

I. Choose the correct answer: Refer text book pg.no.28

1. Salty
2. Distillation
3. I and iv
4. Ground water
5. use it for watering plants

II. Fill in the blanks: Refer book pg.no.28

1. 0.3
2. Evaporation
3. Dam
4. Rain
5. Hydrological cycle

III. Write True or false: Refer book pg.no.28

1. False
2. False
3. True
4. True
5. False

IV. Match the following Refer Book pg. no. 28

1. Increased rain fall
2. Lake
3. evaporation
4. Water vapour
5. pole

V. Answer the following in one or two sentences:

1. Name four different sources of water.

Ans: Wells, canals, tanks, ponds, rivers etc are the main sources of water.

2. We could see clouds almost everyday but why doesn't it rain daily?

Ans. The droplets of cloud have to become heavier to form drops that fall to the earth as rain.

3. How do aquatic animals manage to live in Arctic and Antarctic circle?

Aquatic animals living in Arctic and Antarctic circle do not die because the floating layer of ice acts as a protective coat and doesn't allow heat to escape from water.

4. What are the main reasons for water scarcity?

Ans: * Population explosion
* Pollution of water
* uneven distribution of rain fall
* careless use of water

5. Differentiate between surface water and ground water.

Surface water	Ground water
Water present on the surface of earth is called surface water	Water present beneath the earth's surface in soil is called ground water.

6. How is water classified based on salinity?

Ans: Based on salinity water is classified into three categories.

- * Fresh water - 0.05 to 1% of salt
- * Brackish water - 3% of salt
- * sea water - more than 3% of salt

7. Sea water, polar ice caps, lakes, rivers Pick the odd one out and give reason.

Oddone: sea water

Reason : Sea water is saline water whereas others are fresh water

VI. Answer in detail:

1. Explain water cycle:

Ans: * Water cycle involves three stages:

Evaporation, condensation and precipitation.

Evaporation: Water from oceans, lakes, ponds, etc evaporates due to the heat of the sun.

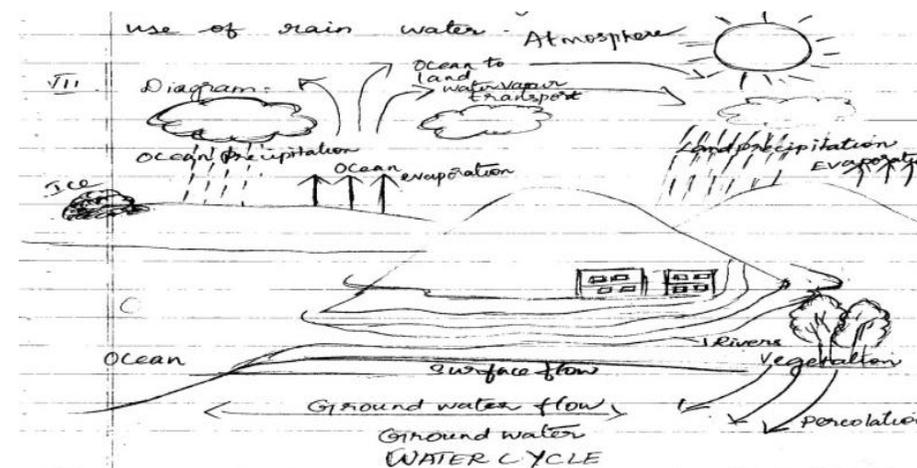
Condensation: Cooling of water vapour and changing into water droplets is called condensation.

Precipitation: The water droplets collide with one another to form larger droplets. These drops of water fall in the form of rain.

2. How can water management be done to conserve water?

Ans: * Bringing awareness about the bad effects of throwing wastes into the waterbodies.

- * Recycling of water.
- * Minimizing the use of chemical fertilizers.
- * Controlling deforestation
- * Adopting drip irrigation and sprinkler irrigation.
- * Rain water harvesting – collection and use of rain water.



Ln -4 Environment

I. Choose the correct Answer: (Refer pg.64)

1. All of them
2. Plants
3. Coconut shell
4. Pollution
5. None of the above

II. Fill in the blanks: (Refer pg.64)

1. Herbivores
2. abiotic
3. Recycling
4. diseases
5. Reuse

III. True or false: (Refer pg. 64)

1. True
2. True
3. False
4. False
5. True

IV. Match the following: (Refer pg. 64)

1. Animals
2. Water pollution
3. Land pollution
4. Terrestrial ecosystem
5. Air Pollution

V. Answer in short:

1. Define ecosystem.

Ecosystem is a community of living and non living things that work together.

2. What are the two types of ecosystems?

The two types of ecosystems are,

- * natural ecosystem
- * artificial ecosystem

3. Distinguish between producers and consumers.

Producers	Consumers
* Producers are also called autotrophs	* Consumers are also called heterotrophs
* Producers are organisms that are able to produce their own food.	* Consumers are organisms which cannot produce their own food and depend on other organisms for food.
Eg. plants	Eg. Animals

4. Give one example of a food chain in an aquatic ecosystem

Aquatic plant → Aquatic insect → Larva → fish

This is an example for aquatic (lake) ecosystem

5. Define composting.

The process of degradation of organic wastes into manure by the action of microorganism is called composting.

6. Pick the odd one out and give reason: fruit peel, plastic, metal scraps, aluminium bottles

Odd one: Fruit peel is a biodegradable waste whereas others are non-biodegradable wastes.

7. What are the types of pollution?

- * Air pollution
- * Water pollution
- * land pollution
- * Noise pollution

VI. Answer in detail:

1. Explain about the steps for solid waste management.

* Avoid:

Avoid the usage of unwanted materials which create more debris.

*Reduce:

Reduce the waste by using durable goods.

*Reuse:

Usage of things again rather than using and throwing after a single use.

*Recycle:

- * Making new products from waste material.

*Compost:

- *Degradation of organic waste into manure.

*Incinerate:

- * The Burning of solid waste in incinerator

* Land fill:

- * The method of dumping wastes in a natural or man made pits and covered with soil

2. Describe in detail about various trophic level.

* The various levels in the food chain is called a trophic level.

- * The different levels are:

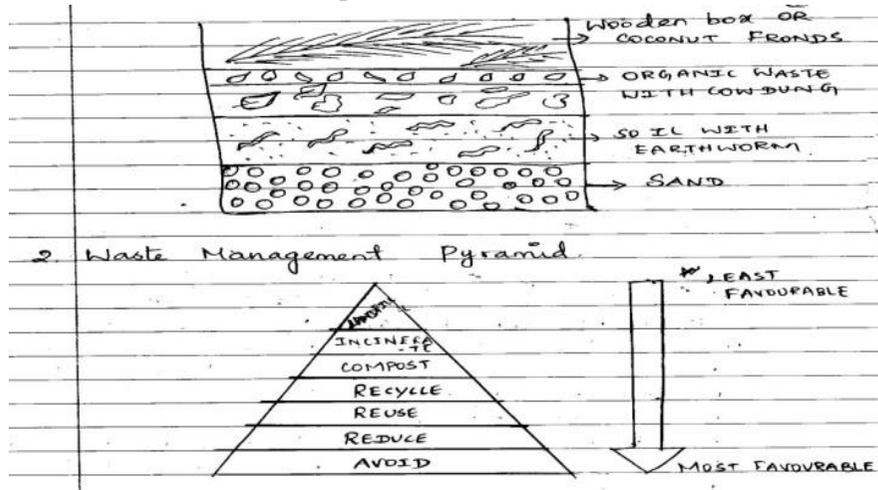
i. Organisms that are able to produce their own food. are called producers. Eg. Plants

ii. Animals that eat plants are primary consumers. Eg. Grasshopper.

- iii. Animals that eat primary consumers are called secondary consumers. Eg. Frog
- iv. Animals that eat secondary consumers are called tertiary consumers eg: snake
- v. Large predators that eat tertiary consumers are called quaternary consumers. Eg. Eagle.

VII. Diagram:

Process of. 1. Vermicompost.



Ln -1 Magnetism

I. Choose the correct answer (pg -12)

- 1. b. plain pins
- 2. c. chinese
- 3. d. North - south
- 4. c. Hit with a hammer
- 5. c. direction

II. Fill in the blanks (pg -12)

- 1. Horse shoe, Ring, Bar magnet.
- 2. Magnetic substance.
- 3. Magnetic
- 4. lode stone/ bar magnet
- 5. two

III. True or False (pg - 12)

- 1. False
- 2. True
- 3. False
- 4. False
- 5. False

IV. Match the following (pg - 12)

- 1. Magnetic needle
- 2. Opposite poles
- 3. Like poles
- 4. Maximum magnetic strength
- V. Answer in short

1. Mention any two methods by which a magnet can be demagnetized.

Ans. * By hammering the magnet strongly
* by heating a magnet strongly and kepping it in the east - west direction.

2. Why is it advised to keep magnets away from mobiles, television, computers and CD's?

Ans: Because all those devices are made up of magnetic material and has magnets in it, when we bring magnets near them, it will spoil the devices.

3. What is the compound of iron present in a lode stone and after whose name is the term magnet coined?

Ans: Iron oxide or magnetite is the compound present in lode stone and the term magnet is coined after a shepherd named magnus.

4. Difference between magnetic and non- magnetic substance.

Magnetic substance	Non - Magnetic Sunstance
* Substances which are attracted by magnet are called magnetic substances. * Iron, cobalt, nickel... etc are magnetic materials	Substances which are not attracted by magnet are called non- magnetic substances. Paper, plastic, rubber ...etc are non magnetic materials

5. Iron nail, pins, rubbertube, needle Pick the odd one out and give reason.

Odd one - Rubber tube
Reason - Rubber tube is a non- magnetic material but others are magnetic material.

6. Explain the attraction and repulsion between magnetic poles.

Ans. Like poles (N-N, S-S) repel each other and unlike poles (N-S, S-N) attract each other.

7. List out some advantages of electro magnetic trains.

- i. These trains are capable of running upto 600 km/hr
- ii. They do not make any noise.
- iii. They require less energy and are eco- friendly.

VI. Answer in detail:

1. How does the electromagnetic train work?

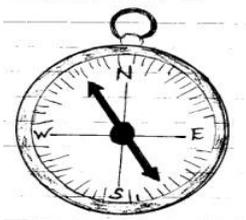
* Electromagnets are used in Electromagnetic train.

- * Electromagnets are magnetized only when current flows through them.
- * When the direction of current is changed the poles of the electromagnets are also changed.
- * Like poles of the magnets which are attached at the bottom of the train and rail track repel each other.
- * Therefore the train is lifted from the track up to a height of 10cm
- * The train moves with the help of the force of attraction or repulsion properties of magnets. That are attached on the sides of track and at the bottom of the train.
- * Hence by controlling the current we can control the magnets and movement of the train.

2. Write the properties of a magnet.

- Ans. 1. A magnet always has two poles (ie) North pole and South pole.
2. Poles of a magnets can never be isolated.
 3. Like poles repel and unlike poles attract.
 4. A freely suspended magnet always gets aligned to north. South direction.

VII. Diagram:
Magnetic compass.



Ln – 5 Plants in Daily Life

I. Choose the correct answer:

1. c. Humming bird
2. d. Neem
3. a. Potato
4. c. Turmeric
5. c. Banyan tree

II. Fill in the blanks

1. 16th
2. Cotton
3. Palm tree

4. tulsi
 5. Pulses
- III. Say True or False
1. False
 2. True
 3. False
 4. False
 5. False

IV. Match the following:

- | | | |
|-------------------------|---|------------|
| 1. Fibre yielding plant | - | Hemp |
| 2. Hardwood | - | Teakwood |
| 3. Neem | - | Chloramine |
| 4. Clove | - | Spice |
| 5. Millet | - | cereals |

V. Answer is short:

1. Define Economic botany.

Ans: Economic botany is a study of relationship between people and plants and the uses of plants in economy.

2. Name few spices used in India.

Ans. The spices which we use widely in India are cardamom, black pepper, curry leaves, ginger and turmeric.

3. Differentiate between hardwoods and softwoods.

Hardwoods	Softwoods
Hardwoods are angiosperms. Eg. Teak It is used to make furniture, decks and flooring	Softwoods come from gymnosperms. Eg. Pine It is used to make plywood, wooden boxes and paper making

4. What are pulses?

Ans. Pulses are edible seeds of plants legume family. Pulses are secured in pods. Eg. Bengal gram, Green mung bean.

5. Pick the odd one out and give reason.

Rose, Neem, Jasmine and Crotons

Odd one: Neem

Reason: Neem is a medicinal plant where as others are ornamental plants.

6. What are medicinal plants?

Ans. The chemical compounds in some plants act against insects, fungi and certain germs. They are called medicinal plants Eg. Neem, Amla

7. What are fibre yielding plants?

Ans. Plants which give us fibres necessary for our uses are called as fibre yielding plants. The fibre from these plants can be spun into thread, rope and cloth. Eg. cotton plant, yields cotton fibre.

VI. Detail Answer:

1. Tabulate the list of plants that have the highest medicinal values.

Plant Name	Parts used	Medicinal USE
1. Amla	Fruit	It cures vitamin C deficiency diseases like scurvy and improves immunity
2. Tulsi	Leaves, seed	It is used to cure cough and cold
3. Aloe	Leaves	It heals wounds, skin burns and ulcer.
4. Neem	Bark, leaf and seed	It is used against skin diseases. It helps to fight against foreign invaders like microbes.
5. Tumeric	Rhizome	

2. Write short notes on uses of plants.

Ans. Plant gives Food:

Plants provide nutrition and energy Eg: Spinach

Plant Gives spices:

Plants give spices that are used for flavouring, colouring or preserving food Eg. bay leaves.

Plant gives Medicines:

Medicinal plants contain chemical compounds which are useful in fighting against germs eg: Neem.

Plant gives Fibres:

Fibre yielding plants give, textile, cordage and filling fibres Eg. Silk

Plants give Timber:

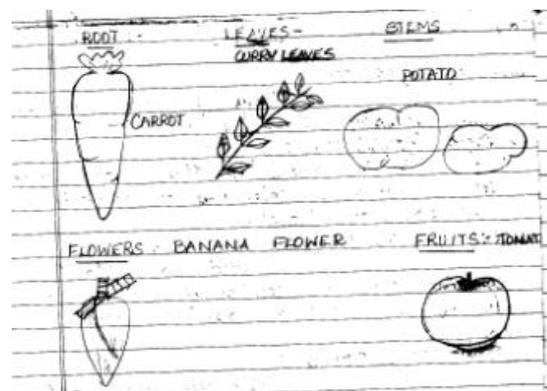
Timber yielding plants give us useful hardwood and softwoods Eg. Pine, teak.

Plants give Fuels:

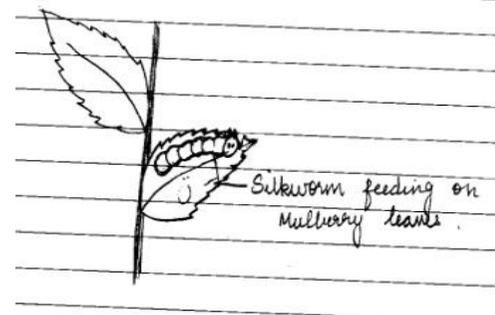
Some plants are also grown to extract biofuels. Eg. Jatropha.

VII. Diagram:

1. Different parts of plants used as Vegetable:



2. Interrelationship Between Plants and animals
Mulberry leaves and silkworm.



Ln-3 Chemistry in Everyday Life

I. Choose

1. Animal fats and vegetable oils
2. Sodium hydroxide
3. Hardening
4. Carbolic acid
5. Starch

II. Fill in the Blanks

1. Propanethial s-oxide
2. Sodium hydroxide
3. Earthworms
4. Organic
5. Starch

III. True or False

1. False
2. False
3. True
4. False
5. True

IV. Match the following

1. NaOH
2. RCC
3. NPK
4. CaSO₄. 2H₂O
5. C₆ H₅ OH

V. Short Answers

1. Define fertilizers.

Fertilizers are organic or inorganic materials that we add to the soil to provide one or more nutrients to the soil.

2. Distinguish between Gypsum and Epsom

Gypsum	Epsom
(i) Gypsum is a soft white or grey, naturally available mineral.	Epsom is a salt
(ii) Chemical name of gypsum is calcium sulphate dehydrate	Chemical name of Epsom is magnesium sulphate hydrate.
(iii) Molecular formula of gypsum is Ca SO ₄ . 2H ₂ O	Molecular formula of Epsom is Mg So ₄ . 7H ₂ O

3. Urea, ammonium sulphate, super phosphate, Vermicompost Pick the odd one out.

Odd one: Vermicompost

Reason : Vermicompost is an organic fertilizer where as others are Inorganic fertilizers

4. List out the three important nutrients among the various nutrients needed for the growth of plants.

The important nutrients needed for the growth of plants are.

- * Nitrogen (N)
- * Phosphorous (P)
- * Potassium (K)

5. Write the uses of Gypsum.

- * Used as Fertilizers
- * Used in the process of making cement
- * In the process of making plaster of paris

6. Define organic fertilizers.

Fertilizers containing only plant or animal based materials or those synthesized by micro organisms are called organic fertilizers.

Ex. Vermi Compost.

7. What are adhesives? Mention their types

→ Adhesives are substances that are used to join two or more components together.

→ There are two types of adhesives

- * Natural adhesives
- * Artificial adhesives

VI. Detail.

1. Explain the process of manufacturing cement and its uses.

→ The cement is manufactured by crushing of naturally occurring minerals such as lime, clay and gypsum through milling process.

→ Cement becomes hardened when it is mixed with water.

→ Gypsum plays a very important role in controlling the rate of hardening of the cement.

Uses of cement.

→ Cement is used as mortar, concrete and reinforced cement concrete.

2. Explain plaster of paris and its uses

→ Plaster of paris consists of fine white powder.

→ The molecular formula of plaster of paris is CaSO₄. ½ H₂O.

→ Plaster of paris is prepared by heating gypsum, where it gets partially dehydrated.

Uses

- * In making black board chalks
- * In surgery for setting fractured bones
- * In construction industry.

VII. Diagram:

