

Living Science
Class 7
Science Chapter 1 - Nutrition In Plants

Page No 8:

Question 1:

If a new organism is discovered and it is found that it can make food for itself from simple non-living substances found in nature, what will you classify it as—an autotroph or a heterotroph? Give reasons.

ANSWER:

An organism that can prepare its food from simple non-living substances will be classified as an autotroph. This is because autotrophic organisms are those organisms which can use simple non-living substances (such as carbon dioxide and water) to produce their own food. These organism can obtain energy for this process through sunlight or chemicals.

Question 2:

The absence of which of these will not affect photosynthesis—oxygen, carbon dioxide, water, chlorophyll, light? Give reasons.

ANSWER:

The absence of oxygen will have no effect on the process of photosynthesis. This is because the photosynthetic process utilises water and carbon dioxide to produce oxygen and carbohydrate in the presence of chlorophyll and sunlight. Thus, oxygen is a product of photosynthesis and is not required for photosynthesis.

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Question 3:

Do you expect the intensity of light to affect the rate of photosynthesis?

ANSWER:

Yes, the intensity of light has a direct affect on the rate of photosynthesis. The chlorophyll molecules that are essential for photosynthesis require a certain intensity of light to perform maximum rate of photosynthesis. Thus, light intensity will certainly affect the photosynthesis rate.

Page No 11:

Question 1:

A tiger does not eat plants, so it does not depend on plants for food. Is the statement true? Justify your answer.

ANSWER:

The given statement is false. Although a tiger does not eat plants, it still depends on the plants. This is because tigers feed on herbivores such as deer which obtain their food from the plants. If the plants are not available, then these herbivores will not get food and consequently, tiger will not get any food. Thus, tiger depends on plant for their food.

Question 2:

All plants are autotrophic. Do you agree? Give reasons.

ANSWER:

No, all plants are not autotrophic. Some of the non-green plants such as **odder plants** obtain their food from other plants and these plants are heterotrophic plants. Heterophic plants generally do not possess chlorophyll, which inhibits their ability to prepare their own food. Consequently, such plants are not autotrophic.

Question 3:

In a forest, trees keep taking nutrients from the soil. Therefore, after sometime, the nutrient level will become so low that growth of trees will suffer. Do you agree? Give reasons.

ANSWER:

No, the nutrient level in a forest will not become low enough to prevent the growth of trees. This is because in forests, the decaying of dead animals and plants adds nutrients to the soil. This natural process prevents the exhaustion of nutrients and replenishes the nutrients in the soil.

Page No 11:**Question 4:**

Plants need nitrogen to make proteins. Can they absorb nitrogen from the atmosphere?

ANSWER:

No, plants can not absorb nitrogen from the atmosphere. Plants can use nitrogen only when it is present in the soil in a soluble form. This soluble nitrogen is absorbed by the roots of the plants and is used by the plants to make proteins.

Page No 12:**Question 1:**

The life process/processes that provides/provide energy is/are

- (a) nutrition
- (b) respiration
- (c) both nutrition and respiration
- (d) response to stimuli.

ANSWER:

- (c) both nutrition and respiration

Nutrition is the process of obtaining food and utilising it, and respiration is the oxidation of food for obtaining energy.

Question 2:

Which of these are autotrophs?

- (a) all plants
- (b) green plants
- (c) all animals
- (d) unicellular organisms

ANSWER:

- (b) green plants

Because green plants are capable of making their own food, they are called autotrophs.

Question 3:

Which of these is not necessary for photosynthesis?

- (a) carbon dioxide
- (b) chlorophyll
- (c) light
- (d) nitrogen

ANSWER:

(d) nitrogen

Green plants, due to the presence of chlorophyll in their leaves, can perform photosynthesis in the presence of light by using carbon dioxide as a raw material. Nitrogen is not needed for it.

Question 4:

Which of these elements is needed in addition to carbon, hydrogen and oxygen to make proteins?

(a) nitrogen

(b) phosphorus

(c) potassium

(d) calcium

ANSWER:

(a) nitrogen

Nitrogen is an important constituent of proteins.

Question 5:

Which of the following gets absorbed from the atmosphere during photosynthesis?

(a) oxygen

(b) water vapour

(c) carbon dioxide

(d) nitrogen

ANSWER:

(c) carbon dioxide

Green plants have tiny pores or stomata on their leaves which allow them to absorb carbon dioxide from the atmosphere during photosynthesis.

Question 6:

Organisms that live in or near the host and obtain their nutrition from the host are called

(a) saprophytes

(b) autotrophs

(c) heterotrophs

(d) parasites

ANSWER:

(d) parasites

Organisms that cannot make their own food and are therefore entirely dependent on their hosts for food are called parasites.

Question 7:

Partial parasites are

(a) green plants

(b) non-green plants

(c) either green or non-green plants

(d) neither green nor non-green plants.

ANSWER:

(a) green plants

These plants obtain water and minerals from their hosts. Hence, they are called partial parasites.

Question 8:

Which of these is a saprophyte?

- (a) venus flytrap
- (b) mushroom
- (c) pitcher plant
- (d) dodder

ANSWER:

- (b) mushroom

Mushrooms live on dead and decaying plants and animals to get their food; hence, they are called saprophytes.

Question 1:

Living organisms that cannot make their own food are called _____

ANSWER:

Living organisms that cannot make their own food are called heterotrophs.

Question 2:

The structures in cells that contain chlorophyll are called _____

ANSWER:

The structures in cells that contain chlorophyll are called chloroplasts.

Question 3:

What does 'photo' in photosynthesis refer to?

ANSWER:

'Photo' in photosynthesis refers to light.

Question 4:

Which bacteria in the soil can convert atmospheric nitrogen into soluble compounds?

ANSWER:

Rhizobium are the bacteria which are present in the soil and convert atmospheric nitrogen into soluble compounds.

Question 5:

What type of plant is *Cuscuta*?

ANSWER:

Cuscuta is a parasitic plant which obtains food from the other plants.

Question 6:

What do you call a mutually beneficial relationship between two living organisms?

ANSWER:

Symbiosis is the mutually beneficial relationship between two living organisms.

Question 7:

Name one organism that gets its food from dead and decaying matter.

ANSWER:

Mushroom gets its food from dead and decaying matter.

Question 8:

When iodine is added to starch, it becomes _____ in colour.

ANSWER:

When iodine is added to starch, it becomes blue-black in colour.

Page No 12:

Question 9:

What is the ultimate source of all the energy needs of our body?

ANSWER:

Food is the ultimate source of all the energy needs of our body.

Note: Although sun is the ultimate source of energy for all living beings. But the energy requirements of our body is fulfilled by the food obtained from the plants.

Page No 13:**Question 10:**

Saprophytes are green in colour. True or false?

ANSWER:

False, as saprophytes are non-green plants.

Question 11:

Some green plants are also heterotrophic in nature. True or false?

ANSWER:

True.

Some green plants are heterotrophic in nature. For example, plants like pitcher plant feeds on insects.

Question 12:

Which cells control the opening and closing of stomata?

ANSWER:

The guard cells control the opening and closing of stomata.

Question 1:

What is nutrition?

ANSWER:

Nutrition is defined as the process of obtaining food and utilising it by any organism. Nutrition is one of the key processes of obtaining energy from food.

Question 2:

What are 'stomata'? Where are they normally found?

ANSWER:

Stomata are the tiny pores on the leaves through which plants absorb atmospheric carbon dioxide. They are normally found on the underside of the leaves.

Page No 13:**Question 3:**

Write down the chemical equation for manufacture of food in green plants.

ANSWER:

From book, page 6

Question 4:

What factors are essential for photosynthesis to take place?

ANSWER:

Factors essential for photosynthesis are sunlight, water, carbon dioxide and chlorophyll (green pigment present in the leaves).

Question 5:

How does an insectivorous plant absorb nutrients from an insect trapped by it?

ANSWER:

Insectivorous plants secrete digestive juices to digest the insect trapped by them. These plants then absorb the nutrients released from the digested insect.

Question 6:

Why is nitrogenous fertilizer not added in soil in which leguminous plants are grown?

ANSWER:

Nitrogenous fertilisers are not added to the soil in which leguminous plants are grown because these plants can fix atmospheric nitrogen in the soil with the help of the bacteria *Rhizobium* present in their root nodules. These bacteria can fix the atmospheric nitrogen in soluble compounds which can be absorbed by the plants.

Question 7:

How does a saprophyte digest its food?

ANSWER:

A saprophyte secretes digestive juices on the dead and decaying matter to convert the solid substances into liquid. The saprophyte then absorbs the nutrients from this liquid.

Page No 13:

Question 1:

Differentiate between autotrophs and heterotrophs, giving two examples of each.

ANSWER:

Autotrophs	Heterotrophs
Organisms which can make their own food from simple substances are called autotrophs.	Organisms which can not make their own food and obtain it directly or indirectly from green plants are called heterotrophs.
They are producers.	They are consumers.
For example, all green plants, cyanobacteria, etc.	For example, all animals like cow, lion and humans.

Question 2:

How will you test a leaf for starch? Mention any precautions you will take.

ANSWER:

Test for starch:

- Pluck one of the green leaves that have been exposed to sunlight.
- Boil that leaf in water for 5 minutes to soften it.
- Then put the leaf in a test tube containing alcohol. Now, gently place this test tube in a beaker of warm water till the alcohol starts boiling. The chlorophyll will slowly get dissolved in the alcohol and the leaf will start losing its green colour.
- Now, remove the alcohol by washing the leaf with warm water. Then spread the leaf over a white tile and add some iodine solution to it.
- Wash the leaf with water to remove the iodine solution and then hold it in light. The parts of leaf which have starch will turn blue-black.

Precautions

- Do not allow the water in the beaker to boil.

Question 3:

How do plants get nitrogen to synthesize proteins?

ANSWER:

Nitrogen is present in the atmosphere in large amounts, but plants can not absorb it directly. There are two ways by which plants can absorb nitrogen. They are as follows:

- The soil bacterium *Rhizobium* is able to fix the atmospheric nitrogen in water soluble compounds. Plants absorb these compounds along with water in order to get nitrogen.
- Plants can also get nitrogen from the nitrogen-rich fertilizers used by farmers to treat the soil.

Question 4:

All animals—whether herbivores, carnivores or omnivores—depend on plants for their food. Discuss.

ANSWER:

Plants are capable of making their own food. All animals whether herbivores, carnivores or omnivores can not make their own food; hence, they depend on the plants for their food. Herbivores feed on plants to obtain nutrition. Again, the carnivores eat herbivores to obtain nutrition. Thus, carnivores indirectly depend on plants for their food. Omnivores, on the other hand, can directly obtain food from plants or indirectly consume animals which feed on plants. Thus, all animals ultimately depend on plants for their food.

Question 5:

Explain the following with the help of an example for each:

- (a) parasitic nutrition
- (b) symbiosis
- (c) saprotrophic nutrition

ANSWER:

(a) Parasitic nutrition: Parasites feed on other living organisms to obtain nutrition. This mode of nutrition is referred to as parasitic nutrition. For example, non green plants like dodder which can not synthesise their own food, grows over other plants and sucks nutrition from them using their root like structure.

(b) Symbiosis: The mutually beneficial relationship between two organisms is termed as symbiosis. For example, lichens are association between alga and fungi. Alga supplies food to its fungal partner, while fungi provides shelter to its algal partner.

(c) Saprotrophic nutrition: Organisms which feed on dead and decaying matter are called saprotrophs, and this mode of obtaining nutrition is called saprotrophic nutrition. For example, mushrooms, fungi and bacteria

Question 6:

Why are manures and fertilizers added to the soil in a farm?

ANSWER:

Manures and fertilisers are added to the soil in order to enrich its organic composition and replenish the nutrients in it. The plants absorb most of the nutrients from the soil, leaving the soil deficient of these nutrients. Manures and fertilisers are rich in organic matter and nutrients like nitrogen, potassium and phosphorous. Thus, according to the need of the plants, farmers add manures and fertilisers in the soil.

Question 7:

Distinguish between parasites and partial parasites in plants, giving one example of each.

ANSWER:

Parasites	Partial Parasites
Parasites are non green plants which feed on other plants.	Partial parasites are green plants which can synthesis their own food but absorb water and minerals from other plants.
For example, dodder sucks food from other plants via its hair like structure.	For example, mistletoe plant which grows on a mango tree.

Page No 13:**Question 1:**

We make our own food in the kitchen. This means that humans are also autotrophs. Do you agree? Give reasons.

ANSWER:

Humans can not synthesize their own food; therefore, they are heterotrophs. We make our own food in the kitchen but the raw materials that we use to cook the food are either obtained from plants or from animals. Thus, humans, directly or indirectly, depend upon plants for their food. For example, we cook vegetables obtained from plants and meat obtained from animals.

Question 2:

Why can't animals make food from carbon dioxide, water and sunlight, like plants do?

ANSWER:

Unlike plants, animals lack chloroplast in their body. So, animals can not prepare their food from carbon dioxide, water and sunlight. Chloroplast is an organelle which is specifically present in green plants. It has a green coloured pigment called chlorophyll. This chlorophyll traps the sunlight and enables plants to make food, which animals can not.

Question 3:

The pitcher plant and Venus flytrap are green plants that can photosynthesize.

Why do they need to feed on insects?

ANSWER:

Even though Venus flytrap and pitcher plant are green plants, they can not perform photosynthesis because they grow in a soil which is poor in nutrients. Therefore, to obtain nutrition they feed on insects. This nutrition supplements the food prepared by them via photosynthesis.

Question 4:

Plants do not have a digestive system like us. Why do they not need a digestive system?

ANSWER:

Plants make their food through the process of photosynthesis. Because the synthesis of food occurs within them, they do not need to digest it. Therefore, they do not have a digestive system like humans.

Page No 13:**Question 1:**

Deepak carried out an experiment to see the effect of increasing the amount of carbon dioxide available to a pondweed (a submerged plant) on the rate of photosynthesis carried out by the plant. The readings of the experiment are potted in the graph.

Answer these questions.

1. How do you think he measured the rate of photosynthesis?
2. How do you think he increased the amount of carbon dioxide in the water?
3. Since temperature causes a change in the rate of photosynthesis, he kept the temperature constant throughout the experiment. Suggest one more factor that he should have kept constant.
4. Why did the graph increase initially?

5. Why do you think it ultimately levelled off?

ANSWER:

1. The rate of photosynthesis can be measured by -

- by measuring the CO₂ uptake or the O₂ output or
- by measuring the gas exchange
- by measuring the amount of increase in dry weight of the photosynthesis plant or a specific plant part.
- by using Ganong's Photosynthometer

He must have used any one of the above mentioned methods.

2. The amount of CO₂ can be increased the water by adding the chemical potassium hydrogencarbonate. It acts as a source of CO₂. The amount of CO₂ can be increased by increasing the amount of this chemical.

3. Another factor which he should keep constant is the light intensity.

4. The graph increased initially because the rate of photosynthesis increases with the increase in the amount of carbon dioxide.

5. The graph levelled off because the increase in the rate of photosynthesis with the increase in carbon dioxide, occurs only upto a point. After reaching that point, increase in the concentration of carbon dioxide has no effect on the rate of photosynthesis.

Page No 14:

Question 1:

Anwesa owns a restaurant. One day she noticed fungus growing on the bread she had bought in the morning, which had to be served for breakfast to her clients. She immediately asked her cook to throw away the bread and purchase fresh ones. In doing this, she lost some money. What value did Anwesa show?

ANSWER:

The above incident shows that Anwesa is a responsible, aware and an honest person who cares more about the health of her customers rather than her profits.

Chapter 1(Nutrition in plants)

A. Choose the most appropriate answer:-

1.a 2.b 3.d 4.b 5.d 6.a 7.b 8.b

B. Very short answer.

1. Heterotrophs 2. Chloroplast 3.light 4.Rhizobium bacteria 5.parasites 6.symbiosis 7.fungi 8.blue black 9.food 10.false 11.true 12.guard cells.

C. Short answer questions.

1.Nutrition is defined as the process of obtaining food and utilising it by any organism. Nutrition is one of the key processes of obtaining energy from food.

2.Stomata are the tiny pores on the leaves through which plants absorb atmospheric carbon dioxide. They are normally found on the underside of the leaves.

3.The chemical equation representing the process of manufacturing food by green plants (photosynthesis) is as follows:



4.Factors essential for photosynthesis are sunlight, water, carbon dioxide and chlorophyll (green pigment present in the leaves).

5.Insectivorous plants secrete digestive juices to digest the insect trapped by them. These plants then absorb the nutrients released from the digested insect.

6.Nitrogenous fertilisers are not added to the soil in which leguminous plants are grown because these plants can fix atmospheric nitrogen in the soil with the help of the bacteria Rhizobium present in their root nodules. These bacteria can fix the atmospheric nitrogen in soluble compounds which can be absorbed by the plants.

7.A saprophyte secretes digestive juices on the dead and decaying matter to convert the solid substances into liquid. The saprophyte then absorbs the nutrients from this liquid.

D. Long answer questions

1.

Autotrophs	Heterotrophs
1.Organisms which can make their own food from simple substances are called autotrophs.	1.Organisms which can not make their own food and obtain it directly or indirectly from green plants are called heterotrophs.
2.They are producers.	2.They are consumers.
3.For example, all green plants, cyanobacteria, etc.	3.For example, all animals like cow, lion and humans.

2.Test for starch:

- Pluck one of the green leaves that have been exposed to sunlight.
- Boil that leaf in water for 5 minutes to soften it.
- Then put the leaf in a test tube containing alcohol. Now, gently place this test tube in a beaker of warm water till the alcohol starts boiling. The chlorophyll will slowly get dissolved in the alcohol and the leaf will start losing its green colour.
- Now, remove the alcohol by washing the leaf with warm water. Then spread the leaf over a white tile and add some iodine solution to it.
- Wash the leaf with water to remove the iodine solution and then hold it in light. The parts of leaf which have starch will turn blue-black.

Precautions

- Do not allow the water in the beaker to boil.

3. Nitrogen is present in the atmosphere in large amounts, but plants can not absorb it directly. There are two ways by which plants can absorb nitrogen. They are as follows:

- The soil bacterium *Rhizobium* is able to fix the atmospheric nitrogen in water soluble compounds. Plants absorb these compounds along with water in order to get nitrogen.
- Plants can also get nitrogen from the nitrogen-rich fertilizers used by farmers to treat the soil.

4. Plants are capable of making their own food. All animals whether herbivores, carnivores or omnivores can not make their own food; hence, they depend on the plants for their food. Herbivores feed on plants to obtain nutrition. Again, the carnivores eat herbivores to obtain nutrition. Thus, carnivores indirectly depend on plants for their food. Omnivores, on the other hand, can directly obtain food from plants or indirectly consume animals which feed on plants. Thus, all animals ultimately depend on plants for their food.

5.(a) Parasitic nutrition: Parasites feed on other living organisms to obtain nutrition. This mode of nutrition is referred to as parasitic nutrition. For example, non green plants like dodder which can not synthesise their own food, grows over other plants and sucks nutrition from them using their root like structure.

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© Saprotrophic nutrition: Organisms which feed on dead and decaying matter are called saprotrophs, and this mode of obtaining nutrition is called saprotrophic nutrition. For example, mushrooms, fungi and bacteria

6. Manures and fertilisers are added to the soil in order to enrich its organic composition and replenish the nutrients in it. The plants absorb most of the nutrients from the soil, leaving the soil deficient of these nutrients. Manures and fertilisers are rich in organic matter and nutrients like

nitrogen, potassium and phosphorous. Thus, according to the need of the plants, farmers add manures and fertilisers in the soil.

7.

Parasites	Partial parasites
1.Parasites are non green plants which feed on other plants.	1.Partial parasites are green plants which can synthesis their own food but absorb water and minerals from other plants.
2.For example, dodder sucks food from other plants via its hair like structure.	2.For example, mistletoe plant which grows on a mango tree.

Class – VII

Chapter – 1 (hopscotch)

By sir Milan

A . 1.It is a well – known and simple game .

2 . It is easy and needs very little space to play .

3 . The main aim of the game to hop across the squares of the grid .

4 . After tossing the marker you must hop across 8 squares forwards and backwards .

5 . The skills required for hopscotch are nimbleness and balance in movement .

6 . There are variations with different rules for the game of hopscotch.

7 . Children all over the world play some variations of this game .

8 . hopscotch is a street game because children can play it wherever convenient .

E.

1. usually

2. modifications

3. adjoining

4. territory

5. effortless

6. shocked

7. familiar

8. hurl

9.equilibrium

10. dexterity

G.

1. are names of the game Kith – Kith , children play in India.

2. a game played by hopping over eight numbered squares in a grid.

3. a good test for agility and balance.

4. is very interesting and fun to play.

Class VII - English II

1. The Sentence

Ex- 2 .Make sentences using the following phrases:

1. This book is full of useful information.
2. Everyone has to go through ups and downs of life.
3. He left for school in a hurry.
4. Mike is head and ears in trouble for breaking windowpane.
5. Children were playing in the rain and now they are covered with mud.
6. The train going to Agartala is two hours late.
7. There are both advantages and disadvantages of using mobile phones.
8. Near in future our country will have an economic superpower.
9. Always be good and act in a courteous manner.
10. The man killed his neighbour without any rhyme and reason.

Ex -3 Draw one line under the subject and two lines under the predicate:

1. Subject- Several herbal plants grown in
Predicate- in our kitchen garden have great medicinal properties.
2. Sub – Tulsi
Pred – is one of them.
3. Sub - You.
Pred- Eat a couple of tulsi leaves every day to remain healthy.
4. Sub – Drink large quantities of water
Pred- removes toxic substances from our body.
5. Sub- We
Pred- must not drink water from a pond or a lake.
6. Sub- Even tap water
Pred- should be boiled before drinking.
7. Sub- On the topmost shelf
Pred- of my cupboard lies a big red book.
8. Sub- This book
Pred- gives very useful health tips.

Ex – 4. Fill in the blanks with suitable question words:

1. Who has been selected to coach the team?
2. Which of these magazines would you like to subscribe to ?
3. Which serials do you like to watch ?
4. How did you manage to submit the project on time ?
5. Your school is so far away. Why don't you shift to the hostel ?
6. Whom do you want to meet ?
7. Where are these picture tubes imported from ?

M.L

Class VI
Chapter: 1 our environment

Question answers

A. Tick the correct answer

1. Ozone layer
2. Tree
3. Water
4. Environment
5. Monument
6. Deforestation

B. Fill in the blanks

1. Continental crust and oceanic crust
2. Hydrosphere
3. Non living
4. Positive
5. Atmosphere

C. Compare and contrast

1. Biotic components include all biological or living beings such as plants, animals, insects, etc.. Whereas a biotic components include all physical or non- living things such as land, minerals, soil, water and climate.
2. The hydrosphere consists of all forms of water on our earth. For example seas, lakes, rivers, streams, waterfalls water vapor, glaciers, ice and snow are all parts of the hydrosphere whereas the atmosphere is the layer of air that surrounds our Earth. This air is mixture of gases, such as nitrogen, oxygen carbon dioxide and other gases.

D. Answer the following questions in brief.

1. Environment refers to the interaction of humans and all other living forms with the physical aspects of the earth.
2. Lithosphere, atmosphere, hydrosphere and biosphere
3. The continental crust lies below the land masses. Its thickness varies between 40 kilometer and 100 kilometer whereas the oceanic crust lies below the oceans and it is only about 6 kilometer thick.
4. The atmosphere is the most important layer because it helps life survive on earth. It helps us to breath. Its ozone layer protects us from the harmful ultraviolet rays of the sun.
5. Biosphere is the part of the earth's surface and atmosphere in which plants and animals can live.

E. Answer the following questions in details.

1. An ecosystem has biotic and a biotic components which depend on each other, interact with each other and live together in an environment that is unique. An ecosystem's health depends on a delicate balance among its members and the environment. All the elements of the ecosystem are tied together by the heat and light of the sun and the weather of that region. Water is the important part of ecosystem.
2. The human environment refers to anything that has been created by humans. Humans have influenced the physical environment into two ways- positive and negative. For example humans have cleared forests (negative) to make the buildings to live in and work (positive). The construction activities of humans have changed the natural landscape. Similarly, quarrying activities of humans for minerals (positive) have left gaping holes in the natural environment, increasing the possibility of soil loss and landslides (negative). Nature's wealth has been converted into resources that have helped build the world we live in today.
3. The major importance of the hydrosphere is that water sustains various life forms and plays an important role in ecosystem and regulating the atmosphere. Hydrosphere covers all water present on the Earth's surface. It involves saltwater, fresh water and frozen water along with ground water and water in the lower levels of the atmosphere. The following are the function of a hydrosphere:
 - A. Water is the most important part of living cells.
 - B. Human needs
 - C. Water provides habitat
 - D. Regulate climate
4. Atmosphere not only contains the oxygen that we need for living, but it also protects us from harmful ultraviolet solar radiation. It creates the pressure without which liquid water couldn't exist on our planet and keeps temperature habitable for our living earth. The atmosphere shield earth from the most harmful solar rays.
5. The realms of the natural environment are not separate units, but are interlinked. This interrelation is seen in the biosphere. Life on the biosphere is dependent on the soil of the crust on the lithosphere, on air from the atmosphere and the heat of the sun through it, and rivers, lakes, rains or snow from the hydrosphere. In the oceans, the biosphere is dependent on the dissolved nutrients of the lithosphere in its waters, air from the atmosphere and the very habitat of the ocean.

Chapter I

The Sentence

I. Answer the following questions:

1) Define Sentence? Write 2 examples.

An: A group of words that makes complete sense is called a sentence.

We played a Cricket match last evening.

Did your team win the match?

2) What are the four things that you have to remember while you construct a sentence?

An: A sentence makes complete sense.

It begins with a capital letter.

The words in a sentence must be in their proper order.

A sentence ends with a full stop, a mark of interrogation, or a mark of exclamation.

3) What is a Phrase? Write 3 examples.

A phrase is a group of words make sense but not complete sense.

Examples: A funny story, last evening, at the railway station.

4) What are the main parts of a sentence? Explain and write an example.

An: The main parts of a sentence are Subject and Predicate.

Subject is a part of sentence which names what the sentence is about.

Predicate is a part of sentence which says something about the subject.

Examples: All the players contributed to the victory of the team.

Subject

Predicate

5) How many kinds of sentences are there? Name, Define and Write one example for each..

An: There are four kinds of sentences.

i) Assertive or Declarative sentence says or states something.

Example: The fox looked at the piece of meat.

ii) Interrogative Sentence asks a question.

Example: What is your name?

iii) Imperative Sentence expresses a command or order, an instruction, a request, or an advice.

Example: Please bring me a glass of water.

iv) Exclamatory Sentence expresses some strong feeling.

How beautiful the nature is!

6) How many kinds of Assertive sentences are there and name them?

An: Assertive sentences are of two kinds. They are Affirmative or Positive and Negative.

7) How many kinds of Interrogative sentences are there and name them?

An: Interrogative sentences are of two kinds. They are **Yes or No question** and **wh questions**.

8) What are wh questions?

An: The questions which begin with **What, When, Where, Who, Whose, Whom, Which, and Why** are referred as wh questions.

9) **Exercise (2)** from page (2) Make sentences by using the following phrases: (The first one is done for you).

i) **Full of useful information:** The Television channels provide full of useful information.

Rest of (2- 9) exercises by using phrases you have to make sentences of your own.

10) **Exercise (4)** from page (5) Fill in the blanks with suitable question words: (The first one is done for you).

i) **...Who...** has been selected to coach the team?

Rest of (2-7) exercises by using suitable question words you have to do it of your own.

Class-VII-c

Subject- English -I

Chapter-I (HOPSCOTCH)

B.

1. Hopscotch can be played alone and with many players. To play hopscotch , we first make a grid of eight squares with a chalk on the floor. The player tosses the marker into the first square .The marker should not touch the line or the player is out of the game. The player then jumps over the first square and hops on one leg across the squares. The player turns around ,hops through the squares back and picks up marker and jump over the squares.

2. In the game of numbers Hopscotch, we don't need to toss a marker. We just have to keep hopping on one foot and try not to step on the wrong square.

C.

1. Yes, children do play street games. They play these games in the open spaces or parks.

2. Yes, we play these games with our friends. We play games like spy, hide and seek, Hopscotch, seven stones etc.

D.

1. Children should play informal outdoor games with their friends because it involves physical activity, it keeps them physically fit, it relaxes the body and build sportsmanship.

2. The numbers hopscotch was very fun and interesting to play. The best part of the play was that we do not have to follow any rules.

Milan jamatia

प्रश्नों के उत्तर (मौखिक)

1. बच्चे वीर क्यों बनना चाहते हैं?

उत्तर:- बच्चे मातृभूमि की रक्षा के लिए वीर बनना चाहते हैं।

2. बच्चे भारत मां के हृदय का हार किस प्रकार बन सकते हैं ?

उत्तर:- बच्चे अपने देश के सुख के लिए अपना बलिदान देकर भारत मां के हृदय का हार बन सकते हैं।

3. कविता को स्वर्ग गाईए

उत्तर:- गृह कार्य (Homework)

लिखित:-

1. साहस के अवतार बनने का क्या अर्थ है?

उत्तर:- साहस के अवतार बनने का अर्थ है कि हमें हर कठिनाइयों, मुश्किल, आफतों का डटकर सामना करना चाहिए।

2. वे पंक्तियां लिखिए जिसमें कठिनाइयों का सामना करने की बात की गई हो?

उत्तर:- कठिनाइयों से रण ठनारहे ।

आफत का कुहरा घनारहे ।

पर सदा हौंसला बना रहे।

सीना आगे कोतना रहे ।

यह पंक्तियां जिनमें कठिनाइयों का सामना करने की बात की गई है।

3. हम अपनी उन्नति के जिम्मेदार कब बनेंगे?

उत्तर:- जब हम अपने पूर्ण अधिकार तथा किसी भी कठिनाई से लड़ सके, उस समय हम उन्नति के जिम्मेदार बनेंगे।

4. "जन्मभूमि के क्लेशहारना" और 'स्वदेश को सुखी करना' - दोनों बातों के पीछे कवि के मन में क्या भावना है?

उत्तर:-जन्म भूमि के क्लेशहरना और स्वदेश को सुखी करना। इस भावना को समझाना है कि हमें मातृभूमि के लिए हर वक्त आगे रहना चाहिए ।

5. जन्मभूमिपरमरमितनेकीस्थितिकब - कब पैदा होती है?

उत्तर:-जन्मभूमि पर मर मिटने की स्थिति कई कारणों से हो सकती है चाहे युद्ध हो या महामारी।

6. कविता का प्रतिपादय अपने शब्दों में लिखिए।

उत्तर:-प्रभु हमें वीर बनाए सरदार बनाएं हमें साहस देने की शक्ति दे। हर कार्य को पूरा कर पाए जो भी हमारे सपने हैं उन्हें पूरा करने की ताकत देना सभी कार्य को अपने दम पर करने की शक्ति देना हम हम अपने खुद के कार्य का परिचय बने जिम्मेदार बने कोई भी कठिनाई आए उससे लड़ने की ताकत देना इस जन्म भूमि के लिए अपने बलिदान के लिए हम हर वक्त तैयार रहेंगे।

7. कविताकोसुंदरलेखमेंलिखिए।

उत्तर:-हैंड राइटिंग (Handwriting)

8. अर्थ भाव स्पष्ट कीजिए

क. हम खुद अपना आधार बने।

उत्तर:-हमें अपनी पहचान खुद को बनाना चाहिए।

ख. हमप्रण कापालनहारबने।

उत्तर:-जो भी वादे हमने किए उन्हें पूरा करने का शक्ति हमें देना प्रभु।

সপ্তম শ্রেণি

পদ্যাংশ:-- রাজধর্ম

অতি সংক্ষিপ্ত উত্তর ধর্মী প্রশ্ন বালি:-

1) দশরথ কোথাকার রাজা ছিলেন?

উত্তর:-- দশরথ অযোধ্যার রাজা ছিলেন।

2) দশরথ রামচন্দ্রকে কখন এই উপদেশ দিয়েছিলেন?

উত্তর:-- শ্রী রামচন্দ্রকে যুবরাজ পদে অভিষিক্ত করার পর তাঁকে এই উপদেশ দেন।

3) রামচন্দ্র কে এখানে অপর কি নামে অভিহিত করা হয়েছে?

উত্তর:-- রামচন্দ্রকে এখানে “রঘুবীর” নামেও অভিহিত করা হয়েছে।

4) দশরথ রামচন্দ্রকে কি কি বিষয়ে শিক্ষা দিতে চেয়েছিলেন?

উত্তর:-- দশরথ রামচন্দ্রকে রাজধর্ম ও রাজনীতি বিষয়ে শিক্ষা দিতে চেয়েছিলেন।

5) কি কি কাজ রাজার করা উচিত নয়?

উত্তর:-- রাজার পরহিংসা ও পরনিন্দা করা উচিত নয়। পরধনে লোভ করা উচিত নয়। বিনা অপরাধে কারুর প্রাণ নেওয়া উচিত নয়।

6) শরণাগতের প্রতি রাজার কেমন আচরণ করা উচিত?

উত্তর:-- শত্রু যদি শরণাগত হয় তবে সর্বশক্তি দিয়ে তাকে রক্ষা করা রাজার কর্তব্য।

1) অর্থ লেখ:--

নৃপবর:-- রাজা।

পরিগ্রাণ---বাঁচানো।

সংশয়---সন্দেহ।

অবিবেকী---বিবেকহীন।

বাখানে--- প্রচরিত হয়।

রঘুবর--- রামচন্দ্র।

বিদ্যমান--- যা বহাল আছে।

বেষ্টিত--- ঘিরে থাকা।

4) বাক্য রচনা:--

বিনয় --- বিদ্যা বিনয় দান করো।

পরিগ্রাণ ----- এই জটিল অবস্থা থেকে এখন পরিগ্রাণ চাই।

বিদ্যমান--- ডাকাতদের ছোঁড়া গুলির চিহ্ন এখনও বিদ্যমান।

শশধর --- পৃথিমার রাতে শশধরের শোভা অনিন্দ্যসুন্দর।

শোভিত--- নক্ষত্র শোভিত রাতের আকাশ দেখাছিল।

ভূপতি:-- আগে দেশে ভূপতি ছিলেন সর্বক্ষমতা সম্পন্ন মানুষ।

মহিমা----- বিদ্বান ও বিনয়ী মানুষের মহিমা সর্বত্র কীর্তিত হয়।

সংক্ষিপ্ত উত্তর ধর্মী প্রশ্নাবলী:-- (প্রতি প্রশ্নের মান 3)

1) “নক্ষত্র বেষ্টিত যেন পূর্ণ শশধর।”--- কোন বিষয়ের উল্লেখ করতে গিয়ে এই মন্তব্য করা হয়েছে? সেটির উল্লেখ করো। উপমাটি তাৎপর্য পরিপুষ্ট করো।

উত্তর:-- রাজা দশরথ যখন তার পুত্র রামচন্দ্র কে পাশে নিয়ে সিংহাসনে বসলেন এবং পাত্র মিত্ররা যখন তাঁদের চারপাশ বেষ্টিত করে রইলেন, তখন কেমন দেখাছিল তার উল্লেখ করতে গিয়ে কবি কৃতিবাস মন্তব্যটি করেছেন।

কবি বলেছেন, পাত্রমিত্র---পরিবেষ্টিত এবং সিংহাসনে উপবিষ্ট দশরথ ও রামচন্দ্র কে নক্ষত্র পরিবেষ্টিত আকাশের চাঁদের মতই মনে হচ্ছিল।

পৃথিমার রাতে চাঁদকে পরিপূর্ণ গোল দেখায় এবং সেদিন সে পরিপূর্ণ আলো দান করে। আকাশের নক্ষত্র গুলিতে সেদিন পরিষ্কার দেখা যায়। সেদিন আকাশের দিকে রাতের বেলায় তাকালে মনে হয় কিরণে সমুজ্জ্বল চাঁদ যেন রাজা, আর মিটমিট করে কোনক্রমে জলা নক্ষত্ররা তার পাত্র-মিত্র-তার গোল গলে চাঁদ কে ঘিরে আছে। পুত্র রামচন্দ্র কে পাশে নিয়ে সিংহাসনে বসলেন তখন তাদের দেখে পৃথিমার চাঁদের মত দীপ্তমান মনে হচ্ছিল। তাঁদের চারপাশে ঘিরে ছিলেন মন্ত্রী, অমাত্য ও শুভানুধ্যায়ীরা তাঁরা যেন আকাশের নক্ষত্র গুলির মত। এই অবস্থায় অযোধ্যার রাজসভা কে দেখে নক্ষত্রবেষ্টিত চাঁদের কথাই মনে হচ্ছিল।

2) দশরথ রামচন্দ্রকে রাজা হয়ে কি কি করার উপদেশ দিয়েছিলেন?

উত্তর:- রাজার প্রথম কর্তব্য হলো প্রজাপালনা। প্রতিটি মানুষের তিনি মনোরঞ্জন করবেন, প্রত্যেককে মধুর বচনে পরিতুষ্ট করবেন। যাতে তার গুণগান সর্বত্র প্রচারিত হয়। রাজনীতি ও রাজধর্ম তিনি সাবধানে শিখবেন। তিনি পরহিংসা ও পরনিন্দা করবেন না এবং অপরের সম্পদ লোভ করবেন না। শত্রু যদি তা সুরণ নেন তবে তিনি তাঁকে রক্ষা করবেন। বিনা অপরাধে তিনি কারো প্রাণ নেবেন না। সর্বোপরি তিনি হবেন বিবেকবান, বিনয়ী, বিদ্বান ও ধার্মিক। যে রাজা এমন গুণসম্পন্ন হন, সারা পৃথিবীতে তাঁকে মান্য করে এবং তার মহিমা কীর্তন করে।

3) 'প্রথমা রানীর তুমি প্রথম নন্দন'..... কার উক্তি? প্রথম রানী কে? 'প্রথম নন্দন' কে?

প্রথমা রানীর প্রথম নন্দন হওয়ায় ওই ব্যক্তির কি সুবিধা হয়েছে?

উত্তর:- একটি অযোধ্যার রাজা দশরথের উক্তি।

প্রথমা রানী হলেন শ্রীরামচন্দ্রের মাতা কৌশল্যা।

কৌশল্যা ছিলেন রাজা দশরথের প্রথম স্ত্রী। তার 'প্রথম নন্দন' বা প্রথম পুত্র হলেন শ্রীরামচন্দ্র।

প্রথমা রানীর প্রথম পুত্র হওয়ায় শ্রীরামচন্দ্রই অযোধ্যার সিংহাসনের উত্তরাধিকারী হয়েছেন এবং এই কারণেই দশরথ অন্য তিন পুত্র কে বাদ দিয়ে রামচন্দ্রকেই যৌবরাজ্যে অভিযুক্ত করেছেন।

4) 'আছে যার, মানে তারে সকল সংসারা'..... কার কথা এখানে বলা হয়েছে? তাঁর কি কি গুণ থাকলে সকল সংসার তাকে মান্য করে?

উত্তর:- প্রকৃত গুণবিশিষ্ট রাজার কথা এখানে বলা হয়েছে।

রাজা যদি সার্থক প্রজাপালক, ধার্মিক বিদ্বান, বিনয়ী ও বিবেকবান হন, তাহলে সারা পৃথিবী তাঁকে মান্য করে।

রচনাধর্মী প্রশ্নাঙ্কলি:----- (প্রতি প্রশ্নের মান 5)

2) 'অবিনয়ী অবিবেকী রাজা যদি হয়।

দীন হতে দীন দেখ নাহিক সংশয়'-----

কার উক্তি? কাকে কখন তিনি একথা বলেন? প্রকৃত রাজার কি কি গুণ সম্পন্ন হওয়া উচিত বলে তাঁর অভিমত? রাজা 'দীন হতে দীন' কখন?

উত্তর:- উক্তিটি অযোধ্যার রাজা দশরথের।

পুত্র শ্রী রামচন্দ্র কে যুবরাজকে অভিযুক্ত করার পর কিভাবে রাজ্য শাসন করতে হবে, সে বিষয়ে উপদেশ দিতে গিয়ে তিনি শ্রীরামচন্দ্র কে একথা বলেছিলেন।

প্রকৃত রাজার প্রথম কর্তব্য হলো প্রজাপালনা। প্রতিটি মানুষের তিনি মনোরঞ্জন করবেন, প্রত্যেককে মধুর বচনে পরিতুষ্ট করবেন। যাতে তার গুণগান সর্বত্র প্রচারিত হয়। রাজনীতি ও রাজধর্ম তিনি সাবধানে শিখবেন। তিনি পরহিংসা ও পরনিন্দা করবেন না অপরের সম্পত্তিতে লাভ করবেন না। যদি শত্রু তার শরণ নেয়, তবে তিনি তাকে রক্ষা করবেন। বিনা অপরাধে তিনি কারো প্রাণ নেবেন না। তিনি দরিদ্রের ভরণপোষণ করবেন এবং জ্ঞানী ব্যক্তিকে সর্বদাই উপযুক্ত সম্মান দেখাবেন। সর্বোপরি তিনি হবেন বিবেকবান, বিদ্বান ও ধার্মিক। যে রাজা এমন গুণসম্পন্ন হন সারা পৃথিবী তাকে মান্য করে এবং তার মহিমা কীর্তন করে যে রাজা এমন গুণসম্পন্ন হন, সারা পৃথিবীতে তাঁকে মান্য করে এবং তার মহিমা কীর্তন করে।

রাজা যদি বিবেকবান, বিনয়ী ও ধার্মিক না হয় অবিনয়ী ও বিবেকহীন হন, তাহলে পৃথিবীর সামনে তাঁর মর্যাদা ক্ষুণ্ণ হয়, তিনি দীন-দরিদ্র অপেক্ষা ও দরিদ্রের পরিণত হয় -- অর্থের দিক দিয়ে নয়, কিন্তু মর্যাদা ও সম্মানের দিক দিয়ে তিনি হন দরিদ্রতম।

1) 'পিতা-পুত্র বসিলেন সিংহাসন' পরো..... এই পিতা-পুত্র কে? পিতা সিংহাসনে বসে পুত্রকে যেসব উপদেশ দিলেন তা নিজের ভাষায় লেখ।

উত্তর:- এখানে 'পিতা' হলেন অযোধ্যার রাজা দশরথ এবং পুত্র হলেন তাঁর পুত্র শ্রীরামচন্দ্র।

বাকী অংশটা ১নং প্রশ্নের উত্তর (তৃতীয় অংশটা) লিখ।

PRITI RANI GOPE DAS