar eclipse the eclipse of the moon called the lunar eclipse. (e) When the earth and the moon are in a direct line with the sun. an eclipse occurs. When the shadow of the earth falls on the moon a lunar eclipse occurs. When the shadow of the moon fall on the earth a solar eclipse occurs. (f) The light is very important for all because light product use solar electricity with the help of sunlight. (g) Substances which allow light rays of pass through them are called transparent objects. Translucent substance permit a fraction of light to pass through them. We can not see things distinctly through them. Ground glass, oiled paper, wax, etc. are some examples of translucent objects. Objects which do not allow light rays to pass through them are called opaque objects. (h) Light travels in a straight line : It can be proved by the following experiment. Take three equal rectangular cardboard screens A, B and C. Make a hole in each of them at the centre. Arrange them one behind the other leaving equal space with the holes in a straight line. Keep a burning candle behind the last screen C. Look through the hole of the first screen A. You are able to see the candle flame. If any one of the screen is moved a little you can not see the flame. This shows that the light passes through the three holes in a straight line. **2.** (a) long (b) direction (c) solar (d) moon (e) full moon, New moon **3.** (a) transparent object (b) size of the screen (c) The earth is between the sun and the moon (d) The moon is between the sun and the earth the centre of the Sun.