

ONLY FOR TEACHERS

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Life With SCIENCE-1

1. Our Body

Question Hour-I

A. Tick (3) the correct answer :

1. (b) legs 2. (a) nose 3. (a) fingers

B. Match the body parts with the things they do :

Legs	eat and speak
Hands	see things
Eyes	hear music
Mouth	write and hold things
Ears	walk and run

C. Fill in the blanks with correct words from the box :

1. many 2. different 3. important 4. five 5. around

Think Beyond HOTS

Do Yourself

Question Hour-II

A. How many of these parts do you have? Write the number in the box :

1. (2) 2. (2) 3. (2) 4. (1) 5. (10) 6. (2)

B. Read the sentences and complete the words :

1. Eyes 2. Nose 3. Ears 4. Tongue 5. Skin

C. Paste your photo in the box. Circle the correct words to describe yourself :

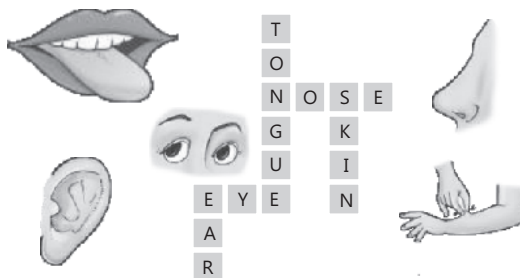
1. two 2. two 3. one 4. one 5. one 6. two

D. Name the body part which rhymes with each word :

1. Nose 2. Chin 3. Neck 4. Hand

Fun to Drill

Complete the crossword Puzzle with the help of pictures:



Fun to Act

Do Yourself

2. Staying Fit and Healthy

Question Hour-I

A. Tick (3) the correct answer :

1. (a) everyday. 2. (c) before and after every meal. 3. (b) eight hours

B. Fill in the blanks with correct words from the box :

1. clean 2. cleanliness 3. chew 4. lick 5. swimming

C. Match the body parts with the things they do :

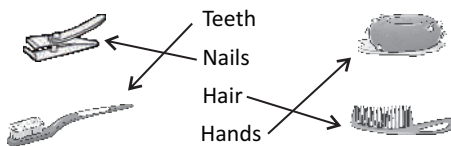
- | | |
|-----------------------|----------------------------|
| 1. To remain healthy | (a) when we sleep. |
| 2. We must eat | (b) upright. |
| 3. Our body gets rest | (c) strong and healthy. |
| 4. Playing makes us | (d) we need to stay clean. |
| 5. We must walk | (e) fresh food. |

Think Beyond HOTS

Do Yourself

Question Hour-II

Match the names with correct pictures :



Fun to Drill

Number your daily routine activities in correct order :

Do Yourself

Fun to Act

Do Yourself

3. Our Food

Question Hour-I

A. Tick (3) the correct answer :

1. (a) healthy 2. (b) energy 3. (c) both of these 4. (b) teeth

B. Fill in the blanks with correct words from the box :

1. food 2. different 3. healthy 4. plants 5. animals

C. Answer the following questions :

Q 1. Why do we need food?

Ans. We need food to live, grow and stay healthy.

Q 2. Name different types of food.

Ans. Fruits, vegetables, milk, egg, pulses, cereals and meat etc.

Q 3. What are the sources of food?

Ans. Plants and animals.

Q 4. Why should we eat healthy food?

Ans. We should eat healthy food to make our body strong and healthy.

Think Beyond HOTS

Do Yourself

Question Hour-II

Look at the picture. Write the names of the food items you would like to have in your lunch box :

Do Yourself

Fun to Drill

You take food daily. How much have you grown up?

Do Yourself

Fun to Act

Fill in the table with food items that you take for breakfast, lunch and dinner :

Do Yourself

4. Our Clothes

Question Hour-I

A. Tick (✓) the correct answer :

1. (c) both 2. (b) summer 3. (b) winter

B. Fill in the blanks with correct words from the box :

1. cover 2. cold, heat 3. weather 4. cotton 5. sheep

C. Tick (✓) the correct and cross (X) the wrong statement :

1. (✓) 2. (✓) 3. (X) 4. (✓) 5. (X)

D. Answer the following questions :

Q 1. Why do we need clothes?

Ans. We need clothes to cover our body.

Q 2. What do we wear in summer?

Ans. We wear cotton clothes in summer.

Q 3. What type of clothes do you wear when it is cold?

Ans. We wear woollen clothes when it is cold.

Q 4. When do we carry an umbrella or wear a raincoat?

Ans. When it rains, we wear a raincoat or carry an umbrella.

Q 5. Where do you get the material for woollen clothes from?

Ans. We get wool from sheep for woollen clothes.

Think Beyond HOTS

Do Yourself

Question Hour-II

The clothes I wear for my school uniform are :

Do Yourself

Fun to Drill

Names of five clothes are hidden in the maze. Go up, down, left or right to find them.

Write their names on the given lines.

1. SHIRT	B	M	N	F	I	R	P
2. JEANS	S	H	I	R	T	J	A
3. COAT	M	S	T	O	L	E	N
4. PANT	R	G	H	C	O	A	T
5. STOLE	N	M	N	K	Z	N	S
	E	C	G	X	Y	S	T

Fun to Act

Do Yourself

5. Our House

Question Hour-I

A. Tick (3) the correct answer :

1. (a) house 2. (c) both 3. (b) clean

B. Fill in the blanks with correct words from the box :

1. bathroom 2. kitchen 3. clean 4. windows 5. hills

C. Answer the following questions :

Q 1. What is a house?

Ans. A house is a place where we live and rest.

Q 2. Write the names of different rooms in a house?

Ans. The names of different rooms in a house.

1. Bedroom 2. Drawing room 3. Bathroom 4. Kitchen

Q 3. How should be a good house?

Ans. A good house should have windows to let in sunlight and fresh air.

Think Beyond HOTS

Do Yourself

Question Hour-II

A. Tick (3) the rooms you have in your house :

Do Yourself

B. Write down the complete address of your house :

Do Yourself

C. Which things do not belong to these rooms. Circle them out :

Do Yourself

Fun to Drill

Do Yourself

Fun to Act

Do Yourself

6. Keeping Safe

Question Hour-I

A. Tick (3) the correct answer :

1. (a) fire 2. (b) footpath 3. (c) strangers

B. Tick (3) the correct and cross (7) the incorrect statement :

1. (7) 2. (3) 3. (7) 4. (3) 5. (3)

C. Tick (3) the correct answer for the following questions :

1. Walking 2. Zebra crossing 3. With a swimming tube

D. Tick (3) the correct words :

1. Do not play with fire 2. footpath 3. Always get into a bus at the stop

Think Beyond HOTS

Do Yourself

Question Hour-II

Look at the pictures. Write 'S' for safe and 'US' for unsafe :

Do Yourself

Fun to Drill

Colour these traffic lights and fill in the blanks :

1. Stop 2. Wait 3. Go

Fun to Act

Do Yourself

7. The Plant World

Question Hour-I

A. Tick (3) the correct answer :

1. (a) trees 2. (b) shrubs 3. (a) herbs 4. (b) fruits

B. Fill in the blanks with the correct words from the box :

1. trees 2. creepers 3. flower 4. green 5. seeds

C. Tick (3) the correct and cross (7) the incorrect statement :

1. (7) 2. (7) 3. (3) 4. (3)

D. Write names of two :

1. Mango, Banyan

2. Grapevine, money plant

3. Pumpkin, Watermelon

Think Beyond HOTS

Do Yourself

Question Hour-II

A. Complete the names of these seeds :



GRAM



RICE



MAIZE



RAJMA



PEAS



WHEAT

B. Complete the names of these seeds :

NEEM

N	E	E	M	R	F	P	Y	B	P
Q	R	U	A	O	P	I	I	A	U
W	B	A	N	Y	A	N	N	N	M
E	I	T	G	R	A	P	E	S	P
C	O	C	O	N	U	T	B	D	K
G	U	L	R	O	S	E	R	A	I
P	A	P	P	L	E	O	T	J	N

ROSE

BANYAN

PUMPKIN

GRAPES

APPLE

COCONUT

MANGO

Fun to Drill

Do Yourself

Fun to Act

Do Yourself

8. Food From Plants

Question Hour-I

A. Tick (3) the correct answer :

1. (a) plants 2. (b) wood

B. Fill in the blanks with the correct words from the box:

1. plants 2. food 3. cereals 4. pulses 5. sugar

C. Tick (3) the correct and cross (7) the incorrect statement :

1. (3) 2. (7) 3. (3) 4. (3) 5. (7)

D. Answer the following questions :

Q1. Where do we get food from?

Ans. We get food from different parts of plants.

Q 2. Name some vegetables that we get from plants?

Ans. Cabbage, potato, carrot, radish, pumpkin etc. that we get from plants.

Think Beyond HOTS

Do Yourself

Question Hour-II

A. Look at the pictures. Write the name and type of each food :



Cauliflower
Flower



Spinach
Leaves

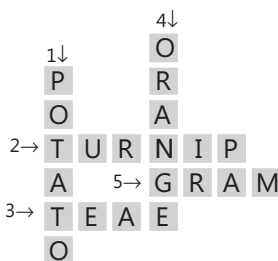


Mango
Fruit



Kidney beans
Pulses

B. Solve the given cross-word using the picture clues :



Fun to Drill

We all come from plants. Write our names :

1. Grapes 2. Pumpkin 3. Chilly 4. Sugar

Fun to Act

Do Yourself

Model Test Paper-I

Solve Yourself.

9. The Animal World

Question Hour-I

A. Tick (3) the correct answer :

1. (a) living 2. (b) two legs 3. (c) pet animals

B. Name the following :

1. elephant 2. ant 3. fish 4. butterfly 5. lion

C. Match the following :

- | | | |
|----------|-------|------------------|
| 1. Dog | _____ | (a) wings |
| 2. Zebra | _____ | (b) insect |
| 3. Fish | _____ | (c) pet animal |
| 4. Ant | _____ | (d) wild animal |
| 5. Bird | _____ | (e) water animal |

D. Answer the following questions :

Q 1. Name two animals that live in forests.

Ans. 1. Lion

2. Elephant

Q 2. Name an animal that lives on tree.

Ans. Monkey

Q 3. Name an animal that lives in water.

Ans. Fish

Q 4. What help the birds to fly ?

Ans. Wings help the birds to fly.

Q 5. How many legs does an insect have ?

Ans. An insect have six legs.

Think Beyond HOTS

Do Yourself

Question Hour-II

A. Circle () the correct picture :

1. The



is a big animal.

2. The



can fly in the air.

3. The



has six legs.

4. The



lives on trees.

5. The



lives in water.

B. Names of six animals are hidden in the maize below. Go up, down, left or right and encircle them :



S	C	A	B	F	I	E	H
H	O	R	S	E	L	P	O
E	W	Y	E	K	N	O	M
E	A	O	N	O	I	L	E
P	W	H	A	L	E	I	R



Fun to Drill

Join the dots in order. Colour the picture and name it:

Do Yourself

Fun to Act

Do Yourself

10. Animals : Food and Shelter

Question Hour-I

A. Tick (3) the correct answer :

1. (b) house 2. (b) grains 3. (c) an aquarium

B. Fill in the blanks with the correct words from the box :

1. insects 2. grass 3. grains 4. rabbit 5. birds

C. Match the following :

- | | | |
|-----------|-------|------------|
| 1. pigeon | _____ | (a) hole |
| 2. Rabbit | _____ | (b) nest |
| 3. Lion | _____ | (c) burrow |
| 4. Bee | _____ | (d) den |
| 5. Snake | _____ | (e) hive |

D. Name two animals that eat the following kinds of food :

1. Cow, Horse 2. Lion, Snake 3. Mouse, Hen 4. Frog, Spider 5. Bear, Crow

D. Answer the following questions :

Q 1. Why do animals need food?

Ans. Animals need food to live.

Q 2. What do cows and goats eat?

Ans. Cows and goats eat grass.

Q 3. What do lions and tigers eat?

Ans. Lions and tigers eat flesh of other animals.

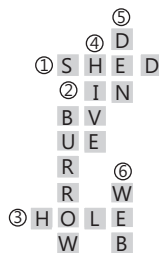
Think Beyond HOTS

Do Yourself

Question Hour-II

Fun to Drill

A. Write names of six homes of animals from the given clues :



B. Put these animals in the correct columns :

goat, pigeon, spider, vulture, lizard, horse, hen, owl
rabbit, sparrow, lion, camel, dove, bear, bat, peacock

Plant-eaters	Grain-eaters	Insect-eaters	Flesh-eaters
goat	hen	lizard	lion
horse	pigeon	sparrow	vulture
camel	dove	spider	owl
rabbit		bat	bear, Peacock

Fun to Act

Do Yourself

11. Air

Question Hour-I

A. Tick (3) the correct answer :

1. (b) air 2. (c) breathe 3. (a) sail-boats

B. Fill in the blanks with the correct words from the box :

1. air 2. heavier 3. move 4. burning 5. wind 6. storm

C. Answer the following questions :

Q 1. Why do we need air?

Ans. We need air to breathe.

Q 2. What gives shape to a blown-up balloon?

Ans. Air gives shape to a blown-up balloon.

Q 3. Write any three uses of air.

Ans. Three uses of air : 1. Flying a kite, 2. Drying Clothes, 3. Sail-boat.

Q 4. What will happen if you cover a burning candle with a glass jar?

Ans. The candle does not burn in the jar as there is no air inside it.

Think Beyond HOTS

Do Yourself

Question Hour-II

A. Things that move with the help of wind :



Parachute



Glider



Flying a kite

B. Things in which air is filled :



Tyre tube



Balloon



Football

Fun to Drill

Do Yourself

Fun to Act

Do Yourself

12. Water

Question Hour-I

A. Tick (3) the correct answer :

1. (a) rain 2. (b) clean 3. (c) both of these

B. Fill in the blanks with the correct words from the box :

1. water 2. rain 3. stored 4. waste

C. Answer the following questions :

Q 1. Write three uses of water.

Ans. Drinking, bathing, cooking

Q 2. What are the two ways of purifying water?

Ans. Filter and boiling

Q 3. Why must we drink clean water?

Ans. We must drink clean water to stay healthy.

Q 4. What are the three ways of storing water?

Ans. Dam, well, tank are the ways of storing water.

Q 5. Why should we not throw waste into waterbodies?

Ans. Water is very precious. So we should not throw waste into waterbodies.

Think Beyond HOTS

Do Yourself

Question Hour-II

Look at the pictures and write the uses of water :

washing clothes cooking food putting out a fire

Fun to Drill

Do Yourself

Fun to Act

Do Yourself

13. Weather

Question Hour-I

A. Tick (3) the correct answer :

1. (a) weather 2. (b) cool 3. (b) winter 4. (c) season

B. Match the columns to complete the sentences :

- | | |
|---------------------------|------------------|
| 1. Summer days are | (a) cold. |
| 2. Winter days are | (b) a windy day. |
| 3. Monsoon days are | (c) rainy. |
| 4. A strong wind blows on | (d) hot. |

C. Read the sentences and write the correct season :

- | | | |
|-----------|------------|------------|
| 1. winter | 2. summer | 3. monsoon |
| 4. summer | 5. monsoon | 6. winter |

D. Answer the following questions :

Q 1. What do we like to drink on a hot day?

Ans. We like to drink cold water on a hot day.

Q 2. What do we wear to protect ourselves from rain?

Ans. We wear raincoat to protect ourselves from rain.

Q 3. What is a season?

Ans. A part of the year with a particular type of weather is called a season.

Q 4. What do we wear on a cold day?

Ans. We wear thick, woollen clothes on a cold day.

Q 5. Name the five different seasons of the year?

Ans. 1. spring season 2. summer season 3. monsoon season
4. autumn season 5. winter season

Think Beyond HOTS

Do Yourself

Question Hour-II

Look at these pictures and guess the season :

Winter

Summer

Rainy

Fun to Drill

Read the words shown on the umbrella. Find these words in the maze and encircle them :



B	Y	A	I	N	S	V	W	W
H	H	R	A	I	N	C	I	I
O	O	S	E	L	S	O	N	N
B	T	W	U	N	T	L	T	D
S	U	M	M	E	R	D	E	Y
O	W	E	A	T	H	E	R	U
O	M	O	M	S	O	E	N	T

Fun to Act

Do Yourself

14. Our Earth

Question Hour-I






A. Tick (3) the correct answer :

1. (c) round 2. (c) water 3. (a) earth

B. Fill in the blanks with the words from the box :

1. globe 2. earth 3. greater 4. even

C. Match the following :

- | | | |
|--------------|---|---------------------------|
| 1. Earth |  | (a) flat land |
| 2. Mountains |  | (b) flowing water |
| 3. Plain |  | (c) smaller than mountain |
| 4. River |  | (d) land and water |
| 5. Hill |  | (e) peaks |

D. Answer the following questions :

Q 1. What make up the earth's surface?

Ans. The earth's surface is made up of land and water.

Q 2. Write down three different landforms.

Ans. 1. Plains 2. Deserts 3. Mountains.

Q 3. Name any two waterbodies.

Ans. 1. Sea 2. River

Think Beyond HOTS

Do Yourself

Question Hour-II

A. Name the following pictures from the words given below :



river



sea



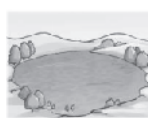
desert



plain



mountain



lake

B. Which of the following places are close to the place where you live? Tick (3) the correct ones :

Do Yourself

Fun to Drill

Do Yourself

Fun to Act

Do Yourself

15. The Sky

Question Hour-I

A. Tick (3) the correct answer :

1. (a) sun 2. (b) sun 3. (a) stars

B. Fill in the blanks with the words from the box :

1. day 2. night 3. star 4. bigger 5. far

C. Answer the following questions :

Q 1. Where does the sun rise?

Ans. The sun rises in the east.

Q 2. When does the moon appear in the sky?

Ans. The moon appears in the sky at night.

Q 3. Why do stars look small?

Ans. Stars look small because they are very far from us.

Think Beyond HOTS

1. No 2. Satellite

Question Hour-II

Circle () the correct picture :

Do Yourself

Fun to Drill

Day

Night

Fun to Act

Do Yourself.

Model Test Paper-II

Solve Yourself.

Life With SCIENCE-2

1. Bones and Muscles

Question Hour-I

A. Tick (3) the correct answer :

1. (b) skin 2. (b) 208 3. (b) healthy 4. (a) internal parts

B. Fill in the blanks with the correct words from the box :

1. skin 2. soft, hard 3. skeleton 4. bend 5. food, exercise 6. posture 7. internal organ

C. Tick (3) the correct word (s) :

1. upper 2. soft 3. produce 4. small 5. erect

D. Name the following :

1. Brain 2. Lungs 3. Stomach 4. Heart

E. Answer the following questions :

Q1. How are our bones and muscles useful?

Ans. Our bones and muscles together give shape and support to the body.

Q2. How many bones and muscles are there in our body?

Ans. There are 206 bones and 600 muscles in our body.

Q3. What are joints?

Ans. The place where two or more bones meet is called a joint.

Q4. Why do we need to exercise?

Ans. We need exercise to make bone and muscles strong.

Q5. What is posture? Why is good posture important?

Ans. The position of our body when we sit, stand or walk is called posture. A good posture helps us to stay healthy.

Q6. What is the role of each organ?

Ans. Each internal organ has a special role to play.

Think Beyond HOTS

Do Yourself

Question Hour-II

Tick (3) the correct postures and cross (7) out the wrong ones :

Do Yourself

Fun to Drill

Do Yourself

Fun to Act

Do Yourself

2. Food and Health

Question Hour-I

A. Tick (3) the correct answer :

1. (a) sugar 2. (b) rice 3. (b) sick

B. Fill in the blanks with the correct words from the box :

1. need 2. energy 3. body 4. grow

C. Match the columns :

1. Chew your food	_____	(a) a lot of water.
2. Do not eat	_____	(b) regularly.
3. We must drink	_____	(c) well.
4. Visit your dentist	_____	(d) uncovered food.

D. Tick (3) the correct word (s) :

1. fresh 2. water 3. junk food 4. enough 5. harmful

E. Answer the following questions :

Q 1. Why do we need food?

Ans. We need food to live and grow.

Q 2. Why do we need energy?

Ans. We need energy to work and play.

Q 3. How much should we eat?

Ans. We should eat enough food but not too much.

Q 4. Why should we not eat uncovered or stale food?

Ans. We should not eat uncovered or stale food because it can make us sick.

Q 5. Write five rules for healthy eating?

- Ans.** 1. Do not eat junk food. 2. Eat slowly and chew your food well.
3. Drink lot of water everyday. 4. Eat well cooked food.
5. Eat fresh food.

Think Beyond HOTS

Do Yourself

Question Hour-II

F Write 'Good' or 'Bad' against each sentence :

1. bad 2. good 3. bad 4. good 5. bad

Fun to Drill

Do Yourself

Fun to Act

1. Divide your class into three groups :

Do Yourself

2. Plan a healthy diet for your lunch. Put the food items under the correct columns:

Energy-giving food	Body-building food	Protective food
sugar	milk	fruits
rice	dry fruits	vegetables
potato	grams	nuts

3. Housing and Clothing

Question Hour-I

A. Tick (3) the correct answer :

1. (a) temporary house 2. (c) an igloo 3. (b) sloping roofs

B. Fill in the blanks with the correct words from the box :

1. houseboat 2. igloo, 3. wood, mud 4. concrete 5. canvas

C. Tick (3) the correct and cross (7) the incorrect statement :

1. (7) 2. (3) 3. (7) 4. (3) 5. (3)

D. Name the three :

1. Permanent, temporary, moveable 2. bricks, cement, iron
3. flat, sloping, circular

E. Answer the following questions :

Q 1. Why do we need a house?

Ans. We need a house to live in.

Q 2. Name any two types of movable houses.

Ans. 1. Caravan 2. Houseboat

Q 3. Name any three materials used for building a permanent house.

Ans. 1. Bricks 2. Cement 3. Steel

Q 4. What is an igloo?

Ans. Eskimos build a house made of ice, called an igloo.

Q 5. Name any four things which our clothes protect us from.

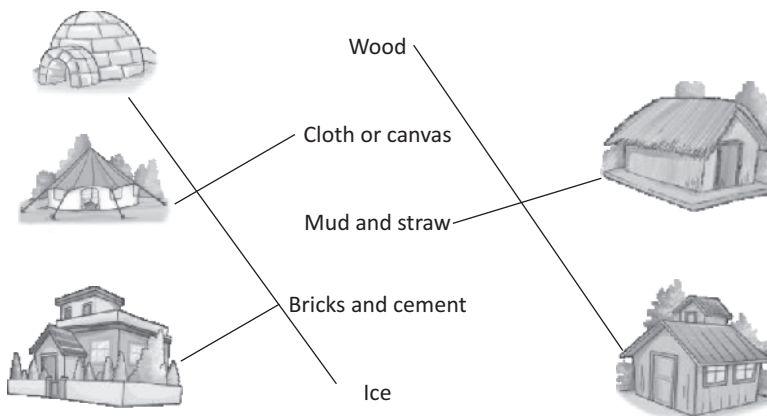
Ans. Our clothes protect us from heat, cold, wind and rain.

Think Beyond HOTS

Do Yourself

Question Hour-II

Match the pictures of the houses to the correct materials used to make them :



Fun to Drill

Do Yourself

Fun to Act

Do Yourself

4. Keep Safe

Question Hour-I

A. Tick (3) the correct answer :

1. (a) knives 2. (b) footpath 3. (b) swimming

B. Fill in the blanks with correct words from the box :

1. footpath 2. zebra crossing 3. play, run 4. socket, plug 5. tube

C. Tick (3) the correct word(s) :

1. playground 2. report to 3. stationary 4. dangerous 5. should not

D. Answer the following questions :

Q 1. Name three things which should be used carefully.

Ans. 1. Matchsticks 2. knives 3. needle

Q 2. Write two safety rules when you are in a moving bus.

Ans. 1. Do not put your arm or head out of a moving bus.

2. Do not get in or get off a moving bus.

Q 3. Write three safety rules while swimming in a pool.

Ans. 1. Do not swim alone. 2. Use always swimming tube.
3. Do not run around the pool.

Q 4. What will you do if someone gets hurt?

Ans. If someone gets hurt tell our parents or teacher at once.

Think Beyond HOTS

Do Yourself

Question Hour-II

A. Write 'S' for safe and 'D' for dangerous :

1. D 2. S 3. D 4. D 5. D

B. Tick (3) the activity we must do and cross (7) that we must not do :



(7)



(7)



(3)

Fun to Drill

Do Yourself

Fun to Act

Do Yourself

5. Plants Around Us

Question Hour-I

A. Tick (3) the correct answer :

1. (a) trees 2. (b) herb 3. (a) climber 4. (c) 1008 of years

B. Fill in the blanks with correct words from the box :

1. hard 2. many 3. climbers 4. soft 5. green 6. stem

C. Tick (3) the correct and cross (7) the incorrect statements :

1. (7) 2. (7) 3. (3) 4. (7) 5. (3)

D. Match the columns :

1. Neem	_____	(a) herb
2. Rose	_____	(b) tree
3. Pea	_____	(c) creeper
4. Marigold	_____	(d) climber
5. Pumpkin	_____	(e) shrub

E. Answer the following questions :

Q 1. Name any two trees.

Ans. 1. Neem 2. Banyan

Q 2. What is the difference between a shrub and a herb?

Ans. **A shrub** **A herb**

1. Small plant with hard wood stems	1. Small plant with soft stems.
2. They lives for a few years.	2. They live only for a few month.

Q 3. Why do climbers need a support to climb up?

Ans. Climbers have weak stems, so they need a support to climb up.

Q 4. What are creepers?

Ans. Weak plants that grow along the ground are called creepers.

Q 5. What are three things that a plant needs to make its own food?

Ans. They need sunlight, air and water to make its own food.

Think Beyond HOTS

Do Yourself

Question Hour-II

Name the following plants :



Rose



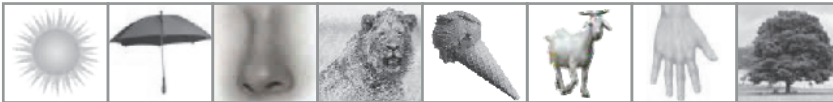
Grapevine



Banana

Fun to Drill

Use the first letter of each of the following pictures to get names of the three things needed by a green plant to make food :



S

U

N

L

I

G

H

T



A

I

R



W

A

T

E

R

Fun to Act

Do Yourself

6. Gifts From Plants

Question Hour-I

A. Tick (3) the correct answer :

1. (b) vegetables 2. (b) cereals 3. (a) plants

B. Fill in the blanks with correct words from the box :

1. leaves 2 sugarcane 3. gum 4. stem 5. flowers

C. Match the columns :

- | | | |
|----------------|---|--------------|
| 1. Bamboo | — | (a) medicine |
| 2. Coffee seed | — | (b) paper |
| 3. Jute | — | (c) nut |
| 4. Neem | — | (d) bags |
| 5. Cashew | — | (e) coffee |

D. Name the parts of these plants that you eat :

Apple : Fruit Carrot : root
Sugarcane : stem Lettuce : leaf
Wheat : grain Tomato : Vegetable

E. Answer the following questions :

Q 1. What do plants give us?

Ans. Plants give us food, medicine, fiber and food.

Q 2. Write five things that we get from plants for food.

Ans. 1. Fruits 2. Vegetables 3. pulses 4. grains 5. spices

Q 3. Name any five things other than food that we get from plants.

Ans. 1. Wood 2. Soaps 3. perfumes 4. paper 5. medicines

Q 4. Name five things we can make from wood.

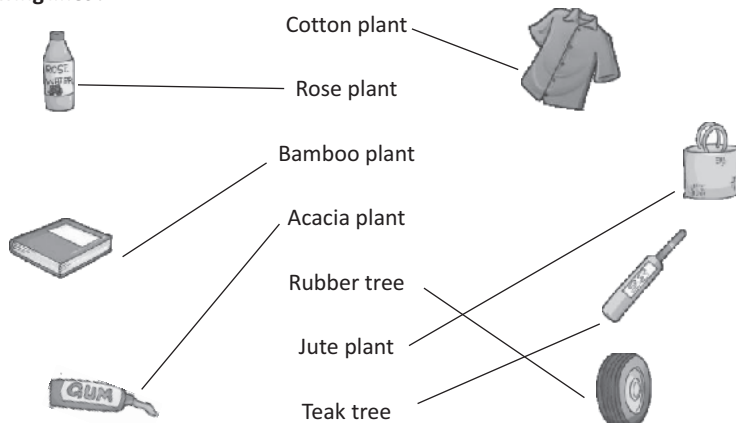
Ans. 1. Pencils 2. Chairs 3. tables 4. doors 5. windows

Think Beyond HOTS

Do Yourself

Question Hour-II

Find out what these things are made from. Match the things with the plants by drawing lines :



Fun to Drill

Find out in the word-search ten things we get from plants. Write them on the lines.

PINEAPPLE	P	I	N	E	A	P	P	L	E	I	K	COCONUT
	U	W	H	E	A	T	T	C	R	F	P	
WHEAT	L	B	A	S	S	O	K	O	R	I	N	GRAPES
	S	E	A	P	P	L	E	C	Y	C	G	
BEANS	C	A	U	L	I	F	L	O	W	E	R	CASHEWNUT
	O	N	N	T	N	O	S	N	N	B	A	
APPLE	R	S	A	W	A	L	N	U	T	E	P	SPINACH
	N	I	N	E	C	N	S	T	Z	Q	E	
WALNUT	B	C	A	S	H	E	W	N	U	T	S	CORN

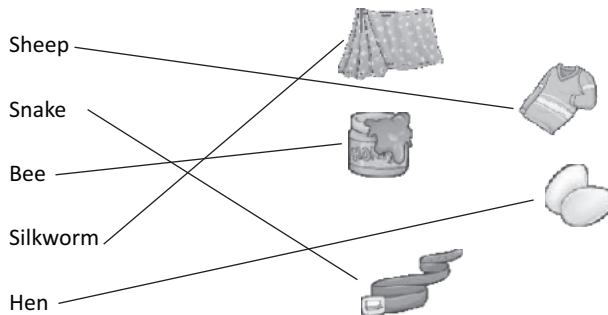
Fun to Act

Do Yourself

7. Domestic and Pet Animals

Question Hour-I

- A. Tick (3) the correct answer :**
 1. (a) cow 2. (c) milk 3. (a) ducks 4. (b) sheep
- B. Fill in the blanks with correct words from the box :**
 1. milk 2. dog 3. skin 4. fur 5. domestic
- C. Tick (3) the correct and cross (7) the incorrect statements :**
 1. (7) 2. (3) 3. (7) 4. (7) 5. (3)
- D. Match the animal names with things we get from them :**



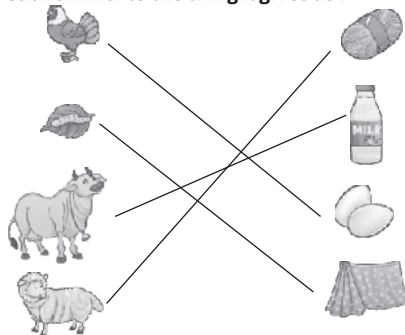
- E. Answer the following questions :**
- Q 1. What are domestic animals?**
Ans. Animals that can be tamed are called domestic animals.
- Q 2. How are cows and buffaloes useful to us?**
Ans. We get milk from cows and buffaloes.
- Q 3. Name two animals from which we get leather.**
Ans. Camels and buffaloes.
- Q 4. Name three animals that carry load for us.**
Ans. 1. Donkeys 2. Horses 3. Camels
- Q 5. What are pet animals?**
Ans. Animals that live with us in our houses are called pet animals.

Think Beyond HOTS

Do Yourself

Question Hour-II

Match each animal to the thing it gives us :



Fun to Drill

Who am I?

My first letter is in FOWL, but not in BOWL.

F

My second letter is in FIN, but not in FAN.

I

My third letter is in RISE, but not in RICE.

S

My fourth letter is in HOME, but not in DOME.

H

I am a FISH

Now draw my picture in the given space and colour it.

Do Yourself

Fun to Act

Do Yourself

8. Wild Animals

Question Hour-I

A. Tick (3) the correct answer :

1. (a) giraffe 2. (a) den 3. (b) skin

B. Fill in the blanks with correct words from the brackets :

1. dead 2. giraffe 3. jungle 4. endangered 5. hole

C. Tick (3) the correct word(s) :

1. medium 2. plants 3. zoo 4. Lions 5. Rabbits

D. Answer the following questions :

Q1. What are wild animals?

Ans. Animals that live in jungle and forests are called wild animals.

Q2. Name three animals that eat plants.

Ans. 1. Elephant 2. Deer 3. Giraffe

Q3. Name two animals that eat other animals.

Ans. 1. Lion 2. Snake

Q4. Name three animals that help in keeping the jungle clean.

Ans. 1. Vulture 2. Fox 3. Jackal

Q5. Name two endangered animals.

Ans. 1. Tiger 2. Panda

Think Beyond HOTS

Do Yourself

Question Hour-II

Write 'P' for plant-eating animals and 'F' for flesh-eating animals :

lion

F

duck

F

hyena

F

cow

P

dog

F

monkey

P

rhino

P

bear

F

snake

F

Fun to Drill

Who am I?



RATBBI

RABBIT



RHICEROSNO

RHINOCEROS



SNKEA

SNAKE



MOKEYN

MONKEY



DREE

DEER

Fun to Act

Do Yourself

Model Test Paper-I

Solve Yourself.

9. Air

Question Hour-I

A. Tick (3) the correct answer :

1. (a) breathe 2. (c) dirty 3. (a) vapour 4. (a) clean

B. Fill in the blanks with correct words from the box:

1. air 2. wind 3. breeze 4. storm 5. weather cock

C. Tick (3) the correct and cross (7) the incorrect statements :

1. (3) 2. (7) 3. (3) 4. (7)

D. Match the columns :

1. breeze		(a) fast and strong moving air
2. storm		(b) moving air
3. seeds		(c) gentle and soft moving air
4. wind		(d) are carried to other places by air.

E. Answer the following questions :

Q 1. Why do living things need air?

Ans. All living things need air to live.

Q 2. What does air contain?

Ans. Air contains tiny dust particles.

Q 3. What are the three ways in which the wind helps us?

Ans. 1. Wind help us in flying kites. 2. It moves a sail boat in the sea.
3. Clothes flutter in the wind.

Q 4. What causes a storm?

Ans. Fast and strong wind can cause a storm.

Q 5. What is a weather cock used for?

Ans. A weather cock shows us the direction of wind.

Think Beyond HOTS

Do Yourself

Question Hour-II

Fill in the missing letters to name these types of moving air :



breeze



wind



storm

Fun to Drill

Do Yourself

Fun to Act

Do Yourself

10. Water

Question Hour-I

A. Tick (3) the correct answer :

1. (a) rain 2. (b) germs 3. (b) liquid form 4. (a) clouds

B. Fill in the blanks with correct words from the box:

1. liquid 2. natural 3. plants and animals 4. tap 5. solid

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

1. (F) 2. (T) 3. (T) 4. (F) 5. (F)

D. Match the columns :

1. Well	(a) clean water
2. Boiling water	(b) water
3. Water filter	(c) underground water
4. Save	(d) kills germs

E. What happens :

1. ice 2. water 3. steam 4. water

F. Answer the following questions :

Q 1. Name any three sources of water.

Ans. 1. Rain 2. River 3. Pond

Q 2. What is surface water and groundwater?

Ans. Surface Water : The water we see on the surface of the earth is called surface water.

Ground Water : Some water goes into the ground are called ground water.

Q 3. Why should we boil water before drinking?

Ans. Dirty water can make us ill, so we should boil water before drinking.

Q 4. Write four ways how we can save water.

Ans. 1. Use water carefully. 2. We should turn off taps after use.
3. Use a bucket of water. 4. Repair leaking taps at once.

Q 5. What happens when water is heated?

Ans. When water is heated, it change into steam.

Q 6. How can you change water into ice?

Ans. When water is cooled, it change into ice.

Q 7. How are clouds formed?

Ans. The water vapour forms clouds in the sky.

Q 8. What is water cycle?

Ans. Water keeps changing its forms. This form the water cycle.

Think Beyond HOTS

Do Yourself

Question Hour-II

Find the names of eight sources of water in the following word search :

A	B	R	G	F	R	O	P	Q	T	R	O	RAIN
C	W	A	T	E	R	F	A	L	L	A	S	WATERFALL
D	W	E	L	L	I	E	D	J	A	I	E	WELL
P	O	N	D	E	V	S	E	K	K	N	A	POND
E	I	O	U	V	E	R	J	S	E	A	N	LAKE
H	O	J	G	K	R	C	N	M	U	V	Z	SEA
S	T	R	E	A	M	U	Y	F	C	L	S	RIVER
												STREAM

Fun to Drill

Do Yourself

Fun to Act

Do Yourself

11. Weather and Seasons

Question Hour-I

A. Tick (3) the correct answer :

1. (a) season 2. (b) heat 3. (c) spring

B. Fill in the blanks with correct words from the brackets :

1. weather 2. water 3. rainbow 4. woollen 5. spring

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

1. (T) 2. (F) 3. (T) 4. (F)

D. Answer the following questions :

Q1. What is weather?

Ans. Weather is the day to day condition of a place.

Q2. What is called the season?

Ans. A particular type of weather remain for a month or two is called a season.

Q3. How do we feel during summer?

Ans. We feel very hot during the summer.

Q4. Why do farmers wait for the rain?

Ans. Because rain provides water for their crops.

Q5. Name two things we commonly use on a rainy day.

Ans. 1. Umbrellas 2. Raincoats

Q6. What do people wear in winter?

Ans. People wear woollen clothes in winter.

Think Beyond HOTS

Do Yourself

Question Hour-II

Group the following things according to the season :

sweaters, sunglasses, cold drinks, fans, jackets, raincoats, gumboots, umbrellas, blankets

Summer	Rainy	Winter
cold drinks	raincoats	sweaters
sunglasses	umbrellas	blankets
fans	gumboots	jackets

Fun to Drill

Do Yourself

Fun to Act

Do Yourself

12. Our Earth

Question Hour-I

A. Tick (3) the correct answer :

1. (a) plain 2. (b) sand 3. (c) an island

B. Fill in the blanks with correct words from the box :

1. hill 2. mountains 3. hot, cold 4. winds

C. Match the following :

- | | |
|-------------|----------------------------------|
| 1. Plain | (a) covered with sand |
| 2. Mountain | (b) flat land |
| 3. Desert | (c) land rises very high |
| 4. Forest | (d) land surrounded by water |
| 5. Island | (e) waterbody surrounded by land |
| 6. Lake | (f) thick bushes and trees |

D. Answer the following questions :

Q 1. What are plains and plateau?

Ans. Plain : A large area of flat land is called a plain.

Plateau : An area of flat land that is higher than the land around it is called a plateau.

Q 2. What is higher—a hill or a mountain?

Ans. A mountain is higher than a hill.

Q 3. Which place on the earth gets very little rain?

Ans. A desert gets very little rain on the earth.

Q 4. Where does the river water flow into?

Ans. The river water flow into sea.

Q 5. Why can we not drink sea water?

Ans. We can not drink sea water because it is very salty.

Think Beyond HOTS

Do Yourself

Question Hour-II

Look at the following pictures and name them :



peaks



mountain



hill

Fun to Drill

Who am I?

1. River 2. Desert 3. Hill 4. Sea 5. Plains 5. Ocean

Fun to Act

Do Yourself

13. Rocks, Soils and Minerals

Question Hour-I

A. Tick (3) the correct answer :

1. (a) red 2. (b) softest 3. (a) liquid

B. Fill in the blanks with correct words from the box :

1. coal 2. floors 3. china clay 4. The Taj Mahal

C. Cross (7) the wrong word :

1. Diamond 2. Sandstone 3. Graphite 4. Diamond 5. marble

D. Match the following :

1. Diamond	—	(a) floors
2. Coal	—	(b) pencils
3. Granite	—	(c) jewellery
4. Chalk	—	(d) writing material
5. Graphite	—	(e) fuel

E. Name these :

1. Graphite 2. Granite 3. White marble 4. Coal

F. Answer the following questions :

Q 1. What is the earth made of?

Ans. The earth is made of soil and rocks.

Q 2. Give two examples of hard rocks and soft rocks.

Ans. Hard Rocks : Granite, Marble **Soft Rocks :** Coal, Slate

Q 3. How does the soil form?

Ans. Soil is formed by the breaking up of rocks.

Q 4. Give three examples of minerals found in rocks.

Ans. 1. Diamond 2. Talc 3. Graphite

Q 5. What do we get from petroleum?

Ans. We get petrol, diesel, kerosene, vaseline and wax from petroleum.

Think Beyond HOTS

Do Yourself

Question Hour-II

Do Yourself

Fun to Drill

C	O	A	L	Q	S	P	N	I	COAL
H	Q	R	M	N	P	S	T	Z	SANDSTONE
A	P	S	L	A	T	E	O	D	CHALK
L	D	E	L	B	R	A	M	N	SLATE
K	M	G	A	J	Z	Q	F	R	MARBLE
E	T	I	N	A	R	G	P	L	GRANITE
S	A	N	D	S	T	O	N	E	

Fun to Act

Do Yourself

14. Sun, Light and Shadow

Question Hour-I

A. Tick (3) the correct answer :

1. (a) east 2. (a) opposite 3. (b) shortest

B. Fill in the blanks with correct words from the box :

1. light, heat 2. sunrise 3. grow 4. morning 5. changing

C. Tick (3) the correct word :

1. far away from 2. west 3. warm 4. opposite 5. something

D. Match the following :

- | | |
|-------------------------|---------------------|
| 1. The sun gives us | (a) to grow. |
| 2. The sun helps plants | (b) moves with us. |
| 3. Our shadow | (c) at noon. |
| 4. Our shadow is long | (d) light and heat. |
| 5. Our shadow is short | (e) in the morning. |

E. Answer the following questions :

Q 1. What does the sun give us?

Ans. The sun gives us light and heat.

Q 2. How is a shadow formed?

Ans. When light cannot pass through an object, a shadow is formed.

Q 3. On which side of the light does a shadow form?

Ans. Shadow is formed on the opposite side of the light.

Q 4. When is your shadow longer?

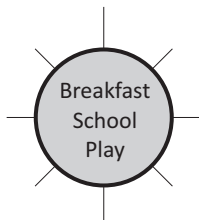
Ans. Our shadow is longer in the morning and evening.

Think Beyond HOTS

Do Yourself

Question Hour-II

Write '' words day in the sun and the 'night' words in the moon :



Breakfast

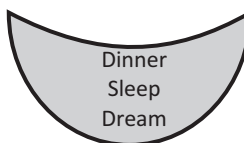
School

Dinner

Play

Sleep

Dream



Fun to Drill

Do Yourself

Fun to Act

Do Yourself

Model Test Paper-II

Solve Yourself.

Life With SCIENCE-3

1. Our Body : A Wonderful Machine

Question Hour-I

A. Tick (3) the correct answer :

1. (b) cells 2. (a) skeleton 3. (c) digestion 4. (b) urine

B. Fill in the blanks with the correct words from the box:

1. smallest 2. brain 3. sense 4. movement 5. veins

C. Tick (3) the correct and cross (7) the incorrect statements :

1. (3) 2. (7) 3. (7) 4. (7) 5. (7) 6. (3)

D. Match the following :

1. Muscles	(a) nervous system
2. Bones	(b) digestive system
3. Arteries	(c) skeletal system
4. Nerves	(d) muscular system
5. Stomach	(e) circulatory system

E. Answer the following questions :

Q1. What are cells?

Ans. Cells are the smallest unit of our body. Building blocks of the body.

Q2. What do you understand by the term 'skeleton' ?

Ans. The human body is made up of 206 bones. These bones together make up the skeleton system.

Q3. How does the framework of bones and muscles help us?

Ans. Muscles are attached to the bones in our body. Muscles help us to move different parts of our body.

Q4. Name the organs of the respiratory system?

Ans. Nose, wind pipe and the lungs make the respiratory system.

Q5. What is the function of the circulatory system?

Ans. The heart pumps the blood to different parts of our body through small and big blood vessels.

Q6. Which organ system helps the body in getting rid of waste materials?

Ans. Excretory system helps the body in getting rid of waste materials.

Q7. What is the role of the reproductive system?

Ans. The role of the reproductive system helps in producing young ones.

Think Beyond HOTS

Do Yourself

Question Hour-II

A. Circle the odd one in each group. Give reasons for your answer :

1. Food-pipe	(Lungs)	Stomach	Large Intestine
2. Kidney	(Skin)	Lungs	Heart
3. Brain	Spinal cord	(Kidney)	Nerves

B. Who am I?

1. Elimentry Canal	2. Respiration	3. Heart
4. Lungs	5. Circulatory system	

C. Write names of the following organs. Also write to which system they belong :



Kidney



Lungs



Brain



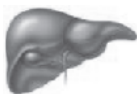
heart



Muscles

Fun to Drill

How many parts of your body can you find in the word-search? Encircle them :



I	L	Y	S	V	Q	E	M
K	I	D	N	E	Y	S	P
W	V	H	E	A	R	T	T
A	E	X	Y	N	O	S	E
R	R	C	B	R	M	I	N
P	C	T	B	R	A	I	N
F	M	U	S	C	L	E	S
U	S	L	V	E	H	E	K

Fun to Act

Do Yourself

2. Housing and Clothing

Question Hour-I

A. Tick (3) the correct answer :

1. (a) kuchcha house 2. (b) stilts 3. (a) germs 4. (a) cotton

B. Fill in the blanks with the correct words :

1. nomads 2. airy, well-lit 3. dengue, malaria 4. cotton

C. Match the columns :

- | | | |
|----------------------------|-------|------------------------------|
| 1. Sloping roofs | _____ | (a) carries dirty water away |
| 2. Wire-netting | _____ | (b) water flows down easily |
| 3. Ventilators and windows | _____ | (c) keeps insects out |
| 4. Drainage system | _____ | (d) let air and sunlight in |

D. Answer the following questions :

Q 1. Why do we need a house?

Ans. We need a house to live in. A house protects us from heat, cold and rain.

Q 2. Write any two features of a good house.

Ans. A good house can be big or small. Every room in the house should be airy and well-lit.

Q 3. How are netted doors and windows useful?

Ans. Doors and windows may have a wire netting to keep flies and mosquitoes away. Doors, windows and ventilators let in fresh air and sunlight.

Q 4. What are natural fibres?

Ans. Natural fibres are those which we obtain from either plants or animals.

Q 5. Why do we wear cotton clothes in summer, and woollen clothes in winter?

Ans. We wear cotton clothes in summer because cotton and jute keep our body cool. We wear woollen clothes in winter because woollen and silk clothes keep our body warm.

Think Beyond HOTS

Do Yourself

Question Hour-II

Circle the odd one in each group. Give the reason for your answer :

- | | | | | |
|------------|----------------|--------------|-------------|---------|
| 1. Ant | Cockroach | Mosquito | Cat | Insect |
| 2. Sofa | Picture frame | Centre table | Cooking gas | Chair |
| 3. Dusting | Sweeping | Bathing | Cleaning | Cobwebs |
| 4. Mop | Vacuum cleaner | Toilet brush | Cooker | Broom |

Fun to Drill

Unscramble the words given below to get names of some items of clothing :

- | | | |
|----------|------------|-------------|
| 1. FROCK | 2. SWEATER | 3. SHIRT |
| 4. COAT | 5. CAP | 6. RAINCOAT |

Fun to Act

Do Yourself

3. Safety Saves

Question Hour-I

A. Tick (3) the correct answer :

1. (a) matchsticks 2. (b) sharpener 3. (c) on the road 4. (c) everywhere

B. Fill in the blanks with the correct words :

1. careless 2. wet 3. powerful 4. fight 5. fruits 6. crowd

C. Tick (3) the correct word :

1. careless 2. walk 3. playground 4. footpath 5. help

D. Name one safety rule you should follow at each place :

Do Yourself

E. Answer the following questions :

Q1. What is safety?

Ans. Safety means to keep away from danger.

Q2. Why do accidents occur?

Ans. Accident take place when we are careless.

Q3. Name some dangerous things found in a house.

Ans. Electricity, knives, fork, blades etc dangerous things found in a house.

Q4. How can you prevent accidents in the classroom?

Ans. To prevent accident in the classroom :

1. Do not climb or jump on the desks.
2. Do not push anybody in or outside the classroom.

Q5. What should you do before you cross a busy road?

Ans. We should look carefully in both directions crossing a busy road.

Q6. What is first aid?

Ans. First aid is the first help given to an injured person immediately after an accident.

Q7. What should you do if someone is injured?

Ans. If someone is injured, we should call a doctor or an elder person .

Think Beyond HOTS

Do Yourself

Question Hour-II

Tick (3) the activities we must do and cross (7) the ones we must not :

Do Yourself

Fun to Drill

Do Yourself

Fun to Act

Do Yourself

4. Living and Non-living Things

Question Hour-I

A. Tick (3) the correct answer :

1. (c) both of these 2. (a) air holes 3. (b) plant 4. (b) leaves

B. Fill in the blanks with the correct words :

1. living , non- living 2. plants 3. roots 4. gills 5. webbed

C. Write 'L' for living things and 'N' for non-living things :

1. (L) 2. N 3. (N) 4. (L)

D. Answer the following questions :

Q1. Why do animals move from place to place?

Ans. Animals move from place to place in search of food and shelter.

Q2. Why do we need food?

Ans. We need food to grow and healthy.

Q3. List the features of living things.

Ans. Living things more.

Living things grow.

Living things breathe.

Living things need food and water.

Living things feel.

Q4. A chair cannot reproduce. Why?

Ans. A chair cannot reproduce because chair is a non-living thing.

Q5. Who makes food for green plants?

Ans. Green plants make their own food in their leaves.

Think Beyond HOTS

Do Yourself

Question Hour-II

Circle the odd one in each group :

1. Mosquito

Housefly

2. Lion

Toy

3. Kitten

Puppies

Fun to Drill

Solve the crossword using the clues given below :

Down (→)

1.

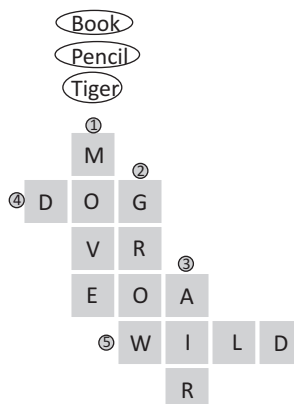
2.

3.

Across (↓)

4

5.



Fun to Act

Do Yourself

5. Plants : Parts and Uses

Question Hour-I

A. Tick (3) the correct answer :

1. (a) root 2. (c) stomata 3. (b) germination

B. Fill in the blanks with the correct words :

1. one 2. shoot 3. weak 4. many

C. Match the following :

- | | | |
|------------|-------|--------------------------------|
| 1. Root | _____ | (a) breathe |
| 2. Stem | _____ | (b) prepare food for the plant |
| 3. Leaves | _____ | (c) absorbs water and minerals |
| 4. Stomata | _____ | (d) grow into new plants |
| 5. Seeds | _____ | (e) carries food |

D. Tick (3) the correct word (s) :

1. chlorophyll 2. in the soil 3. fibrous 4. flowers 5. sugarcane

E. Name the parts of the plant :

1. soil 2. shoot 3. root 4. stomata 5. plant

F. Answer the following questions :

Q 1. Name the parts of a plant.

Ans. Two part of a plant : (1) The root system (2) The shoot system

Q 2. From where do roots obtain water?

Ans. Roots obtained water of the plant that grows below the ground. Most roots grow in soil and water.

Q 3. Give two uses of the stem.

Ans. Uses of stem :

1. It supports the plant and helps it to grow above the soil.
2. It carries water sucked by the roots to the leaves.

Q 4. Why are leaves called the kitchen of the plant?

Ans. Leaves grow on stems. The leaf is known as the kitchen of the plant because it makes food for the plant.

Think Beyond HOTS

Do Yourself

Question Hour-II

Match the plants with its part we eat :

Do Yourself

Fun to Drill

Do Yourself

Fun to Act

Do Yourself

6. Animals : Feeding Habits

Question Hour-I

A. Tick (3) the correct answer :

1. (a) goat 2. (b) gnawers 3. (c) cats and dogs 4. (a) lion

B. Fill in the blanks with the correct word from the box :

1. plant 2. food 3. flesh 4. omnivores 5. butterfly

C. Match the following :

Animal	Feeding Habit
1. Butterfly	(a) eats plants
2. Buffalo	(b) sucks blood
3. Lion	(c) swallows
4. Bed-bug	(d) eats flesh
5. Snake	(e) sucks nectar

D. Name two animals that :

- | | | | |
|----------------|--------|----------|--------|
| 1. cows | horses | 2. lion | tigers |
| 3. butterflies | bees | 4. snake | lizard |
| 5. snake | Lizard | | |

E. Answer the following questions :

Q 1. Why do animals need food?

Ans. Animals need food to live in. Food gives them energy to work, grow and keep healthy.

Q 2. All animals depend on plants for their food. How?

Ans. All animals depend on plants for their food because animals cannot make their own food like plants.

Q 3. What type of food do omnivorous animals eat?

Ans. Plants and animals both type of food omnivores animals eat.

Q 4. What kind of tongue does a frog have?

Ans. Frogs have a long, sticky tongue that they use to catch insects.

Q 5. Why should we take care of animals?

Ans. Plants are eaten by herbivorous animals. Some of these animals are eaten by carnivorous animals. This form a chain called the food chain.

Think Beyond HOTS

Do Yourself

Question Hour-II

A. Circle out the odd one in each group :

- | | | | |
|---------------------------|-------|-----------|-----------|
| 1. Plant-eating animals : | cow | (lion) | horse |
| 2. Flesh-eating animals : | tiger | (giraffe) | fox |
| 3. Insects : | bee | (monkey) | butterfly |
| 4. Domestic animals : | horse | goat | (lion) |

B. Draw pictures of things that these animals eat :

Do Yourself

Fun to Drill

frog

Fun to Act

Do Yourself

7. The World of Birds

Question Hour-I

A. Tick (3) the correct answer :

1. (b) down feathers 2. (a) preying birds 3. (b) vulture 4. (c) sparrow 5. (c) sunbird

B. Fill in the blanks with correct words from the box :

1. feathers 2. boat 3. flight 4. food 5. nest 6. eating

C. Match the following :

- | | |
|----------------|-----------------------------|
| 1. Woodpecker | (a) pebbles and stones nest |
| 2. Tailor bird | (b) tunnel nest |
| 3. Penguin | (c) cup nest |
| 4. Eagle | (d) cozy nest |
| 5. Weaver bird | (e) cavity nest |

D. Name two birds which :

- | | | |
|---------------------------|--------|---------|
| 1. can fly | pigeon | crow |
| 2. can wade | heron | crane |
| 3. can perch | crow | sparrow |
| 4. can swim | duck | goose |
| 5. can crack and eat nuts | pigeon | peacock |
| 6. are flesh-eating | eagle | vulture |
| 7. are fish-eating | heron | crane |

E. Answer the following questions :

Q 1. Why do different birds have different kinds of beaks?

Ans. All birds do not eat the same kind of food so different birds have different kinds of beaks. Some birds have colourful beaks.

Q 2. How do feathers help a bird?

Ans. Birds are the only living creatures which have feathers they help the birds to fly.

Q 3. Name three kinds of feathers.

Ans. Three types of feathers are:

1. Body feathers 2. Down feathers 3. Flight feathers.

Q 4. What kinds of feet do ducks and geese have?

Ans. Ducks and geese have webbed feet. These skin help to push back water while swimming.

Q 5. Where do birds build their nests?

Ans. Most birds build their nests on the branches of trees and shrubs. They also make nests in walls and cliffs and even on the ground.

Think Beyond HOTS

Do Yourself

Question Hour-II

A. Circle the odd one in each group. Give reason for your answer :

- | | | | |
|-----------|---------|---------|-------|
| 1. Pigeon | Peacock | Crow | Crane |
| 2. Eagle | Kiwi | Vulture | Kite |
| 3. Beak | Wings | Scale | Tail |

B. Write the kind of beaks of these birds :

pigeon owl woodpecker duck

Fun to Drill

Do Yourself

Fun to Act

Do Yourself

8. The World of Insects

Question Hour-I

A. Tick (3) the correct answer :

1. (a) on land 2. (b) fly 3. (c) roots of plant 4. (c) useful insects

B. Fill in the blanks with correct words from the box :

1. thorax 2. three 3. chitin 4. locust 5. eggs

C. Name three :

1. parts of an insect's body	head	thorax	abdomen
2. useful insects	beetle	ladybird	dragonfly
3. harmful insects	mosquito	cockroach	flies
4. insects that live in colonies	Honeybees	ant	bees

D. Answer the following questions :

Q 1. What are antennae (feelers)? What are they used for?

Ans. The head bears one pair of feelers or antennae. Insects use feelers to smell and feel things.

Q 2. How are some insects harmful to man?

Ans. Some insects like mosquitoes, houseflies etc cause disease and are harmful to human beings.

Q 3. What kind of insects live in a colony?

Ans. Honeybees and ant insect live in a colony. In a colony, there can be thousand of insects.

Q 4. How do termites kill plants?

Ans. Termites kill even big trees and then feed on the wood plants.

Q 5. What is nectar? Name an insect which feeds on it.

Ans. Most flowers have a sweet juice is called nectar. A butterfly and bee sucking nectar, eats leaves of plants.

Think Beyond HOTS

Do Yourself

Question Hour-II

Name the following insects :



Ladybird



Mosquito



Cockroach



Housefly

Fun to Drill

Label the body parts of the insect :



Fun to Act

Do Yourself

Model Test Paper-I

Solve Yourself.

9. The Soil

Question Hour-I

- A. Tick (3) the correct answer :**
1. (b) glass 2. (c) humus 3. (c) butterflies 4. (b) glass
- B. Fill in the blanks with correct words from the box:**
1. manure 2. roots 3. clayey 4. air 5. humus
- C. Tick (3) the correct and (7) the incorrect statements :**
1. (7) 2. (3) 3. (3) 4. (3) 5. (3)
- D. Answer the following questions :**
- Q 1. How do rocks help in soil formation?**
Ans. Rocks break into very small pieces then the formation of soil.
- Q 2. Name the different types of particles present in soil.**
Ans. Soil are tiny pieces of rocks and rotten pieces of dead plants and animals.
- Q 3. What is humus?**
Ans. Rotten plants and animals are called humus.
- Q 4. What is moisture?**
Ans. Water trapped in soil is called moisture.
- Q 5. List the types of the soil. Give two uses of soil.**
Ans. Different types of soil : (1) sandy soil (2) clayey soil (3) loamy soil
Two uses of soil : (1) soil is home to animals like earthworms, ants etc.
(2) soil stores water. Roots absorb water present in the soil.

Think Beyond HOTS

Do Yourself

Question Hour-II

Circle the odd one in each group. Give reasons for your answer :

- | | | | |
|--------------|-----------|------|----------|
| 1. Gravel | Sand | Rock | Clay |
| 2. Groundnut | Coconut | Rice | Cucumber |
| 3. Earthworm | Millipede | Ant | Crow |

Fun to Drill

Do Yourself

Fun to Act

Do Yourself

10. Matter

Question Hour-I

- A. Tick (✓) the correct answer :**
1. (a) matter 2. (c) solid 3. (c) water vapours
- B. Fill in the blanks with correct words from the box:**
- 1.matter 2. three 3. shape 4. flow 5. invisible
- C. Match the columns :**
- | | |
|----------------------|------------------|
| 1. Solid into liquid | (a) evaporation |
| 2. Liquid into gas | (b) melting |
| 3. Gas into liquid | (c) freezing |
| 4. Liquid into solid | (d) condensation |
- D. Name three :**
- | | | | |
|---------------------|-------|--------|-----|
| 1. states of matter | solid | liquid | gas |
|---------------------|-------|--------|-----|

- | | | | |
|------------|-------|-----------------|-------|
| 2. solids | bed | table | chair |
| 3. liquids | water | milk | oil |
| 4. gases | air | CO ₂ | ice |

E. Answer the following questions :

Q 1. What is matter?

Ans. Anything which has mass and occupies space is called matter.

Q 2. Name the three states in which the matter exists.

Ans. Matter exist in three forms : solid, liquid, gas.

Q 3. Write two properties and two examples of solids, liquids and gases.

Ans. Properties of solid and example :

(1) Solid have a definite shape.

(2) Solid do not flow easily.

Ex. Pencil, pen etc.

Properties of liquid and example :

(1) Liquid do not have a definite shape.

(2) Liquid flow easily.

Ex. water, milk

Properties of gases and example :

(1) They do not have definite shape.

(2) Gas is invisible.

Ex. Air, water vapour, etc.

Q 4. What is evaporation?

Ans. The process of change of a liquid into gas is called evaporation.

Q 5. What is condensation?

Ans. The process of change of a gas into liquid is called condensation.

Think Beyond HOTS

Do Yourself

Question Hour-II

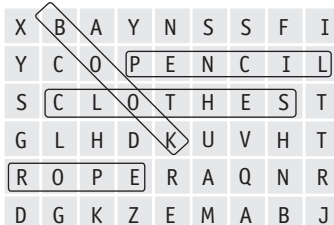
Here is a list of things. Sort them out into the given boxes :

bread	pencil	butter	eraser	milk	air	coffee powder
chocolate	oil	sugar	ice	carbon dioxide	fruit-juice	salt

Solids	Liquids	Gases
pencil	milk	ice
salt	fruit-juice	carbon dioxide
sugar	oil	air
coffee powder	butter	

Fun to Drill

Name of some solids are given in the maze below. Encircle them :



Fun to Act

Do Yourself

11. Measurement

Question Hour-I

A. Tick (3) the correct answer :

1. (b) body parts 2. (a) metre 3. (c) hours 4. (a) 37°C

B. Fill in the blanks with correct words from the box :

1. length 2. metre 3. grams 4. kilograms 5. litres 6. thermometer

C. Match the columns :

- | | |
|--------------------------------|------------------------|
| 1. To measure cloth | (a) thermometer |
| 2. To weigh a box of sweets | (b) measuring jar |
| 3. To measure milk | (c) measuring tape |
| 4. To measure body temperature | (d) electronic balance |

D. Answer the following questions :

Q 1. Why do we need a standard unit of measurement?

Ans. Some people have larger feet or bigger palms than other, so we need to have a standard unit of measurement.

Q 2. Name three body parts used to measure length.

Ans. 1. Hand span 2. Foot span 3. Cubit

Q 3. What are the units for measuring length?

Ans. Metre and centimetre are the units for measuring length.

Q 4. What is mass? What are the units for measuring weight?

Ans. We use weighting scales to find the mass of an object gram and kilogram are the units of measuring weight.

Q 5. What is capacity? What are the units for measuring the capacity of a container?

Ans. The amount of a liquid that a container can hold are called capacity. Litre and Kilo litre are the units of measuring the capacity of a container.

Q 6. What is the unit of time?

Ans. Seconds is the standard unit of time.

Think Beyond HOTS

Do Yourself

Question Hour-II

Which unit would you use to measure the following ? Choose from—kg, g, km, m, cm, l and ml :

1. cm 2. l 3. m 4. ml 5. g 6. kg 7. km 8. m

Fun to Drill

Do Yourself

Fun to Act

Do Yourself

12. Light, Sound and Force

Question Hour-I

A. Tick (3) the correct answer :

1. (a) light 2. (b) shadow 3. (b) noise 4. (a) force

B. Fill in the blanks with correct words from the box :

1. rays 2. glass 3. tongue 4. noise 5. force

C. Match the following :

- | | | |
|--------------------------------|-------|--------------------|
| 1. Sun | _____ | (a) noise |
| 2. Shouting | _____ | (b) force |
| 3. When an object blocks light | _____ | (c) gives light |
| 4. Pushing a thing | _____ | (d) pleasant sound |
| 5. Music | _____ | (e) shadow |

D. Answer the following questions :

Q 1. What are luminous and non-luminous objects? Give two examples.

Ans. An object that gives out light of its own is called luminous object. An object that does not give out light is called non-luminous object.

Example : bulb, torch (L) Bag, Pen (N. L.)

Q 2. How does light travel?

Ans. Light travels in straight lines called rays.

Q 3. How is a shadow formed?

Ans. When something comes in the way of light, a shadow is formed.
or

A shadow is formed when something blocks the path of light.

Q 4. Name the different types of sounds.

Ans. Different types of sounds :

- | | |
|-------------------------------|---------------------------------|
| (1) Some sounds are loud. | (2) Some sounds are soft. |
| (3) Some sounds are pleasant. | (4) Some sounds are unpleasant. |

Q 5. What is noise? Give two examples.

Ans. Sound that is loud and unpleasant is called a noise.

Example: firecrackers, thunders.

Q 6. What is force? Mention three things that force can do?

Ans. Things move when you push or pull is called force.

Example: open the door, shut a window.

Q 7. What is friction? How is it useful?

Ans. A force that slows down movement is called a friction.

Think Beyond HOTS

Do Yourself

Question Hour-II

Number these sources of sound in the increasing order of sound produced :



Thunder (3)



Fireworks (2)



Fan (1)



Aeroplane (4)

Fun to Drill

What happen when

1. We switch on this bulb.

L I G H T



2. We play this guitar.

S O U N D



Fun to Act

Do Yourself

13. Air, Water and Weather

Question Hour-I

A. Tick (3) the correct answer :

1. (a) air 2. (b) water 3. (b) straight 4. (a) breeze 5. (c) monsoon

B. Fill in the blanks with correct words from the box :

1. wind 2. water vapour 3. gases 4. salty 5. steam 6. clouds 7. breeze

C. Match the following :

- | | | |
|------------------|-------|------------|
| 1. Moving air | _____ | (a) breeze |
| 2. Soft wind | _____ | (b) solid |
| 3. Ice | _____ | (c) wind |
| 4. Strong wind | _____ | (d) spring |
| 5. Leaves fall | _____ | (e) storm |
| 6. Flowers bloom | _____ | (f) autumn |

D. Name :

- | | | | |
|-----------------------------------|--------|---------------|-----------------|
| 1. three gases present in the air | Oxygen | Nitrogen | CO ₂ |
| 2. three forms of water | Water | Water vapours | Ice |
| 3. three seasons | Summer | Winter | Monsoon |
| 4. three factors of weather | Sun | Wind | Water vapour |

E. Answer the following questions :

Q1. What does air contain?

Ans. Air contain different gases. Water vapour, dust and small germs are also present in the air.

Q2. Name the three states of water.

Ans. Three states of water :

1. Ice (solid) 2. Water (liquid) 3. Water vapour (gas)

Q3. What is evaporation?

Ans. The process of a change of a liquid into gas is called evaporation.

Q4. How is rain formed?

Ans. The water vapour mixes into the air to form clouds. Clouds cannot hold big drops of water. These water drops come down as rain.

Q5. What is season?

Ans. When weather conditions remain nearly the same for months. It is called season.

Q6. Name three important seasons of the year?

Ans. Three main seasons of the year : 1. Summer 2. Monsoon 3. Winter

Think Beyond HOTS

Do Yourself

Question Hour-II

When do you use the following? Write ' S ' for summer, ' W ' for winter and ' R ' for rainy season:



S



R



W

Fun to Drill

Do Yourself

Fun to Act

Do Yourself

14. Our Earth

Question Hour-I

A. Tick (3) the correct answer :

1. (a) water 2. (c) spherical 3. (a) days and nights 4. (b) 365¼ days

B. Fill in the blanks with correct words from the box :

1. third 2. rotation 3. axis 4. spherical 5. 365¼

C. Match the following :

- | | |
|---------------|--|
| 1. Earth | (a) seasons |
| 2. Rotation | (b) huge round ball |
| 3. Revolution | (c) path along which the earth goes around the sun |
| 4. Orbit | (d) day and night |

D. Answer the following questions :

Q1. What is the shape of the earth?

Ans. A huge round ball shape of the earth.

Q2. What causes day and night?

Ans. Day and night are caused by the rotation of the earth.

Q3. What is rotation?

Ans. The spinning movement of the earth on its axis is called rotation.

Q4. How much time does the earth take to complete one rotation?

Ans. 24 hours times the earth take to complete one rotation.

Q5. What is revolution?

Ans. The movement of the earth around the sun in a fixed path is called revolution.

Think Beyond HOTS

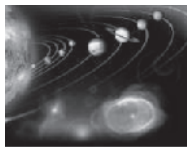
Do Yourself

Question Hour-II

Identify the following pictures. Write their names in the space provided :



globe



planets (solar system)



earth

Fun to Drill

Do Yourself

Fun to Act

Do Yourself

15. The Sun, Moon and Stars

Question Hour-I

A. Tick (3) the correct answer :

1. (a) astronauts 2. (a) sun 3. (a) craters 4. (c) constellation

B. Fill in the blanks with correct words from the box :

1. spaceships 2. fixed 3. light 4. shape 5. telescope

C. Tick (3) the correct and cross (7) the incorrect statement :

1. (7) 2. (7) 3. (3) 4. (3) 5. (3)

D. Answer the following questions :

Q 1. What does space look like?

Ans. Space look like a black planet blanket dotted with the sun, moon, planets and twinkling stars.

Q 2. Who is an astronaut?

Ans. The people who fly into space called astronauts.

Q 3. How many planets are there in the solar system?

Ans. The eight planets are there in the solar system.

Q 4. What is the path of a planet around the sun called?

Ans. The path of a planet around the sun called earth.

Q 5. Does the moon change its shape?

Ans. The moon does not change its shape. It appears to change its shape because we do not always see the full bright side of the moon.

Q 6. What makes the moon shine?

Ans. When the moon goes around the earth, different parts of it are lighted up by the sun on different days.

Q 7. What is a constellation?

Ans. A constellation is a pattern or shape made together by several stars in the sky.

Think Beyond HOTS

Do Yourself

Question Hour-II

A. Name the following :

- | | |
|--|-----------|
| 1. I am the head of the solar system | Sun |
| 2. I seem to change my shape every night | Moon |
| 3. I help you see the stars clearly | Telescope |
| 4. I twinkle at night | Star |
| 5. I am the planet you live on | Earth |

B. Find your weight on a weighing machine. Divide it by 6 and write here _____

That shall be your weight on the moon if you land on it today!

Do Yourself

Fun to Drill

Do Yourself

Fun to Act

Do Yourself

Model Test Paper-II

Solve Yourself.

Life With SCIENCE-4

1. Health and Food

Question Hour-I

A. Tick (3) the correct answer :

1. (a) fats 2. (b) vitamins 3. (c) roughage 4. (a) tasty 5. (b) fresh

B. Fill in the blanks with correct words from the box :

1. warm 2. nutrients 3. carbohydrates 4. vitamins 5. minerals 6. roughage
7. overcooked

C. Match the following :

Fibres	→	needed for healthy eyes and skin
Fats	→	found in green vegetables
Vitamin A	→	found in potatoes and rice
Preservation	→	give more energy than carbohydrates
Starch	→	makes food last longer

D. Answer the following questions :

Q1. Why do we need food?

Ans. We need food to get energy to work and grow and to keep the body warm.

Q2. What do proteins do for the body?

Ans. Proteins are needed for growth and to repair damaged cells and tissues in the body.

Q3. Why do we need carbohydrates?

Ans. We need carbohydrates because they give energy to our body.

Q4. How does roughage help us?

Ans. Roughage is necessary for the proper functioning of the digestive system. It helps to remove waste material out of our body.

Q5. Why do we need to drink water everyday?

Ans. About 70% of our body is made of water. Our body needs water for all its functions.

Q6. Name any four methods of cooking food.

Ans. Four methods of cooking are : boiling, steaming, frying and roasting.

Q7. Why do we need to drink water everyday?

Ans. Methods of preserving food are : Drying—raisins, pickling—mango, refrigerating—milk, canning—jam, baking—biscuits.

Think Beyond HOTS

Do Yourself

Question Hour-II

A. One day's menu for morning, noon and evening for two families is as follow :

Ans. Family 2

B. Which nutrient am I?

1. Protein 2. Carbohydrates
3. Fats 4. Vitamins 5. Calcium

C. Write the name of vitamin/vitamins which each of the following contains :



Vitamin A



Vitamin A



Vitamin C



Vitamin A



Carbohydrates



Vitamin A,B,D

Fun to Drill

Help the boy show a balanced diet on Jinie's plate.

Rice

Eggs

Fruits

Salad



Bread

Vegetables

Pulses

Curd

Fun to Act

Do Yourself

2. Teeth and Digestion

Question Hour-I

A. Tick (3) the correct answer :

1. (b) chewing. 2. (c) oesophagus. 3. (a) small intestine 4. (c) protozoa 5. (d) crown

B. Fill in the blanks with the correct words from the box :

1. newborn child 2. clearly 3. digestive system 4. balanced 5. microscope 6. microbes
7. bacteria 8. protozoa

C. Tick (3) the correct and cross (8) the incorrect statements :

1. (3) 2. (3) 3. (8) 4. (8) 5. (8) 6. (3) 7. (8) 8. (3)

D Match the following :

- | | | |
|---------------|---|---|
| 1. Incisors | → | (a) tear food |
| 2. Canines | → | (b) bite food |
| 3. Enamel | → | (c) temporary teeth |
| 4. Dentist | → | (d) a person who checks and looks after teeth |
| 5. Milk teeth | → | (e) a thin sticky layer of germs |
| 6. Pulp | → | (f) the outermost white part of tooth |
| 7. Plaque | → | (g) the soft inner part of a tooth |

E. Answer the following questions :

Q 1. What are a child's first teeth called?

Ans. A child's first teeth are called milk teeth or temporary teeth.

Q 2. When do permanent teeth begin to grow?

Ans. After a few years (usually at the age of 6-7 years), milk teeth begin to fall and new teeth begin to grow. These are called permanent teeth.

Q 3. Describe the structure of a tooth.

Ans. The part of the tooth out of the gums is crown. The outermost white part is enamel. Below the enamel lies the hard dentine and inside the dentine, there is soft pulp full of nerves.

Q 4. Name the four kinds of teeth in an adult. Write functions of each kind.

Ans. The four kinds of teeth and their functions are :

- (i) Incisors : Incisors are used to bite or cut food into small pieces.
- (ii) Canines : Canines are used to tear food.
- (iii) Pre-molars : They grind food to convert it into fine pieces.
- (iv) Molars : Molars crush and grind food into a fine paste.

Q 5. Write five ways by which we can take care of our teeth?

Ans. Five ways to take care of our teeth are :

- (i) Rinse your mouth with water after food.
- (ii) Brush your teeth in the morning and before going to bed.
- (iii) Massage your gums with your finger.
- (iv) Do not share your toothbrush with anyone.
- (v) Visit a dentist if you have a tooth problem.

Q 6. What do you mean by digestion?

Ans. The process by which useful substances in the food change into simpler substances is called digestion. Digestion also includes absorption of food in the body.

Q 7. Write any five healthy eating habits.

Ans. Five healthy eating habits are :

- (i) Eat four or five small meals daily.
- (ii) Chew the food well and do not swallow it whole.
- (iii) Always wash your hands before and after every meal.
- (iv) Always eat a balanced diet.
- (v) Do not overeat, as your body will not be able to digest it.

Q 8. What are microbes? Name their four different kinds.

Ans. Microbes are very small living things that can be seen only through a microscope. Four different kinds of microbes are : bacteria, viruses, protozoa and fungi.

Q 9. What kind of microbes are called germs?

Ans. Microbes can be useful and harmful. Harmful microbes that cause diseases are called germs.

Q 10. Give any three uses of microbes.

- Ans.**
- (i) Some microbes are used to make ice-cream, toothpaste, glue and medicines.
 - (ii) Microbes help to clean the environment by decomposing dead plants and animals.
 - (iii) Bacteria, a kind of microbe, convert milk into curd.

Think Beyond HOTS

Which teeth are also known as 'wisdom teeth'? how many are they in a adult person?

Ans. Permanent teeth. They are 32 in numbers.

Question Hour-II

A. Label the picture :



B. Name the following pictures :



Bacteria



Protozoa



Fungi

Fun to Drill

Ans. tooth

Fun to Act

Do Yourself

3. Safety and First Aid

Question Hour-I

A. Tick (3) the correct answer :

1. (a) carelessness 2. (b) slipping 3. (c) footpath 4. (b) first aid

B. Fill in the blanks with correct words from the box :

1. threats 2. run 3. climb 4. footpath 5. sharp 6. alone

C. Tick (3) the correct and cross (8) the incorrect statements :

1. (8) 2. (3) 3. (8) 4. (3) 5. (8) 6. (8)

D. Answer the following questions :

Q 1. What causes an accident? List some common accidents that occur in houses.

Ans. Carelessness causes an accident. Common accidents that occur in houses are : cut, burn, slip, electric shock, stumble and fall down.

Q 2. As a pedestrian, what will you do to avoid accidents on the road?

Ans. We will do the following to avoid accidents on the road.

- (i) Walk on the footpath.
- (ii) Use the Zebra crossing to cross the road.
- (iii) Not play on or near the road.
- (iv) Not cross the road when vehicles are passing.

Q 3. What is first aid?

Ans. First aid is the immediate treatment or help given to a person who is hurt or injured, before the doctor comes.

Q 4. How can you treat burns?

Ans. We should run cold water or put ice on the burns, and apply suitable ointment and see the doctor.

Q5. How will you help a victim with a bleeding wound?

Ans. A bleeding wound should be washed with clean water. We should use dettol, spirit or antiseptic cream and cover the wound with clean bandage.

Q6. How will you help a person who has fainted?

Ans. If a person has fainted, make him lie down with his head low to increase blood supply to his head. Let him rest, and call for the doctor.

Q7. How will you help a victim with an insect bite?

Ans. For insects bites, apply calamine lotion. For bee or wasp stings, apply paste of baking soda with an antiseptic cream.

Q8. Give five general rules for first aid.

Ans. Five general rules for first aid are :

- (i) Act quickly but calmly.
- (ii) Do not create panic.
- (iii) Make the patient lie down so that he/she feels comfortable.
- (iv) Loosen the victim's clothing.
- (v) Do not crowd around but immediately send for the doctor.

Think Beyond HOTS

Ans. Red

Question Hour-II

A. Circle the odd one in each group :

1. scarf 2. fire 3. football

B. Write how you can help these people.



Use dettol or spirit
or antiseptic cream,
cover with clean
bandage.



Apply calamine lotion,
baking soda, antiseptic
cream.



Immediately switch off the
main current line. Take him
to the doctor.

Fun to Drill

Do Yourself

Fun to Act

Do Yourself

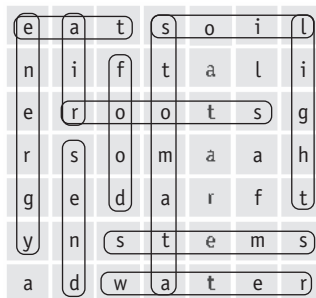
4. Plants Make Food

Question Hour-I

A. Tick (3) the correct answer :

1. (a) leaf blade 2. (b) starch 3. (c) green 4. (d) iodine test 5. (e) lacks chlorophyll

B. Encircle the words in the puzzle to fill in the blanks in the passage.



B. Tick (3) the correct and cross (7) the incorrect statements :

1. (3) 2. (7) 3. (3) 4. (7) 5. (7) 6. (7)

C. Match the columns :

- | | | |
|----------------|---|--|
| 1. Stomata | → | (a) food factory of the plant. |
| 2. Leaf | → | (b) tubes that carry water from the roots to the leaves. |
| 3. Chlorophyll | → | (c) tiny holes in the underside of a leaf |
| 4. Starch | → | (d) green substance that traps sunlight |
| 5. Xylem | → | (e) stored food in plants |

D. Give reasons for the following :

Q 1. The veins of a leaf have double pipeline tubes.

Ans. Because they help to carry the food to other parts.

Q 2. Leaves of a plant are green in colour.

Ans. Because of chlorophyll.

Q 3. Parasitic plants depend upon other plants.

Ans. Because they cannot make their own food.

Q 4. Cactus can make food without leaves.

Ans. Because it has no leaves. Chlorophyll is found in its stem.

Q 5. The leaves of a plant kept in the dark do not produce starch.

Ans. Because they need sunlight to do so.

Q 6. A yellow leaf cannot prepare food.

Ans. Because it does not have chlorophyll.

E. Answer the following questions :

Q 1. What do plants need to prepare food?

Ans. A plant needs water, carbon dioxide, sunlight and chlorophyll to make food.

Q 2. Draw a diagram of a leaf and label it.

Ans. Do it yourself.

Q 3. Write the functions of stomata.

Ans. The stomata helps in the exchange of gases and water vapour between the leaves and the surrounding air.

Q 4. What is photosynthesis?

Ans. The process of making food by the plant is called photosynthesis.

Q 5. How do plants use their food?

Ans. Plants use their food to grow, to build new cells and to repair worn out cells. They also store food in leaves, stems and roots in the form of starch.

Q 6. In what form and where does a plant store extra food?

Ans. A plant stores its extra food in leaves, stems and roots in the form of starch.

Q 7. Describe how plants and animals are dependent on each other.

Ans. Animals depend on plants for food. Plants need carbon dioxide to prepare food. Animals breathe out carbon dioxide which is used by plants. So, plants and animals depend on each other.

Q 8. A balance between plant and animal life is essential. Why?

Ans. A balance should be maintained between the number of plant and animals. If there are more plants than animals, plant will not get sufficient amount of carbon dioxide. If there are more animals than plants, animals will not get sufficient amount of food.

Think Beyond HOTS

Ans.1. It is used by man and animals.

Ans. 2. In the form of glucose a kind of sugar.

Question Hour-II

A. Give one word for the following :

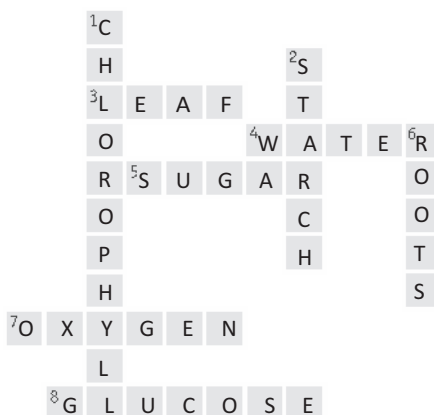
1. leaf blade 2. glucose 3. starch

B. Label the following diagram :

Do it yourself.

Fun to Drill

Complete the word ladder with the help of the given clues :



Fun to Drill

Do it yourself.

5. Adaptation in Plants

Question Hour-I

A. Tick (3) the correct answer :

1. (a) on land 2. (b) a floating plant 3. (b) an insectivorous plant 4. (c) needle like leaves
5. (b) pine

B. Fill in the blanks with the correct words from the brackets :

1. aquatic 2. plains 3. stem 4. Mangroves 5. floating 6. paper

C. Match the columns :

- | | | |
|---------------|---|-------------------------|
| 1. Water lily | → | (a) free-floating plant |
| 2. Babool | → | (b) cone-bearing |
| 3. Pine tree | → | (c) fixed aquatic plant |
| 4. Tape grass | → | (d) underwater plant |
| 5. Duckweed | → | (e) desert plant |

D. Identify name the following plants :

1. Mangrove tree 2. Pine 3. Cactus 4. Tapegrass 5. Lotus

E. Answer the following questions :

Q 1. What do you understand by adaptation in plants?

Ans. The special features or quality that allows a plant to live in a particular place is called adaption.

Q 2. What are the conditions that make plants different from each other?

Ans. There is a vast variety of plants and they can be classified into two groups—terrestrial plants—that grow on land, and aquatic plants—that grow in water.

Q 3. How are terrestrial plants different from aquatic plants?

Ans. Terrestrial plants grow on land whereas aquatic plants grow in water.

Q 4. How do desert plants save water?

Ans. Desert plants have long roots that penetrate deep into the ground in search of water. Most desert plants have green and thick stems and no leaves. These help in conserving water. Most desert plants have spines instead of leaves. This also helps in saving water.

Q 5. How are mangroves suited to live in marshy areas?

Ans. Marshy areas have sticky and clayey soil which holds a lot of water but very little air. Mangrove trees put out their roots which emerges from soil upwards into the air. Thus, mangrove trees are suited to live in marshy areas.

Q 6. Why do some plants eat insects?

Ans. Some plants are called insectivorous because they eat insects. They grow in soil which is poor in minerals. To get minerals, they trap and eat insects.

Q 7. What are the main uses of the plants of the grass family?

Ans. Plants of grass family such as wheat, rice, bajra, sugar provide food for humans and fodder for animals. Paper is made from plants like bamboo. Brooms, baskets, chairs, meets, toys, huts and furniture is made from plants of grass family.

Think Beyond HOTS

Ans.1. Because of hollow stems, light weight and wax coated leaves.

Ans. 2. To save water loss.

Question Hour-II

Identify the following plants and write their names.

Do it yourself.

Fun to Drill

Do it yourself.

Fun to Act

Do it yourself.

6. Reproduction in Animals

Question Hour-I

A. Tick (3) the correct answer :

1. (a) mammals 2. (c) yolk 3. (a) tadpole 4. (a) moulting 5. (c) caterpillar

B. Fill in the blanks with the correct words from the brackets :

1. reproduce 2. reproduction 3. mammals 4. hair 5. brain 6. bat 7. spawn

C. Name two :

1. Duck-billed platypus, spiny anteater 2. hen, crocodile 3. butterfly, frog 4. dog, monkey

D. Find out one word for each of the following :

1. yolk 2. fry 3. caterpillar 4. nymph

E. Answer the following questions :

Q1. Why is reproduction important ?

Ans. Reproduction is important for life to continue on the earth.

Q2. What do you understand by reproduction?

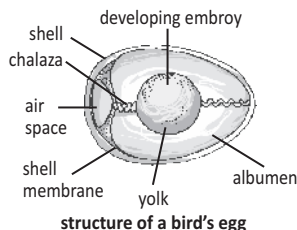
Ans. The process, by which new living beings resembling their parents are produced, is called reproduction.

Q3. What are the different ways by which animals reproduce?

Ans. Animals reproduce in two ways : (i) by giving birth to young ones (ii) by laying eggs from which young ones hatch out.

Q4. Describe the structure of an egg with the help of a diagram.

Ans. An egg has a hard shell to protect the chick growing inside. Yolk is the yellow part of the egg. The embryo or the chick feeds on the yolk. The white part called albumen protects the embryo. The air sac contains air for the chick to breathe.



Q5. How do birds reproduce?

Ans. Birds reproduce by laying eggs.

Q6. Describe the life-cycle of butterfly?

Ans. A butterfly lays eggs. The young ones of a butterfly are quite different from the adult butterflies. they look like worms and called larva which grows rapidly. After sometime, it covers itself in a cocoon. This stage is called pupa or caterpillar which keeps on change. Finally, the pupa bursts and the adult butterfly comes out.

Q7. How do mammals take care of their young ones?

Ans. Mammals produce milk and feed their young ones. They take good care of their young ones until they learn to look after themselves.

Think Beyond HOTS

Ans. Because they get oxygen only from water.

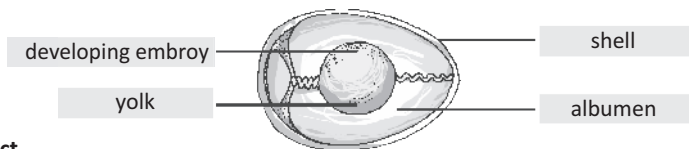
Question Hour-II

A list of animals is given below. Separate these animals into 'egg laying animals' and 'animals that give birth to young ones.'

Ans.	Animals that lay eggs	Animals that give birth to young ones
	ant, snake, butterfly, frog, bee, lizard, crocodile	dog, camel, lion, bear, cat, squirrel, deer

Fun to Drill

Label the diagram of the eggs.



Fun to Act

Do it Yourself.

7. Adaptation in Animals

Question Hour-I

A. Tick (3) the correct answer :

1. (c) arboreal 2. (a) herbivores 3. (a) amphibians 4. (c) bird 5. (b) chameleon

B. Fill in the blanks with correct words from the box :

1. habitat 2. ten 3. legs 4. waterproof 5. aquatic 6. spines 7. snow

C. Match the columns :

- | | | |
|----------------|---|--------------|
| 1. Aerial | → | (a) horse |
| 2. Herbivore | → | (b) pigeon |
| 3. Parasite | → | (c) lion |
| 4. Carnivore | → | (d) frog |
| 5. Hibernation | → | (e) turtle |
| 6. Flippers | → | (e) mosquito |

D. Tick (3) the correct and cross (7) the incorrect statements :

1. (7) 2. (3) 3. (7) 4. (7) 5. (3)

E. Answer the following questions :

Q1. What is adaptation?

Ans. Animals adopt or change themselves to their surroundings or a particular way of life. This ability is called adaptation.

Q2. How is a camel able to adapt and live in a desert?

Ans. A camel can store fat in its hump which can be converted into food when needed. It can also drink about ten buckets of water at a time. It also has a thick skin to protect itself from the heat of the sun. It has padded feet and so can walk comfortably in hot sand.

Q3. How is the body of a fish adapted to live in water?

Ans. A fish has fins to swim and waterproof scales on the body. It has gills to take in air dissolved in water.

Q4. What is hibernation?

Ans. Some land animals like lizards and snakes are not seen in the winter. They go for a long sleep. This is called hibernation.

Q5. Why do aerial animals have light bodies?

Ans. Aerial animals like birds have light bones. Wings with feathers and a streamlined body to cut through the air. It helps them to fly in the air.

Q6. How are animals grouped according to the food they eat?

Ans. Animals can be grouped into five groups according to the type of food they eat :

- (i) Herbivores : eat grass and plants
- (ii) Carnivores : eat flesh of other animals
- (iii) Omnivores : eat both plants and animals

- (iv) Parasites : suck blood of other animals
 (v) Scavengers : feed on flesh of dead animals

Q 7. What are the ways by which animals protect themselves?

Ans. Animals have different features to protect themselves from their enemies. Fish live in groups to protect from big fish. Lions, deer, tigers, etc protect by running fast. Birds protect themselves by flying away quickly. Snails have shells to protect their soft bodies. A chameleon changes its colour according to the surroundings and cannot be seen.

Q8. How are parasites different from other animals?

Ans. Parasites live on or inside the body of other animals to obtain food. They have suckers to suck other animal's blood. Fleas, lice, bugs and tapeworms are parasites.

Think Beyond HOTS

Q 1. Why does a polar bear have white fur?

Ans. For camouflage

Q 2. Why do cats have pointed tearing teeth?

Ans. To tear meat

Q 3. Why does a bug have suckers?

Ans. To suck blood

Q 4. Why do some birds migrate to another places?

Ans. To escape excessive cold

Question Hour-II

A. Circle the odd in each group. Give reasons for your answer :

1. Cow Horse Jackal Deer
 2. Zebra Tiger Leopard Lion
 3. Mosquito Leech Crow Tapeworm
1. carnivorous 2. carnivorous 3. aerial

B. Write one word for each :

1. hibernation 2. aerial 3. carnivorous 4. omnivorous 5. parasites

C. Classify the animals according to their habitat. Write the names of the following animals in the appropriate column :

Terrestrial	Aquatic	Amphibian	Arboreal	Aerial
deer camel zebra lion polar bear	crab fish	frog	monkey squirrel lizard	kingfisher bat

Fun to Drill

A. Tell who am I?

1. I am a bird. I cannot fly but swim well. duck
2. I live inside water but breathe oxygen from the open air. frog
3. I can live on land as-well-as in water. salamanders
4. I am famous for changing my colour. chameleon
5. I go to sleep for the whole water. lizard

B. That's a lie really!

Do it yourself.

Fun to Act

Do it Yourself.

Model Test Paper-I

Solve Yourself.

8. Our Clothes

Question Hour-I

A. Tick (3) the correct answer :

1. (c) both of these 2. (c) fibres 3. (b) chemicals

B. Fill in the blanks with correct words from the box :

1. clothes 2. smart, cultured 3. morning, night 4. warm 5. dust 6. identify 7. care

C. Tick (3) the correct and cross (7) the incorrect statements :

1. (7) 2. (3) 3. (7) 4. (3) 5. (7) 6. (3)

D. Answer the following questions :

Q 1. Give three reasons why we wear clothes?

Ans. (i) Clothes protect us from heat, cold, dust and insects.

(ii) We look smart and cultured in suitable clothes.

(iii) Clothes are as important for us as a house.

Q 2. How many kinds of clothes do we wear?

Ans. We wear different types of clothes.

Protective clothes are worn in summer, winter and rainy season. We wear uniform which help us to identify the job of a person. We wear decorative clothes at picnics, parties, weddings and festivals.

Q 3. Give two differences between natural and synthetic fibres.

Ans. The two differences between natural and synthetic fibres are :

(i) Natural fibres are obtained from plants or animal. But synthetic fibres are made from man-made fibres.

(ii) Natural fibres keep our body warm in winter and cool in summers. But synthetic fibres are not weather-friendly, though, they are stronger than natural fibres.

Q 4. How are synthetic fibres useful?

Ans. Synthetic fibres are strong and can last for long. They are capable of being stretched, waterproof and wrinkle-free.

Q 5. How can we take care of our woollen and silk clothes?

Ans. Woollen clothes should be dry-cleaned. After the season is over, woollen and silk clothes must be put in the sun. Mothballs or dried neem leaves should be placed with woollen clothes to keep insects away.

Think Beyond HOTS

Q 1. Cotton clothes are usually worn in summer. Why?

Ans. Because they keep us cool and absorb sweat.

Q 2. We put mothballs or dried neem leaves with our woollen clothes. Why?

Ans. Because they keep insects away.

Question Hour-II

A. Circle the odd one in each group :

1. Silk Silkworm Cotton
 2. Sun Winter Summer
 3. Weaving Spinning Farming
1. Silkworm 2. Sun 3. Farming

Fun to Drill

Read the clues and write the name of the states these people come from :



Maharashtra



Punjab



West Bengal

Fun to Act

Do it yourself.

9. Matter and Its States

Question Hour-I

A. Tick (3) the correct answer :

1. (c) liquid and gas 2. (a) solid 3. (b) solute

B. Fill in the blanks with correct words from the box:

1. space 2. atoms 3. water 4. matter

C. Tick (3) the correct and cross (7) the incorrect statements :

1. (3) 2. (7) 3. (3) 4. (3) 5. (7) 6. (3)

D. Match the following and write two examples for each :

- | | | | | |
|-----------|--|--------------------------------------|---------------------|--------------|
| 1. Solid | | neither fixed shape nor fixed volume | <u>water vapour</u> | <u>LPG</u> |
| 2. Liquid | | fixed shape and fixed volume | <u>wood</u> | <u>metal</u> |
| 3. Gas | | no fixed shape but fixed volume | <u>water</u> | <u>milk</u> |

E. Answer the following questions :

Q1. What is matter? What is matter made up of?

Ans. All objects around us are made of matter. Matter is made of tiny particles called atoms.

Q2. What are the common properties of matter?

Ans. Some of the common properties of matter are :

- (i) Matter exists in three states—solid, liquid and gas.
- (ii) Matter has weight and occupies space and it has a definite mass.
- (iii) Matter can change its form, from solid to liquid and liquid to gas.

Q3. How are molecules arranged in a solid?

Ans. Molecules of a solid are tightly arranged.

Q4. What is the difference between melting and evaporation?

Ans. When ice is heated, it changes into water. This is called melting. When water is boiled at a high temperature, it changes into water vapour. This is called evaporation.

Q5. What is condensation?

Ans. When water vapour changes back to water on cooling, it is called condensation.

Q 6. What is a solution?

Ans. When a solid dissolves in a liquid, it forms a solution. For example, when sugar is dissolved in water after stirring, it becomes a sugar solution.

Think Beyond HOTS

1. **Why can we not see salt dissolved in water?**

Ans. Because it becomes invisible after dissolving.

2. **Why do solids have a fixed shape?**

Ans. Because their molecules are tightly packed.

Question Hour-II

A. Fill in the boxes using the given clues :



Fun to Drill

Do it yourself

Fun to Act

Do it Yourself.

10. Force, Work and Energy

Question Hour-I

A. Tick (3) the correct answer :

1. (a) force 2. (b) gravitational force 3. (b) frictional force 4. (b) When force is applied and the object moves 5. (b) energy 6. (c) machine

B. Tick (3) the correct and cross (7) the incorrect statements :

1. (7) 2. (3) 3. (3) 4. (3) 5. (7)

C. Fill in the blanks with correct words from the box :

1. force 2. more 3. work 4. energy 5. fossil fuels 6. machines

D. Identify the kind of force in each of the following cases :

1. muscular force 2. gravitational force 3. frictional force 4. muscular force 5. gravitational force

E. Answer the following questions :

Q1. What is force?

Ans. Force is the push or pull you apply to make things move.

Q2. What do you understand by friction?

Ans. Friction is a force that tries to stop a moving object. For examples, if we make a ball roll on the ground, after some time, it stops. This is because of friction.

Q3. What is energy? What are the different types of energy?

Ans. Energy is the ability to do work. Energy is of different types such as muscular energy, hydro energy, wind energy and solar energy.

Q 4. How is electricity produced by water?

Ans. The water of a river is blocked with the help of huge walls to make a dam. When the gates of the dam are opened, the water rushes down with great force. This energy of the falling water is used to produce electricity in hydropower stations.

Q 5. What are fossils fuels? How are they formed?

Ans. Coal, petrol and natural gas are called fossil fuels. These are formed from the remains of dead plants and animals which got buried under the earth's crust millions of years ago.

Q 6. How do machines help us?

Ans. When we find it difficult to do any work with our hands, we use machines to help to do the work. Machines are used to make tasks easy.

Q7. What are the different types of simple machines?

Ans. Some machines are very simple. Some of them are : needle, axe, hammer, knife, wheel, scissors, etc.

Think Beyond HOTS

1. A ball when kicked, stops after a distance. Why?

Ans. Because of frictional force.

2. A ball when kicked upward, falls back on the earth. Why?

Ans. Because of gravitational force.

3. You oil your bicycle. Why?

Ans. Because oiling lessens the friction and cycling becomes smooth.

Question Hour-II

A. Write 'S' for simple machines and 'C' for complex machines :

hammer-S, car-C, needle-S, axe-S, wheel-S, sewing machine-C, bicycle-C, knife-S

B. Encircle the names of five simple machines hidden in the maze below :

P	O	S	L	U	L	C	A
S	C	R	E	W	E	L	X
C	T	A	O	P	V	E	L
I	R	M	L	L	E	V	E
N	E	P	U	L	L	E	Y
W	E	D	G	E	E	R	S

Fun to Drill

Do it yourself.

Fun to Act

Do it Yourself.

11. Air, Water and Weather

Question Hour-I

A. Tick (✓) the correct answer :

1. (a) directly 2. (c) land 3. (b) quickly 4. (a) fog 5. (a) sedimentation

B. Fill in the blanks with correct words from the box :

1. air, cloud, rain 2. higher 3. crystals 4. dewdrops 5. hailstones

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

1. T 2. F 3. T 4. T 5. F 6. T 7. T 8. F

D. Differentiate between the following :

1. Weather and Climate : Weather is the condition of the air, clouds, rain and sun of a place at a particular time. Climate is the average of weather conditions at a particular place over a long period of time.

2. Sea breeze and land breeze : Sea breeze blows from the sea towards the earth. Land breeze blows from land towards the sea.

E. Match the following :

- | | | |
|------------|---|---------------------------|
| 1. Hot air | → | (a) heated slowly |
| 2. Sun | → | (b) goes up |
| 3. Sand | → | (c) controller of weather |
| 4. Water | → | (d) slanting sun rays |
| 5. Noon | → | (e) direct sun rays |
| 6. Morning | → | (e) heated quickly |

F. Answer the following questions :

Q1. What is weather?

Ans. Weather is the condition of the air, clouds, rain and the sun of a place at a particular time.

Q2. What is climate?

Ans. Climate is the average of weather conditions at a particular place over a long period of time.

Q3. How does the sun cause changes in weather?

Ans. The heat of the sun causes winds to blow and also causes changes in the states of water. Changes in the states of air and water causes change in weather.

Q4. Why is it hotter at noon than in the morning and evening?

Ans. At noon, the sun rays fall directly on the earth, so it is very hot. In the morning and evening, the sun rays are slanting and it is not very hot.

Q5. Why is sea water warm even after sunset?

Ans. The sea water is warm even after sunset because it cools slower than the land.

Q6. How does sea breeze occur?

Ans. During the day, when the sun shines brightly, the land near the sea gets heated faster than the sea water. Hence, the air above the land becomes warm and rises up. The cool air of the sea rushes towards the land to take the place of the warm air that has risen up. This gives rise to the sea breeze.

Q7. What is meant by evaporation and precipitation?

Ans. The process of change of liquid (water) into gaseous (water vapour) is called evaporation. Precipitation is any form of water that falls on earth's surface. Different forms of precipitation include rain, snow and hail.

Q8. Explain the water cycle.

Ans. Earth's water is always in movement and makes the water cycle. The sun's heat evaporates the sea water to form the clouds. When the clouds become too heavy, they release water as rain or snow. Rivers and streams collect water from the ground and return it to the oceans so that the whole water cycle can start all over again.

Q9. What are the ways in which the germs in drinking water can be killed?

Ans. Chemicals like chlorine are used to kill germs at the water works of a city. The process of adding chlorine is called chlorination. Bleaching powder also kills germs in water. Boiling and use of potassium permanganate also kill germs.

Think Beyond HOTS

1. One half of the earth is always closer to the sun. Why?

Ans. Because the earth rotates on its axis.

2. Even on a very hot day, people in coastal areas do not feel very hot. Why?

Ans. Because of cool sea breeze.

Question Hour-II

- A. Give one word for each of the following :

1. sun 2. sea breeze 3. land breeze 4. evaporation 5. condensation 6. humidity

- B. Identify the following pictures. Write their names :



Dew



Hail stones



Snow

Fun to Drill

Do it yourself.

Fun to Act

Do it Yourself.

12. Our Solar System

Question Hour-I

- A. Tick (3) the correct answer :

1. (a) axis 2. (c) day 3. (b) mercury 4. (a) venus 5. (c) venus 6. (c) telescope

- B. Fill in the blanks with correct words from the box :

1. globe 2. water 3. rotation 4. revolution 5. seasons 6. natural object 7. gases

- C. Match the following :

- | | | |
|-------------------------------|---|-------------|
| 1. Fastest revolving planet | → | (a) Uranus |
| 2. Red planet | → | (b) Mercury |
| 3. Largest planet | → | (c) Saturn |
| 4. Planet with over 100 rings | → | (d) Jupiter |
| 5. Bluish planet | → | (e) Mars |

- D. Name the following :

1. Axis 2. Star 3. Mars 4. Satellite 5. Orbit

- E. Explain the following :

1. **Movement of the earth** : The earth has two types of movement : rotation on its own axis and revolution around the sun in an orbit.

2. **Solar System** : The sun with all the 8 planets is called the solar system.

3. **A planet and its satellite** : A planet moves around the sun whereas a satellite moves around a planet.

- F. Answer the following questions :

Q1. How long does the earth take to rotate on its axis?

Ans. The earth takes one day or 24 hours to rotate on its axis.

Q2. How long does the earth take to revolve around the sun?

Ans. The earth takes one year or 12 months or $365\frac{1}{4}$ days to revolve the sun.

Q3. How many times does the earth rotate in a year?

Ans. The earth rotates 365 times in a year.

Q 4. Explain with the help of a diagram how different seasons are caused.

Ans. Different seasons are caused due to the tilting position of the earth on its axis. (show the diagram yourself from page 100 of your text book).

Q 5. Why is earth a planet?

Ans. The earth is neither a star like the sun, nor it is a moon. It is a planet. A large natural object that revolves around a star is called a planet. The sun is a star and the earth revolves around it. So the earth is a planet.

Q 6. What do you mean by solar system?

Ans. The solar system is a group of heavenly bodies, i.e. the sun, eight planets, their moons and other smaller objects.

Q 7. What is a star made up of?

Ans. Stars are made of glowing gases. They spread out heat and light in the space.

Q 8. What is a satellite? Name the earth's natural satellite.

Ans. A satellite is any free-flying object orbiting the earth or any other planet. Moon is the natural satellite of the earth.

Think Beyond HOTS

1. Stars appear very small. Why?

Ans. Because they are very far from earth.

2. When it is day time in India, it is night in America. Why?

Ans. Because America is away (in the other side of the earth) from the sun when it is day in India.

3. The shadow of all things on the earth move during the day. Why?

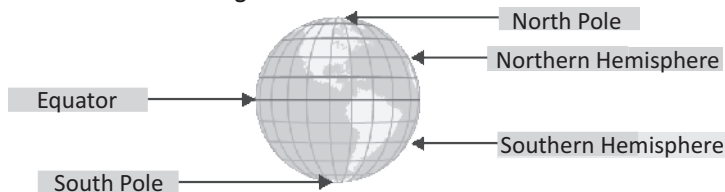
Ans. Because the earth revolves around the sun, and the light of the sun falls on different sides of things. So shadows also move.

4. The Earth is called the water planet. Why?

Ans. Because three-fourth part of the earth's surface is covered with water.

Question Hour-II

A. Write the labels for the diagram :



Fun to Drill

Do it yourself.

Fun to Act

Do it Yourself.

13. Pollution

Question Hour-I

A. Tick (3) the correct answer :

1. (a) pollution 2. (c) pollutants 3. (b) dustbin 4. (a) infertile 5. (a) deforestation
6. (c) CNG

B. Fill in the blanks with correct words from the box :

1. population 2. pollution 3. trees 4. deforestation 5. rain 6. paper

C. Tick (3) the correct and cross (7) the incorrect statements :

1. (3) 2. (7) 3. (7) 4. (3) 5. (7)

D. Name two :

1. smoke, dust 2. carbon dioxide, methane 3. chemicals, detergents 4. plastic, iron

E. Answer the following questions :

Q 1. What do you mean by pollution?

Ans. Pollution means the presence of harmful substances in air, water and land that can cause harm to human beings and other living organisms.

Q 2. Write two ways by which air pollution can be controlled?

Ans. To check air pollution, we must get our vehicles fitted with CNG or LPG kits. The chimneys with filters must be fitted in factories very high and they should be set up away from populated area.

Q 3. Write two ill-effects of water pollution.

Ans. Many harmful micro-organisms grow in polluted water and cause disease like diarrhoea and typhoid. Polluted water makes river and lake water dirty and it becomes unuseful.

Q 4. How do trees help us?

Ans. Trees help us in many ways :

- (i) The roots of trees hold the soil and reduce soil erosion.
- (ii) Trees help in making rain.
- (iii) Trees release oxygen needed by all living beings.
- (iv) Trees provide food and clothing to all living beings.

Q 5. What is deforestation?

Ans. Cutting down of trees in large numbers is called deforestation.

Q 6. Write three ways in which you can help save trees.

Ans. (i) We should plant more trees than we cut.
(ii) We should not waste paper, but try to reuse as much as possible.
(iii) We should not cut down the whole tree if we need only a few branches.

Think Beyond HOTS

1. Why should you bathe your pets ?

Ans. To keep them clean and healthy.

2. Why should we plant trees?

Ans. To keep our environment healthy.

Question Hour-II

Circle the odd one in each group :

- | | | |
|--------------------|-----------------|-----------------|
| 1. Air pollution | Water pollution | Food pollution |
| 2. Washing clothes | Smoke | Bathing animals |
| 3. Milk | Air | Water |

Fun to Drill

Do it yourself.

Fun to Act

Do it Yourself.

Model Test Paper-II

Solve Yourself.

Life With SCIENCE-5

1. Bones and Muscles

Question Hour-I

A. Tick (3) the correct answer :

1. (a) skeleton system 2. (c) 22 bones 3. (b) pivot joint 4. (a) muscles 5. (a) under our control

B. Fill in the blanks with the correct words from the box :

1. upper jaw 2. breastbone 3. elbow 4. heart 5. bone-marrow

C. Give one word name for each :

1. skull 2. rib cage 3. tendons 4. bone marrow

D. Which joint of the body helps us to perform the following functions?

1. knee joint 2. hip joint 3. knee & hip joint 4. pivot 5. wrist

E. Write 'T' for true and 'F' for false statement :

1. (F) 2. (F) 3. (T).

F. Answer the following questions :

Q 1. What is the human skeleton made up of ?

Ans. The human skeleton is made up of 206 bones which are connected together.

Q 2. What are the functions of the skeletal system?

Ans. Following are the functions of a skeleton :

- (i) It provides support and the basic shape to the body.
- (ii) It protects the soft organs of the body. The skull protects the brain and the ribs protect the heart and lungs.
- (iii) Bones help the muscles to work.

Q 3. Differentiate between voluntary and involuntary muscles.

Ans. Voluntary muscles are under our control, like the muscles of our limbs. Involuntary muscles are not under our control. They move or work on their own, like stomach, liver, etc.

Q 4. What is a joint? Explain different joints in a human body.

Ans. The place where two bones joins together is called a joint.

There are different kinds of joints in human body :

(i) Immovable joints : These joints simply connect bones. These do not allow the movement of bones.

(ii) Movable joints : These joints allow full movement of bones. They are of four types :

(a) Hinge joint : A hinge joint can move only in one side, such as knee, elbow.

(b) Ball and socket joint : A ball and socket joint allows the maximum joint. This joint is found in the hip and shoulder.

(c) Pivot joint : It is found between the skull and the first two vertebrae of the spine. So we can move our head sideways, upward and downward.

(d) Gliding joint : This joint allows our back to bend, twist and turn at each joint. It is found in wrist, ankle and between two vertebrae of the spine.

Q 5. How do the muscles and bones help the body?

Ans. The muscles and bones together give shape to the body and help in moving the parts of the body. We are able to move our legs with the help of muscles and bones of the legs.

Q6. How can we keep our bones and muscles healthy?

Ans. Proper food and regular exercise will keep our muscles and bones healthy. When we play or exercise, our body becomes strong and healthy.

Think Beyond HOTS

Do Yourself

Question Hour-II

Circle the odd one in each group. Give reasons for your answer :

- | | | | |
|-------------|--------|---------|------------|
| 1. Elbows | Finger | Wrist | Knees |
| 2. Tongue | Arms | Chest | Legs |
| 3. Swimming | Yoga | Smoking | Gymnastics |

Fun to Drill

Find ten words in the word search that are related to the skeletal system :

Hip	<table border="1"><tr><td>H</td><td>I</td><td>P</td><td>K</td><td>S</td><td>R</td><td>I</td><td>B</td><td>R</td><td>L</td></tr><tr><td>M</td><td>M</td><td>N</td><td>N</td><td>K</td><td>S</td><td>P</td><td>I</td><td>N</td><td>E</td></tr><tr><td>Q</td><td>B</td><td>T</td><td>E</td><td>N</td><td>D</td><td>O</td><td>N</td><td>T</td><td>R</td></tr><tr><td>L</td><td>S</td><td>K</td><td>E</td><td>L</td><td>E</td><td>T</td><td>O</td><td>N</td><td>B</td></tr><tr><td>I</td><td>T</td><td>F</td><td>C</td><td>G</td><td>F</td><td>E</td><td>M</td><td>U</td><td>R</td></tr><tr><td>M</td><td>S</td><td>K</td><td>U</td><td>L</td><td>I</td><td>T</td><td>L</td><td>A</td><td></td></tr><tr><td>B</td><td>O</td><td>K</td><td>N</td><td>V</td><td>W</td><td>R</td><td>I</td><td>B</td><td>S</td></tr><tr><td>L</td><td>I</td><td>G</td><td>A</td><td>M</td><td>E</td><td>N</td><td>T</td><td>V</td><td>I</td></tr><tr><td>W</td><td>J</td><td>O</td><td>I</td><td>N</td><td>T</td><td>C</td><td>X</td><td>Z</td><td>U</td></tr><tr><td>N</td><td>A</td><td>L</td><td>A</td><td>T</td><td>L</td><td>A</td><td>S</td><td>F</td><td>S</td></tr></table>	H	I	P	K	S	R	I	B	R	L	M	M	N	N	K	S	P	I	N	E	Q	B	T	E	N	D	O	N	T	R	L	S	K	E	L	E	T	O	N	B	I	T	F	C	G	F	E	M	U	R	M	S	K	U	L	I	T	L	A		B	O	K	N	V	W	R	I	B	S	L	I	G	A	M	E	N	T	V	I	W	J	O	I	N	T	C	X	Z	U	N	A	L	A	T	L	A	S	F	S	Ribs
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Spine		Joint																																																																																																				
Femur		Tendon																																																																																																				
Skull		Skeleton																																																																																																				

Fun to Act

Do yourself.

2. Nervous System

Question Hour-I

A. Tick (3) the correct answer :

1. (b) brain 2. (a) vertebral column 3. (c) mixed nerves 4. (c) retina

B. Fill in the blanks with correct words from the box :

1. aware 2. bony 3. network 4. reflex action 5. lens 6. connected

C. Name the following :

1. sensory nerves 2. motor nerves 3. retina 4. somebody actions 5. spinal cord

D. Match the columns :

- | | | |
|--------------------|---|---------------------------------|
| 1. The cerebellum | → | (a) see things |
| 2. The medulla | → | (b) controls muscular action |
| 3. The tongue | → | (c) reflex action |
| 4. The eyes | → | (d) controls involuntary action |
| 5. The spinal cord | → | (e) taste buds |

E. Name three :

1. brain, spinal cord, nerves
2. sensory nerves, motor nerve, mixed nerve
3. cerebrum, cerebellum, medulla
4. think, remember, learn

E. Answer the following questions :

Q1. What are the functions of the nervous system?

Ans. The brain, the spinal cord and the nerves form the nervous system. It controls all the other systems of our body.

Q2. Name the different parts of the brain. What work does each part do?

Ans. The brain has three main parts—cerebrum, cerebellum and medulla.

Cerebrum helps us to think, remember and learn. It controls the functions of our sense organs.

Cerebellum controls muscular activity and maintains balance of the body.

Medulla regulates functions like heart beat, circulation of blood and breathing.

Q 3. Name the three types of nerves. What functions do these nerves perform?

Ans. We have three nerves— sensory, motor and mixed.

Sensory nerves carry messages to the brain.

Motor nerves carry message back from the brain.

Mixed nerves carry messages to the brain as well as bring orders from the brain.

Q 4. What is a reflex action? Explain with an example.

Ans. Sometimes, the body needs to respond quickly to avoid damage. An automatic movement in response to a stimulus is called a reflex action.

Q 5. What are sense organs?

Ans. The organs that help us to see, hear, taste, smell and touch are sense organs. Such as, eyes, ears tongue, nose and skin.

Q 6. How does the tongue help us to taste?

Ans. Our tongue has taste buds which can sense sweet, sour, salty and bitter taste. The taste buds are connected to the nerves. When we place food in the mouth, the tongue senses the taste and converts it into a definite message. The nerves carry it to the brain. The brain recognises the message and helps us to know the taste of things we eat.

Q 7. How can you keep your skin healthy?

Ans. Soap and water should be used to remove dirt and sweat from the skin. Dry the skin after washing and wear clean and comfortable clothes. Scratch or cut on the skin should be treated with an antiseptic to stop growth of germs.

Think Beyond HOTS

Q. When a patient is taken to the operation theater, he/she is first given anaesthesia. Do you know why?

Ans. Anesthesia makes the patient's body or any organ senseless, so he does not feel pain during operation.

Question Hour-II

A. Circle the odd one in each group. Give reasons for your answer :

- | | | | |
|---------------|--------------|----------------|---------|
| 1. Cerebellum | <u>Liver</u> | Cerebrum | Medulla |
| 2. Retina | Iris | <u>Eardrum</u> | Pupil |
| 3. Nerves | Spinal cord | <u>Eye</u> | Brain |

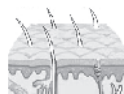
B. Identify the following pictures. Write their names in the spaces provided :



brain



ear



skin

Fun to Drill

Do yourself.

Fun to Act

Do yourself.

3. Food and Health

Question Hour-I

A. Tick (3) the correct answer :

1. (b) iron 2. (c) helps bones to grow strong 3. (a) D 4. (b) healing injured parts.

B. Fill in the blanks with correct words from the box :

1. food 2. diet 3. harmful 4. fibre 5. exercise

C. Tick (3) the correct and cross (7) the incorrect statement :

1. (3) 2. (7) 3. (3) 4. (7) 5. (7)

D. Answer the following questions :

Q 1. Name different nutrients present in the food.

Ans. Carbohydrates, fats, proteins, vitamins and minerals are different types of nutrients present in our food.

Q 2. Why are carbohydrates important for us?

Ans. Because carbohydrates give energy to the body. So they are called energy-giving foods.

Q 3. What is the importance of fats?

Ans. Like carbohydrates, fats too provide energy to the body. Fats contain twice the amount of energy as compared to carbohydrates.

Q 4. Proteins need to be present in the food we eat. Why?

Ans. Proteins help the body to grow and also in healing injured parts of the body. So proteins should be present in the food we eat.

Q 5. What is the importance of fibre in your diet?

Ans. Fibre roughage should be an important part of our diet because it helps to carry waste material out of the body.

Q 6. What is a balanced diet?

Ans. The diet which contains all the nutrients in the right amount is called a balanced diet.

Q 7. Why do we need water in our daily diet?

Ans. Water is essential for life. We need water because :

- (i) It maintains and regulates body temperature.
- (ii) It helps in digestion of food.
- (iii) It purifies blood and helps in removing waste products from the body.
- (iv) Water is a major component of our blood.

Q 8. What is the importance of rest and sleep?

Ans. After a day's hard work, our body gets tired and it needs rest. It relaxes our body. Sleep is needed because it gives us rest and freshness.

Think Beyond HOTS

Q. Why is regular exercise essential for staying healthy?

Ans. Because it improves blood circulation.

Question Hour-II

Write four examples of each :

Nutrients	Found in			
1. Vitamin C	potato	cabbage	orange	spinach
2. Carbohydrates	bread	rice	fruits	honey
3. Iron	fish	apples	beans	eggs

4. Vitamin A	milk	carrot	butter	cheese
5. Iron	meat	fish	eggs	beans

Fun to Drill

Bring some food items to school and sort them out in different groups. Choose a table in your class where you can have different playcards as shown below :

Do yourself.

Fun to Act

Prepare a balanced diet chart for a healthy person.

Do Yourself.

4. Health and Diseases

Question Hour-I

A. Tick (3) the correct answer :

1. (b) exposure to sunlight 2. (c) carrot and spinach 3. (c) vitamin c 4. (a) small living things, which can be seen only with the help of a microscope 5. (b) everywhere 6. (a) anopheles mosquito

B. Fill in the blanks with the correct words from the box :

1. lack 2. life style 3. germs 4. particular 5. vaccination 6. hygiene

C. Match the columns :

- | | | |
|--------------------|---|---------------|
| 1. Night-blindness | → | (a) Vitamin D |
| 2. Scurvy | → | (b) Iodine |
| 3. Anaemia | → | (c) Vitamin A |
| 4. Deformed bones | → | (d) Iron |
| 5. Goitre | → | (e) Vitamin C |

D. Write two symptoms of :

1. child become thin, abdomen gets swollen 2. cannot see in dim light, weakness 3. dry skin, extreme weakness 4. swelling, bleeding of gums 5. bow legs, bending of spine.

E. Answer the following questions :

Q1. What is a disease?

Ans. A disease is a state in which a function or a part of the body is no longer in a healthy condition.

Q2. Differentiate between communicable and non-communicable diseases.

Ans. Non-communicable diseases are those that do not spread from one person to another but communicable diseases can spread from a sick person to a healthy person.

Q3. What are germs?

Ans. Disease-causing micro-organisms are called germs or pathogens.

Q4. Name an infectious disease and list its symptoms.

Ans. Cholera is an infectious disease. Its symptoms are frequent vomiting and watery stools.

Q5. How are germs transferred from one person to another?

Ans. Germs are transferred from one person to another by coughing, spitting, touching, through flies and mosquitoes, through infected spring, air and eating together with infected persons. Germs of some diseases also get transferred by using a patient's clothes and towel.

Q6. What should be done to control malaria and dengue?

Ans. Malaria and dengue spread through mosquitoes. Protect yourself from mosquitoes. Do not allow water to collect around homes, playgrounds as mosquitoes lay their eggs in water.

Introduce fish in ponds. They feed on mosquito larvae and do not let mosquitoes multiply. Use mosquito net to sleep in and use mosquito repellent creams to keep them away.

Q7. How do vaccines protect us?

Ans. It is possible to prevent many diseases through vaccination. Vaccines are available for many diseases like polio, tuberculosis, tetanus, measles, typhoid, etc. Vaccines produce immunity in our body and so protect us from diseases.

Think Beyond HOTS

Q1. Why should you wash your hands with soap or rash after defecation (going to the toilet)?

Ans. To wash out the germs that we get on our hands while defecating.

Q2. Rahul is suffering from rickets. The doctor has advised him to sit in the sun for an adequate period of time. Why?

Ans. We get vitamin D from the sun. Rickets is caused due to deficiency of vitamin D.

Question Hour-II

A. Complete the columns :

Nutrient	Source
Vitamin A	milk, nuts, cheese
Vitamin B	Vitamin D
Milk, egg, meat	oil, ghee, butter
Vitamin C	Iron
lemon, tomatoes, lime	spinach, dates, raisins
Vitamin A	Carbohydrates
butter, milk, carrot	cereals, sugar

B. Identify the disease in each of the following pictures and writes its name :



marasmus



goitre



bent legs



scurvy

Fun to Drill

Do Yourself.

Fun to Act

Do Yourself.

5. Safety and First Aid

Question Hour-I

A. Tick (3) the correct answer :

1. (a) accident 2. (c) both 3. (b) sand 4. (a) dettol 5. (b) above the bite

B. Fill in the blanks with the words from the box :

1. Accidents 2. safety rules 3. firestation 4. doctor 5. sprain 6. fatal diseases.

C. What first aid would you give in the following accidents?

1. dettol 2. ice-pack 3. antiseptic cream 4. dettol 5. try to induce vomiting and take to the doctor.

D. Answer the following questions :

Q1. List two safety rules that should be followed at home.

Ans. (i) Do not take a lighted matchstick near the gas stove. It may catch fire.
(ii) Do not run on the stairs or slide over a banister.

Q2. What safety rules will you follow if you have to cross a road?

Ans. If we need to cross a road, we should :
(i) Always follow safety rules on the road.
(ii) First look to the right, then left and once again to the right. If there is no vehicle coming, we can cross the road safely.
(iii) Always try to cross the road on a zebra crossing when the pedestrian light is green.

Q3. What do you mean by first aid? Why is it important?

Ans. The help given to an injured person before the doctor arrives is called first aid. First aid is very important. It can save an injured person's life.

Q4. How will you put out a fire caused by petrol?

Ans. In case of a fire caused by petrol, do not throw water on it. Put out the fire by throwing lots of sand or mud on it.

Q5. Write some precautions for household safety against poisoning.

Ans. Following precautions can be taken for household safety against poisoning :
(i) Keep the poisonous substances out of the reach of children.
(ii) Keep all medicines locked in a cupboard.
(iii) Read the label of packets and bottles before using them.

Think Beyond HOTS

Q1. Splints are used to bandage the fractured part. Why?

Ans. To support the limb or body part.

Q2. Dog bite should be washed with soap and water. Why?

Ans. To wash out the germs.

Q3. Always wash your hands before giving first aid. Why?

Ans. To avoid infections.

Question Hour-II

Note down the following emergency telephone numbers in your school diary :

Do Yourself.

Fun to Drill

Do Yourself.

Fun to Act

Do Yourself.

6. How Plants Grow

Question Hour-I

A. Tick (3) the correct answer :

1. (a) seedling 2. (a) root 3. (c) soil 4. (a) runners 5. (c) spores 6. (a) ploughing

B. Fill in the blanks with the words from the box :

1. plants 2. germination 3. stemcutting 4. summer 5. winter 6. wealth

C. Tick (3) the correct and cross (7) the incorrect statement :

1. (7) 2. (3) 3. (7) 4. (3)

D. Name two :

1. potatoes, ginger 2. water, sunshine 3. wheat, barley 4. rice, maize 5. potato, onion 6. radish, carrot 7. good soil, water and sunshine

E. Write which part of each plant helps in reproduction :

Banana	<u>stems</u>	Sweet potato	<u>roots</u>
Rose	<u>stem</u>	Potato	<u>stem</u>
Onion	<u>stem</u>	Carrot	<u>roots</u>

F. Answer the following questions :

Q1. Why are plants important to us?

Ans. Plants are important to us because they give us food, cereals, vegetables, fruits, sugar, oilseeds, pulses, wood, fibres, gum, tea, coffee, medicines, fuels, oxygen, etc.

Q2. Why do plants reproduce?

Ans. Reproduction helps plants in maintaining their existence in the form of new plants.

Q3. What are the necessary conditions for germination of seed?

Ans. Some necessary condition for germination of seeds are— air, soil, water and sunlight.

Q4. What is dispersal? Why is it important for a plant to disperse its seeds?

Ans. The process by which the seeds are scattered away from the plant that produces them is called dispersal. Dispersal of seeds is important for a plant. If seeds are not dispersed all the seeds will germinate near the mother plant. Thus, they will not get enough space, water, air and nutrients and so most of them will die.

Q5. How do ferns produce new plants?

Ans. Fern plants do not have seed. They reproduce with the help of tiny structures called spores which are located on their leaves.

Q6. Why are crops important to us?

Ans. Crops are important to us because we get food in the form of cereals and pulses, oil, sugar, fibres, rubber, tea, coffee, rice, wheat, barley, maize. Thus, crops provides food, cloth and shelter and raw materials for our industries.

Q7. What is the difference between rabi and kharif crops? Give two examples of each.

Ans. Rabi crops are grown in winter season while the kharif crops are grown in summer season. Wheat, barley, mustard are rabi crops. Rice, maize and jowar are kharif crops.

Q8. How are crops protected from insects without using chemicals?

Ans. Crops should be protected against diseases, insects, birds and small animals. Insecticides and pesticides should be sprayed to get rid of insects like grasshoppers, locusts and plant lice that damage the crops.

Think Beyond HOTS

Q1. Which part of a seed contains food for the baby plant?

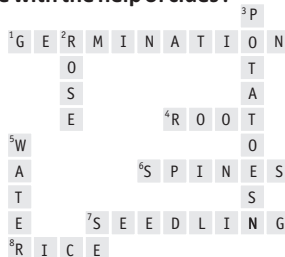
Ans. Seed leaves or cotyledons.

Q2. Why do we spray insecticides on crops?

Ans. To get rid of insects that destroy the crops.

Question Hour-II

Solve the Crossword puzzle with the help of clues :



Fun to Drill

Do yourself.

Fun to Act

Do yourself.

7. Adaptation in Animals

Question Hour-I

A. Tick (3) the correct answers :

1. (b) insects 2. (c) both of these 3. (b) forelimbs 4. (b) webbed toes

B. Tick (3) the correct word :

1. mammals 2. insects 3. swim 4. hopping 5. hopping 6. lungs

C. Match the columns :

- | | | |
|-----------------|---|------------------------------------|
| 1. A fish | → | (a) are harmful migratory insects. |
| 2. A frog | → | (b) are reptiles without legs. |
| 3. Most mammals | → | (c) breathes through gills. |
| 4. Snakes | → | (d) have four limbs. |
| 5. Locusts | → | (e) is an amphibian. |

D. Answer the following questions :

Q1. What is environment?

Ans. The surrounding in which an animal lives and grows is called its environment.

Q2. How is the breathing process of an insect different from that of a fish?

Ans. Insects breathe through air holes on their bodies. These are called spiracles. A fish breathes through its gills. Gills are special organs that are richly supplied with blood vessels.

Q3. How does a frog breathe?

Ans. A frog is an amphibian. A baby frog or a tadpole breathes through its gills. An adult frog breathes through its lungs on land and through its moist skin in water.

Q4. What special features help water animals to move?

Ans. Most water animals have special features to help them move in water such as—a fish has fins to swim, turtles have four paddle-like limbs, penguins use their two forelimbs as flippers to swim, frogs have webbed feet to swim.

Q5. Snakes and some other reptiles have no legs. How do they move then?

Ans. Snakes are reptiles which do not have legs. They have scales or plates on the underside of their bodies. These plates are attached to their ribs. These plates act

like feet and the ribs like legs. Besides plates, they have strong muscles and a flexible backbone which help them to move forward.

Q6. What is the chief difference between herbivores and carnivores?

Ans. The chief difference between herbivores and carnivores is that herbivores eat plants only whereas the carnivores eat flesh of plant-eating animals.

Think Beyond HOTS

Q1. Why do animals live in different types of habitat?

Ans. Because of their different body structures.

Q2. Do all animals move in the same way?

Ans. No, they all move differently.

Question Hour-II

Do the following animals/insects breathe through lungs, gills, air holes, skin, or body surface? Write L, G, A, S or B in the blanks. (You may have to write two letters against some.)

1. S, L 2. L 3. L 4. A 5. S 6. G.

Fun to Drill

Write down the habitats and adaptations in the following animals :

Animals	Habitats	Adaptations
1. Tiger	Forest	teeth, speed, power
2. Camel	Desert	broad padded feet, need of water, thick skin.
3. Fish	water	gills, fins, tail

Fun to Act

Do Yourself.

8. Soil : Erosion and Conservation

Question Hour-I

A. Tick (3) the correct answer :

1. (b) subsoil 2. (b) humus 3. (a) soil erosion 4. (a) fertility of soil 5. (a) growing grass

B. Fill in the blanks :

1. rocks 2. terrace 3. soil 4. overgrazing 5. conservation

C. Tick (3) the correct and cross (7) the incorrect statement :

1. (7) 2. (7) 3. (3) 4. (7) 5. (3)

D. Match the following :

- | | | |
|------------------------|---|-----------------------|
| 1. Loss of soil | → | (a) afforestation |
| 2. Cutting down trees | → | (b) deforestation |
| 3. Protection of soil | → | (c) soil erosion |
| 4. Planting more trees | → | (d) soil conservation |

E. Name the following :

1. Tapsoil 2. Subsoil 3. Afforestation 4. Deforestation 5. Terrace Farming

F. Answer the following questions :

Q1. Why do we say that soil is the foundation of life?

Ans. Soil supports the growth of plants. We all depend on plants for our basic need like food, clothing and shelter. All types of life on the earth depend on soil. So, we say that soil is the foundation of life.

Q2. What is weathering of rocks?

Ans. The process by which soil formation takes place is called weathering. Weathering is a very slow and gradual process during which parent rocks break down into fine particles.

Q3. How was soil formed from rocks?

Ans. When the earth was young, there were only water, air and rocks. Due to the action of heat of the sun, rain, wind and underground water, the rocks broke up bit by bit into small pieces. It took millions of years for these pieces to change into the loose material we call soil.

Q4. What does soil contain?

Ans. Soil contains water, air, minerals and humus or dead and decayed parts of plants and animals.

Q5. What is soil erosion? Name the factors that cause soil erosion.

Ans. The uppermost layer of the soil gets carried away by natural agents like wind, rain and floods. This carrying away of the topsoil from one place to another by natural agents is called soil erosion. Water, wind and floods are factors that cause soil erosion.

Q6. What is soil conservation? In what ways can soil be conserved?

Ans. Conservation of soil means protection of soil from erosion. Different methods are adopted to protect the soil from erosion. Some of them are—afforestation or planting trees, terrace farming, building bunds, building shelter belts and construction of dams.

Think Beyond HOTS

Ans. Because they cut forests, graze animals, construct dams and buildings.

Question Hour-II

Read the following activities that encourage soil erosion or soil conservation. Write 'SE' for soil erosion and 'SC' for soil conservation :

1. SC 2. SE 3. SE 4. SC 5. SC 6. SC 7. SE 8. SC

Fun to Drill

Do Yourself.

Fun to Act

Do Yourself.

Model Test Paper-I

Solve Yourself

9. Rocks and Minerals

Question Hour-I

A. Tick (3) the correct answer :

1. (b) magma 2. (c) marble 3. (b) red 4. (a) trees 5. (b) sandstone

B. Fill in the blanks :

1. shale 2. metals 3. coal and minerals 4. wells

C. Match the following :

- | | | |
|---------------------|---|---------------------------|
| 1. Sedimentary rock | → | (a) formed from limestone |
| 2. Marble | → | (b) a fuel |
| 3. Lava | → | (c) formed in layers |
| 4. Slate | → | (d) igneous rocks |
| 5. Coal | → | (e) formed from shale |

D. Give three examples of each :

1. Sedimentary rock	<u>limestone</u>	<u>sand stone</u>	<u>shale</u>
2. Metamorphic rocks	<u>marble</u>	<u>slate</u>	<u>gneiss</u>
3. Ores	<u>iron</u>	<u>copper</u>	<u>zinc</u>
4. Metals	<u>hematite</u>	<u>bauxite</u>	<u>pyrite</u>

E. Answer the following questions :

Q1. What are rocks made of? Name the three different types of rocks.

Ans. Rocks are made of minerals. Three different types of rocks are : igneous rocks, sedimentary rocks, metamorphic rocks.

Q2. What is a mineral?

Ans. Any natural element or compound in the earth's crust is called a mineral. Some minerals found in rocks are metallic and some are non-metallic.

Q3. What are ores? Name any four common ores.

Ans. Some useful metals which can be obtained from metallic minerals are called ores, such as hematite, bauxite, pyrite and calamine. Some common ores are : iron ore, aluminium ore, copper ore and zinc ore.

Q4. How is petroleum formed?

Ans. Petroleum is a fossil fuel which is formed from the remains of ancient sea creatures. Millions of years ago the parts of dead living things got buried and gradually changed into oil and gas.

Q5. Why is petroleum called fossil fuel?

Ans. Petroleum is called fossil fuel because it is made from the fossils or remains of dead animals which got buried under the earth or sea millions of years ago.

Think Beyond HOTS

Q1. Why does pumice have a sponge-like structure?

Ans. Because it is porous and has small holes like those in sponge.

Question Hour-II

Identify the following pictures. Write their names in the spaces provided :



Coal



Gneiss



Obsidian



Shale

Fun to Drill

Do Yourself.

Fun to Act

Do Yourself.

10. Matter and Molecules

Question Hour-I

A. Tick (3) the correct answer :

1. (c) materials 2. (c) indefinite shape but definite volume 3. (c) none of these 4. (b) lighter 5. (a) faster

B. Fill in the blanks :

1. matter 2. smallest 3. matter 4. compound 5. physical 6. chemical

C. Tick (3) the correct and cross (7) the incorrect statement :

1. (7) 2. (7) 3. (3) 4. (7) 5. (3) 6. (3)

D. Answer the following questions :

Q1. What do you understand by matter? Write its different forms.

Ans. Anything that occupies space or has volume and weight is called matter. Solid, liquid and gas are the three states of matter.

Q2. What are molecules? What are they made up of?

Ans. The smallest part of a substance is its molecule. A molecule has all the properties of the substance. A molecule is made up of one or more types of atoms.

Q3. What is an element?

Ans. A matter that is made up of only one kind of atoms is called an element.

Q4. What is a compound? Name a compound which is sweet.

Ans. A compound is formed when two or more elements combine together in a fixed ratio. Iron and sulphur are two elements. But when they are heated together, they combine to form a compound, called iron sulphide.

Q5. What is mixture?

Ans. When two or more substances are put together and they do not combine, then a mixture is formed. Substances in a mixture are easy to separate.

Q6. What are the three states of matter?

Ans. The three states of matter are— solid, liquid and gas.

Q7. What is a physical change? Give an example.

Ans. When the change is only in the state of matter it is called physical change. For example, liquid coconut oil changes into solid oil in winter. Solid wax changes into liquid on heating.

Q8. What is a chemical change? Give its three characteristics?

Ans. When paper is burnt, we get ash. We cannot get paper back. Such a change is called chemical change. Three characteristics of chemical change are :

(i) Chemical change cannot be reversed. (ii) This change is permanent (iii) There is a change in the composition of matter.

Think Beyond HOTS

Q1. Which is more heavy : one kilograms of iron or one kilogram of cotton and why?

Ans. Both are equally heavy.

Q2. Which is more heavy : one litre of water or one litre of mercury and why?

Ans. Mercury. Because it is the heaviest substance.

Q3. Why is air matter?

Ans. Because it is made of many kind of materials.

Question Hour-II

Circle the odd one in each group :

- | | | |
|-------------------|---------------------|----------------|
| 1. Book | <u>Oxygen</u> | Pen |
| 2. Condensation | Evaporation | <u>Boiling</u> |
| 3. Carbon dioxide | <u>Orange Juice</u> | Oxygen |

Fun to Drill

Do Yourself.

Fun to Act

Do Yourself.

11. Force and Energy

Question Hour-I

A. Tick (✓) the correct answer :

1. (a) force 2. (c) both 3. (a) electrostatic force 4. (a) frictional force 5. (c) playing cricket

B. Fill in the blanks with the correct words from the box :

1. motion 2. energy 3. friction 4. kinetic, potential 5. total

C. Tick (3) the correct and cross (7) the incorrect statement :

1. (3) 2. (3) 3. (7) 4. (3) 5. (7) 6. (7)

D. Answer the following questions :

Q 1. What is a force? List three effects of force.

Ans. A pull or a push acting on an object is called a force. Three effects of force are :

- (i) Force can move a stationary object.
- (ii) Force can stop a moving object.
- (iii) Force can change the shape and size of an object.

Q 2. Describe the different types of forces.

Ans. Different types of forces are : Muscular, gravitational, elastic, mechanical, electrostatic, magnetic and frictional force.

Q 3. What is frictional force? Give three ways in which friction help us.

Ans. Frictional force is the force that tries to stop objects sliding across each other.

Friction helps us in many ways :

- (i) Heat is generated by friction.
- (ii) Walking is possible because of friction.
- (iii) Writing is possible because of friction.

Q 4. Define work in detail.

Ans. Work is said to be done if the force applied on an object causes the object to move in the direction of the force. When we throw or kick a ball, work is done. But when we read a book, it is not considered work in science.

Q 5. What is energy? Name two sources of heat energy, light energy, sound energy and electric energy.

Ans. Energy is the ability to do work. Sources of different types of energy are :

Heat energy : Heat of the sun, heat from burning of fuels.

Light energy : Sun, candle give light energy.

Sound energy : Radio and television produce sound energy.

Electric energy : Washing machine, computer use electric energy.

Q 6. Name two forms of energy which do not cause pollution.

Ans. Solar energy and water energy cause no pollution.

Q 7. What does the law of conservation of energy state?

Ans. Energy can neither be created nor destroyed. Energy just changes from one form to another. The total energy of an object never decreases or increases.

Think Beyond HOTS

Q1. Ayush is waiting for his school bus. Is he doing work?

Ans No, he is not doing any work.

Q2. Why do tyres of vehicles have grooves?

Ans To increase friction which is needed to stop.

Question Hour-II

Look at the pictures and name the kinds of energy needed to do the following kinds of work :



Electric energy



Heat energy



Solar energy



Wind energy

Fun to Drill

Do yourself.

Fun to Act

Do yourself.

12. Simple Machines

Question Hour-I

A. Tick (3) the correct answer :

1. (a) load 2. (b) second class levers 3. (a) screw 4. (a) wedge

B. Fill in the blanks with the correct words from the box :

1. compound 2. fulcrum 3. effort 4. gradual slope 5. winding road 6. piece of rod 7. grooved wheel

C. Tick (3) the correct and cross (7) the incorrect statement :

1. (7) 2. (7) 3. (7) 4. (3) 5. (7) 6. (7)

D. Match the columns :

- | | | |
|---------------------|---|------------------------|
| 1. Scissors | → | (a) second class lever |
| 2. Fishing rod | → | (b) wedge |
| 3. Axe | → | (c) wheel and axle |
| 4. Wheel-barrow | → | (d) first class lever |
| 5. Drilling machine | → | (e) third class lever |

D. Answer the following questions :

Q 1. What are simple machines? How do they help us?

Ans. Simple machines are simple tools. They make our work easier. A pair of scissors, wheel-barrow, oar of a boat and see-saw are examples of simple machines.

Q 2. What is a lever? On what basis are levers classified?

Ans. A lever is a bar that can be moved about a fixed point called a fulcrum. Levers are classified on the basis of the position of load, effort and fulcrum.

Q 3. What is an inclined plane? How is it useful?

Ans. A gradual sloping surface is called an inclined plane. Inclined plane can be used to lift heavy objects to a higher level. We usually use a plank to load heavy things in a truck. This helps us to make our work easier.

Q 4. What is a wedge? Give two examples of a wedge being used in daily life.

Ans. A wedge has two inclined planes joined back to back with a sharp edge. A wedge moves through an object to make work easier. A shovel, an axe and an adze are examples of wedge which are used to split or cut an object.

Q 5. What is the difference between a pulley and a wheel and axle?

Ans. A pulley is a grooved wheel with a rope or cable around it. Wheel and axle move together. Without an axle, a wheel cannot be used as a machine. A pulley can be movable or fixed but a wheel is always fixed to an axle.

Think Beyond HOTS

Q. Carpenters use screws instead of nails to join two pieces of wood. Why?

Ans. Because screws join them more tightly than nails.

Question Hour-II

A. Classify the following machines and fill in the table :

Inclined plane	Lever	Wedge	Pully	Wheel and axle
stairs slope mountain road screw	bottle opener see-saw tweezers scissors	knife blade spear pin nail	wheel of a plane	curtain rod wheels tap knob

B. Write the name of the simple machines below each.

Do yourself.

C. Identify the kind of levers given below. Also mark the fulcrum (F), Load (L) and effort (E) :

Do yourself.

Fun to Drill

Do yourself.

Fun to Act

Do yourself.

13. Air and Water

Question Hour-I

A. Tick (✓) the correct answer :

1. (b) nitrogen 2. (c) all of these 3. (c) sulphur 4. (c) fan 5. (a) 3% 6. (b) impurities

B. Fill in the blanks with the correct words from the box :

1. atmosphere 2. ozone 3. nitrogen 4. oxygen 5. weight, space 6. loading

C. Circle the odd one in each group :

- | | | |
|-----------------------|--------------|---------------|
| 1. Nitrogen | <u>Dust</u> | Oxygen |
| 2. <u>Evaporation</u> | Distillation | Sedimentation |
| 3. Sand | Mud | <u>Salts</u> |

D. Answer the following questions :

Q1. Why is air important? Name some of the gases found in the air.

Ans. Air is important because we cannot stay alive for more than a few minutes without air. Air is a mixture of several gases. Nitrogen, oxygen, carbon dioxide and argon are found in air.

Q2. What is atmosphere? Name different layers of atmosphere.

Ans. Air, which is a mixture of gases, forms a layer around the earth. This layer is called the atmosphere. Atmosphere is divided into five layers : troposphere, stratosphere, mesosphere, thermosphere and exosphere.

Q3. Why do liquid rise in the dropper when we release the bulb?

Ans. A liquid rises in the dropper when we release the bulb because air exerts pressure. When we press the bulb of the dropper, there is no air in it, but when we release it, the air rushes to fill the space and so, the liquid rises in the dropper with the pressure of the air.

Q4. What is sedimentation and decantation?

Ans. The process by which insoluble substances which are heavier than water are separated is called sedimentation and decantation. When impurities sink down to bottom, it is sedimentation. When we pour the liquid into another vessel without disturbing the substances, it is called decantation.

Q5. What is distilled water? What are its uses?

Ans. On boiling, the water changes into vapour. When this vapour is cooled. Water vapour changes into water again. The water so received is distilled water. It is

mainly used in car batteries, in science experiments and medicines.

Q 6. Why should drinking water be purified?

Ans. Drinking water should be purified because it may have disease-causing germs which may cause cholera, jaundice and dysentery.

Q 7. Name three process involved in the treatment of the town water supply.

Ans. In the town water supply, the three processes involved in the treatment of water are : sedimentation, filtration and chlorination.

Think Beyond HOTS

Q1. When you blow up a balloon on which a notebook is kept, the notebook gets lifted. Why?

Ans. The air in the balloon occupies space and lifts the notebook.

Q2. You cannot drink juice using a straw having a small hole in it. Why?

Ans. The small hole contains a very low pressure of air, so juice does not pass through it.

Question Hour-II

Identify the process in the given picture and write their name in the space provide :

Do yourself.

Fun to Drill

Do yourself.

Fun to Act

Do yourself.

14. Light and Shadow

Question Hour-I

A. Tick (3) the correct answer :

1. (a) transparent 2. (a) straight line 3. (b) the moon is between the sun and the earth 4. (a) the earth is between the sun and the moon.

B. Fill in the blanks with the correct words from the box :

1. moon 2. shadow 3. light 4. revolves, rotates 5. magnets 6. water

C. Tick (3) the correct and cross (7) the incorrect statement :

1. (7) 2. (7) 3. (3) 4. (7) 5. (7)

D. Write two points of difference between the following :

1. Opaque and translucent object.

Opaque objects do not allow light to pass through them. And so a shadow is formed. Translucent objects allow some light to pass through them. And so a faint shadow is formed.

2. Transparent and translucent objects.

Transparent objects allow full light to pass through them, so no shadow is formed.

3. Solar eclipse and lunar eclipse.

When the moon comes between the earth and the sun, it is solar eclipse. When the earth comes between the sun and the moon, it is lunar eclipse.

E. Answer the following questions :

Q 1. Name any two sources of light.

Ans. Two sources of light are the sun and the stars. Candle and torch are artificial sources of light.

Q 2. How is shadow formed?

Ans. When something comes in the path of light and light cannot pass through it, a shadow is formed.

Q 3. Light travels in a straight line, verify it.

Ans. When a person looks a flower plant through two or three holes of a wooden piece,

he can see only the flower and not the leaves. It is so because the holes are in a straight line. If the holes are not in a straight line, he will not be able to see the flower. It shows that light travels in a straight line.

Q 4. What are opaque objects? Give an example.

Ans. Such objects through which light cannot pass are called opaque objects. For example—book, cardboard, wood, iron, etc.

Q 5. What are transparent objects? Give an example.

Ans. Such objects through which light can pass and no shadow is formed are called transparent objects. For example—glass.

Q 6. How is a solar eclipse caused?

Ans. When the moon comes between the earth and the sun, the moon casts a shadow on the earth. People under this shadow cannot see the sun. The sky becomes dark even though it is daytime. This is called solar eclipse.

Q 7. What is a partial lunar eclipse?

Ans. A partial lunar eclipse happens when the earth comes between the sun and the moon. The shadow of the earth falls on the moon. When the moon is partially hidden by the earth, partial lunar eclipse occurs.

Q 8. How are tides caused?

Ans. The earth and the moon attract each other like magnets by gravitational pull. The moon pulls everything on earth closer to itself. The earth is able to hold on everything except water. The water of the seas on the side of the earth facing the moon is attracted upwards which we call tide (high tide). The water of the seas on earth away from the moon is not attracted by the moon causing low tide.

Think Beyond HOTS

Q1. The sky always looks dark on the moon. Why?

Ans. The moon has no light of its own. As there is no sun in the moon night, the sky looks dark.

Q2. Why does life not exist on moon?

Ans. Because there is no air and water on the moon.

Question Hour-II

Do yourself.

Fun to Drill

Do yourself.

Fun to Act

Do yourself.

15. Pollution

Question Hour-I

A. Tick (3) the correct answer :

1. (b) environment 2. (a) pollutants 3. (b) forest areas 4. (b) carbon dioxide 5. (c) none of these

B. Fill in the blanks with the correct words from the box :

1. pollution 2. carbon dioxide 3. germs 4. chemicals 5. airports

C. Match the columns :

- | | | |
|-----------------------------|---|------------------------------------|
| 1. Burning of fuel | → | (a) water pollution |
| 2. Melting of polar icecaps | → | (b) carbon dioxide |
| 3. Polluted water | → | (c) effect of global warming |
| 4. Loud noise | → | (d) maintain the balance in nature |
| 5. Trees | → | (e) noise pollution |

D. Write short notes on :

1. Global warming

Average temperature of the atmosphere increases, which cause flood due to melting of ice on poles.

2. Acid rain

Damages soil, plants, building.

3. The greenhouse effect

Harmful effects of green house gases is greenhouse effect.

E. Answer the following questions :

1. What is environment?

Ans. Our environment consists of living and non-living things; air, water, land, plants and animals. All these things combinly make the environment.

2. What are the main causes of air pollution?

Ans. The main causes of air pollution are : burning of fuels in vehicles, smoke and harmful gases emitted by factories and power stations.

3. What are the main causes of water pollution?

Ans. The main causes of water pollution are : throwing wastes of industries, farms and sewage from homes and hospitals into rivers, oceans and streams.

4. What are the main causes of soil pollution?

Ans. The main causes of soil pollution are : Chemical and pesticides used to kill weeds and insects in the crop fields. Poisonous waste from factories, solid waste such as plastic, glass bottles also pollute the soil.

5. What are the main causes of noise pollution?

Ans. Loud noise from vehicles, loud speakers, machinery, aeroplanes, fire crackers and railways are the causes of noise pollution.

Q6. What are natural resources? Why do we feel the need to conserve them?

Ans. Air, water, soil, fuels and minerals are natural resources. We need to conserve them because our survival depends on them. Natural resources such as petrol, diesel and natural gas will end one day. Forests give us food, cloth and shelter and oxygen to breath. So we need to conserve them.

Think Beyond HOTS

Q. What is greenhouse?

Ans. The earth's atmosphere is a blanket of gases. Gases like carbon dioxide, nitrous oxide, methane and water vapour trap heat of the sun and do not allow it to escape back into the space. This leads to increase in infrared radiation close to the surface of the earth. This is called greenhouse effect.

Question Hour-II

Q. Which of the following can lead to global warming? Write a few lines about them.

Ans. Air conditioner, volcano, burning of fuels, refrigerator and cutting down of trees can lead to global warming.

Fun to Drill

Do yourself.

Fun to Act

Do yourself.

16. Natural Disasters

Question Hour-I

A. Tick (3) the correct answer :

1. (c) lava 2. (a) focus 3. (b) Richter 4. (c) tsunami 5. (a) drought

B. Fill in the blanks :

1. earthquake 2. The barren 3. tsunami 4. drought

C. Tick (3) the correct and cross (7) the incorrect statement :

1. (7) 2. (3) 3. (3) 4. (7)

D. Answer the following questions :

1. How do volcanoes erupt?

Ans. When the molten magma comes out from the mantle of the earth and reaches the crust through cracks, it is called eruption of a volcano.

2. What are earthquakes?

Ans. An earthquake is a sudden movement of the earth or a part of its surface. It is a severe shock that travels through solid rocks from underground to the surface.

3. How do earthquakes affect the earth and its people?

Ans. An earthquake, especially a strong one, always causes destruction of property and life. Cracks develop in buildings, trees get uprooted, landslides are caused and fires broke out. Tidal waves sweep away everything at coastal areas.

4. What is tsunami? What is it otherwise known as?

Ans. Tsunami is a series of huge sea waves that occur after an under sea disturbance, such as earthquake or volcano eruption. Tsunami is also known as tidal sea waves.

5. How does tsunami affect human life?

Ans. Tsunami is the name of destructive sea waves. These sea waves can cause a lot of destruction on the shores. A tsunami can destroy everything near the sea area within moments.

Q6. What are cyclones?

Ans. During a cyclone, wind blows at a very fast speed. Cyclones are always accompanied by very heavy showers. When very fast winds blow and bring heavy rains, it is called a cyclone.

Q7. What is drought? What conditions cause a drought?

Ans. Drought is a situation just opposite the floods. Drought is occurred due to scanty or no rainfall. Due to drought, crops are destroyed. Scarcity of food and water drive cattle and even human beings into the jaws of death.

Think Beyond HOTS

Q. Why tsunami is known as tidal waves?

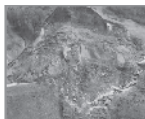
Ans. Because huge sea waves rise in the sea and they strike the sea coasts.

Question Hour-II

Write the name of the following disasters :



Volcano



Landslide



Tsunami



Cyclone



Drought

Fun to Drill

Do yourself.

Fun to Act

Do yourself.

Model Paper-II

Solve Yourself.