



## State Institute of Education, Kashmir



**TUTORIALS CUM ASSIGNMENTS FOR  
CLASS 8<sup>th</sup> FOR UNIT-I & UNIT-II**

**1. How Teachers Learn****INTRODUCTION**

Children are taught by their teachers but there are occasions when teachers are taught certain things by the children or the situations arising out while dealing with the children. This lesson is about how young children find it difficult to learn to read since they do not easily recognize words. We must provide plenty of time to them to get familiar with pictures and words. We should not get annoyed. A teacher must try to see as if through their eyes.

**SUMMARY**

Nora was a five year old girl. The author used to visit her house on the weekend. One day Nora came and sat on the sofa. She had in her hand a book “Hop on Pop” beginner’s book. Nora taught the narrator about the things children do when learning themselves to read, the problems they meet and the ways they solve or try to solve them. To solve their problem a teacher must try to see things as if through their eyes. An adult thinks it should be easy for someone to remember what a word looks from one page to the next as he knows the word. But for children it is not easy since they have seen the word for first time. So a teacher should give them enough time to learn and not be surprised or upset by what looks like slowness or stupid mistakes.

**EVALUATION**

1. Nora and her teacher sat on the sofa. (True/False)
2. Nora was a careless child. (True/False)
3. Teachers should give plenty of time to slow learners. (True/False)
4. Skip means \_\_\_\_\_. (To leave/To come)
5. Who became puzzled and annoyed?
6. Who was not bluffing and guessing?
7. Find the antonyms of following words in the story:
  - a. Old \_\_\_\_\_
  - b. Small \_\_\_\_\_
  - c. Hard \_\_\_\_\_
  - d. Formal \_\_\_\_\_
  - e. Upset \_\_\_\_\_
8. Use suffix (-ish, -ual, -ial) in the following nouns to form adjectives:
  - a. Man \_\_\_\_\_
  - b. Minister \_\_\_\_\_
  - c. Book \_\_\_\_\_
9. Make correct sentences by rearranging the following:
  - a. made/I/a new/suit/had.
  - b. She/heard/has never/spoken/English.

## 2. A Nation's Strength

### INTRODUCTION

This poem is written by Ralph Waldo Emerson, an American poet and philosopher born on 25 May 1803. The poem has six stanzas of four lines each and with a fixed rhyme scheme in each stanza, i.e. "abab".

### SUMMARY

In this short poem, the poet has revealed the secret of a nation's strength. According to him, the success of a nation lies not with gold and jewels but with its man power, i.e., its people.

In this poem, the poet has revealed that how we can make a nation strong. He is of the opinion that it is the people of a nation and not its gold, jewels and other resources that make it strong. The people who make their nation strong are great. They are not selfish. They work day and night for the prosperity of their nation. They fight for truth and for the sake of honour of their nation. They do not do anything that can damage the image and reputation of their nation. To make their nation great and strong, they do not need gold and jewels, but it is their power and determination that makes it strong.



### EVALUATION

1. The poem is divided into six stanzas. (True/False)
2. The poem is composed by: (R.L. Stevenson/R.W.Emerson)
3. In the poem, "A people" means: (people/country/nation)
4. People who are selfish can make their nation strong. (Yes/No)
5. In the poem, "gold" means: (metal/money/wealth)
6. A nation can be made great and strong by ..... . (Fill in the blank)
7. This poem reveals the secret of a nation's strength. (True/False)
8. .... fight for truth and for the sake of honour of their nation.
9. Only resources can make a nation strong. (Yes/No)
10. Great men work for the.....of a nation. (determination/prosperity/wealth)
11. Find the rhyming words like "**high - defy**" from the poem and use them in your own sentences.

### **3. The Unthankful Man**

#### **INTRODUCTION**

This is a story about thankfulness. In this story, there is a poor man whose name is Raman. He is a very helpful person. He helps the Tiger, the Monkey, the Snake and the Goldsmith. The Tiger and the Monkey proved to be thankful creatures, while as the Goldsmith makes a brazen show of his thanklessness and deceit.

#### **SUMMARY**

This story is about a poor man whose name is Raman, who lived with his wife in a small town. They were so poor that his wife was fed up with their poverty. One day she asked her husband to go to a nearby town and seek some job. So, Raman left his home to go to a nearby town to look for a job. On his way he passed through a forest. While walking through the forest, he heard some strange sounds coming from the well. He peeped into the well and found a tiger, a monkey, a snake and a man in the well. The tiger asked the man to pull him out of the well and in turn he will be very thankful to him all through his life. Raman took pity on the tiger and pulled him out of the well. Then Monkey called out to Raman for help. Raman pulled out the Monkey too. He also thanked Raman and told him that if he ever needed his help, he should come to the mango tree by the river outside this jungle. Then Snake requested Raman to pull him out of the well. Raman was scared of the snake as he thought if he pulled him out it could bite him. But snake assured him that it would not harm him, rather it would be thankful to him. Raman took pity on it and pulled it out of the well. Lastly the man asked the Raman for help and Raman pulled him out of the well too. The man thanked Raman and told him that if he ever needed his help he should come to him to Varanasi where he is a Goldsmith by profession.

After taking some rest, Raman started his journey and reached the nearby town. For some days, he tried to get a job, but he could not find a job. He decided to go back home. As he neared the forest, he came to the river, he remembered the Monkey and decided to go to the Monkey. The Monkey saw him and came running to him and gave him sweet mangoes to eat. Raman satisfied his hunger and continued his journey. On his way he came upon a cave and called out the tiger. The tiger came out and took him inside the cave and gave him necklace, which was given to him by a prince while saving his life. Raman was happy and went to town where goldsmith lived to sell it. Goldsmith recognized the necklace, he had made necklace for the prince who had gone missing some months back. Goldsmith took the necklace to the king and assured the king that Raman must have killed the prince and stolen his necklace. Raman was arrested and locked in a dark cell. He had been deceived by the goldsmith and understood that animals had been right when they advised him not to trust the man. He was the most ungrateful creature. He felt sad.

In the jail he remembered snake and called out to the snake and next moment snake slithered into the cell. The snake heard the whole event and asked Raman that he would bite the Queen who would become unconscious and nothing would be able to cure her. However, if Raman touched her forehead, she would get cured

and wake up. Then the king would be pleased and set Raman free. When the snake bit queen she fell unconscious. The king grew sad and announced that if anybody cured the queen, he would get a handsome reward. Raman offered to go and cure the queen. As he touched the queen's forehead she opened her eyes. The king was pleased with Raman and asked him how he landed up in the prison. Raman narrated the whole incident. After hearing his story, king ordered his guards to arrest the goldsmith. The king gave Raman a bag of gold coins and ordered him to go home and live happily.

**EVALUATION**

- Q1 Raman lived in Varanasi. (True/False)
- Q2 Monkey gave Raman sweet Mangoes. (True/False)
- Q3 Monkey slithered into the cell. (True/False)
- Q4 A small room in the prison \_\_\_\_\_ .(Balcony/Cell)
- Q5 A female Servant is called \_\_\_\_\_. (Bride/Maid)
- Q6 What did the King give to Raman?
- Q7 What did the Tiger give to Raman?
- Q8 Pick from the story:

Nouns

\_\_\_\_\_

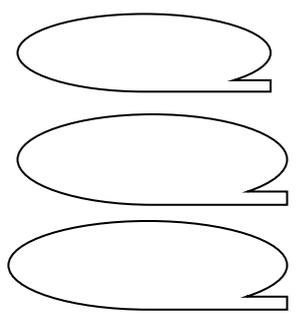
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

adjectives



## 4. Life

### INTRODUCTION

This chapter is actually a dialogue written in Dogri by Ram Nath Shastri and it was translated from Dogri to English by Shivnath. In this dialogue, the author uses the device of personification. He gives human attribute of speaking to various elements of universe like the wind, the stars, the moon, the cloud, the ocean, and the earth. The passing wind asks the question, "what is life?" to all the above mentioned elements of the universe and each one of them give their own perspective about life.

### SUMMARY

In this lesson, the passing wind which has been given human attribute of speech raises a question about life. She one by one asks the same question "what is life?" to different elements of nature.

The stars define life as the independent light which illuminates them and gives them their identity.

When moon is asked about its definition of life, it gives a sad answer. It says that it has dark spots and it is sick and lifeless entity. The borrowed light has given it the dark spots and it is like a shroud. It also compares itself to the laughter of a widow.

The ocean says that life is to realize one's limits and to maintain ones dignity and to dissolve all bitter experiences as if they are pearls and rubies.

The cloud says that life is to lose one self for the joy of others and to help those who are in need.

The earth says that life is about love and affection. It is about taking and giving.

Finally the wind meets the little girl who introduces herself as the life of creation. She lights a new lamp with the lamp that is already alight and the girl enjoys it. The wind is so much delighted and impressed by the little girl that she forgets everything and joins the little girl.

### EVALUATION

1. Star says to shine with one's own brightness is life. (True/False)
2. Ocean says to me life is love. (True/False)
3. Wind was satisfied with the answer of the little girl. (True/False)
4. Pearls and rubies are present in \_\_\_\_\_. (Earth/Ocean)
5. Flowers and fruits grow on \_\_\_\_\_. (Earth/Ocean)
6. What was the little girl doing when the wind saw her?
7. Why did the wind join the little girl?
8. Pick five main verbs from the above dialogue and use them in your sentences:
  - I. \_\_\_\_\_
  - II. \_\_\_\_\_
  - III. \_\_\_\_\_
  - IV. \_\_\_\_\_
  - V. \_\_\_\_\_

## 5. Porus and his Elephant

### INTRODUCTION

The poem “Porus and his Elephant” is written in the form of a ballad by Marry Dobson. In this ballad the poet narrates a story of a king and his elephant. The poem highlights the fact that animals also possess feelings and emotions. They cannot express them through words as humans do but try to express their emotions by crying or gasping. They can exhibit exemplary faithfulness, loyalty and courage for their masters and can even sacrifice their lives for them.

### SUMMARY

It is a story of Porus, a king, who went to fight against the Army of Alexander, the great. In order to defend his Nation, King Porus was on his Elephant, fighting a fierce battle against his enemies. Suddenly the king got wounded and fell from his Elephant. The poet calls the elephant a faithful beast who played a gallant part in protecting his King against the attack of his enemies. It stood as a wall and took all the arrows on itself and then lifted his King to a safe corner. In the end, the poet says that these animals may seem dumb to us but even they can love and show their feelings by crying and panting. King Porus was saved but his elephant died from his wound. This story of animal faithfulness and bravery became a legend for the people to remember.

### EVALUATION

1. Animals have no feelings. (True/False)
2. King Porus was on a horse. (True/False)
3. Elephant is a faithful beast. (True/False)
4. Who saved the life of King Porus?
5. Who was the enemy of King Porus?
6. What is the rhyme scheme of the poem?
7. Find the rhyming words like **“by – die”** from the poem and use them in your own sentences.
8. Write a paragraph on your favourite animal.

## 6. Achilles

### INTRODUCTION

The story Achilles has been written by 'Gerald Durrel'. Achilles was a Greek Hero. According to Greek mythology, when Achilles was born, his mother held him up by his heel and dipped him in the river Styx so that he could live forever. After surviving many battles, Achilles finally died after an arrow struck him on his heel. In this story, the author has named his pet tortoise as Achilles.

### SUMMARY

In this story, the narrator is surprised to meet the Rose Beetleman during his travels because he had a fairy tale air that was impossible to resist. The narrator could hear him long before he could see him. He was saying and playing rippling tune or shepherd's pipe. Rose Beetleman had a fox like face with large eyes. His dress was fantastic. He had a hat on his head. His shirt was worn round his neck. The pockets of his coat bulged and his patched trousers dropped over a pair of leather shoes with upturned toes. He had carried on his back Bamboo cages full of pigeons and young chickens. When he saw the dog of narrator, the Rose Beetleman stopped and smiled at them. The narrator asked him if he had been to some fiesta. He nodded his head vigorously, raised his pipe to his lips and played a lilting tune on it and then stopped and smiled and rubbed his forefinger and thumbs together, expressing that he wanted money. The narrator realized that he was unable to speak. After a long conversation between them, the narrator asked the Rose Beetleman the price of the little tortoise. He showed him all the fingers of his both hands. The narrator denied and showed two fingers. At last the Rose Beetleman handed him the tortoise and held up five fingers. The narrator wanted to show the animal to everyone at his home. So he hurried off along the road. The new arrival was christened Achilles and turned out to be an intelligent beast, with a sense of humor. He loved grapes as much as Roger did. So there was always a great rivalry among them. But the fruit that Achilles liked best was the wild strawberries. Achilles developed a passion of human company. One day, the garden gate was left open and Achilles was nowhere to be found. At some length Achilles was found dead. He had fallen into a well. Lessie attempted artificial respiration and Margo suggested of forcing strawberries down his throat, but they failed to get any response. His corpse was buried in the garden under a small strawberry plant. It was only marred by Roger, who in spite of all protests insisted on waging his tail throughout the burial service.

### EVALUATION

- Q1 How was Rose Beetleman dressed?
- Q2 How did Achilles enjoy eating strawberries?
- Q3 How were Roger and Achilles rivals?
- Q4 Rose Beetleman had a fox like face. (True/False)

Q5 Achilles Liked Mangoes. (True/False)

Q6 Achilles escaped from the garden through gate. (True/False)

Q7 Make sentences using the following words:

- a. Chair
- b. Furniture
- c. Luggage
- d. Accident
- e. Waggle

### Language work

**Anagrams:** An anagram is a word or phrase formed by rearranging the letters of a different word or phrase, typically using all the original letters exactly once. E.g.

LISTEN → SILENT

FRIED → FIRED

EARTH → HEART

STAR → RATS

Form anagrams using the following words:

- a. CHARM \_\_\_\_\_
- b. REAL FUN \_\_\_\_\_
- c. LISTEN \_\_\_\_\_
- d. MARRIED \_\_\_\_\_
- e. RETAIN \_\_\_\_\_

Q8 Write a letter to the editor of a local newspaper and encourage people to maintain physical hygiene and to keep their surroundings neat and clean.

**CHAPTER :1 Rational Numbers**

- ❖ **Rational Number:-** A number which can be put in the form of  $\frac{p}{q}$ , ( $q \neq 0$ ) where  $p$  and  $q$  are integers  
 .e.g.  $\frac{2}{3}, \frac{1}{2}, -\frac{2}{3}, \dots$  etc
- ❖ **Standard form of Rational Number:-** A rational number  $\frac{p}{q}$  is said to be in standard form if  $p$  and  $q$  are integers having no common divisor other than 1.
- ❖ Every positive rational number is greater than 0.
- ❖ Every negative rational number is less than 0.
- ❖ Rational numbers are closed under addition, subtraction multiplication and division (provided divisor is not zero)
- ❖ Commutative of addition is true for natural numbers, whole numbers and integers. It is also true for rational numbers.
- ❖ Associative of addition is true for natural numbers whole numbers and integers. It is true for rational numbers.
- ❖ **Additive inverse :-** For every rational number  $p/q$ , there exists a rational number  $(-p/q)$  such that  $(P/q) + (-p/q) = 0$ ,  $-p/q$  is called the additive inverse of  $p/q$ .

Q No. 1:- Fill in the blanks:-

- (i) The reciprocal of -5 is \_\_\_\_\_
- (ii) The numbers \_\_\_\_\_ and \_\_\_\_\_ are their own reciprocals.
- (iii) Zero has \_\_\_\_\_ reciprocal.
- (iv) The reciprocal of a positive rational number is \_\_\_\_\_
- (v) The product of two rational numbers is always a \_\_\_\_\_
- (vi) Reciprocal of  $\frac{1}{x}$ , where  $x \neq 0$  is \_\_\_\_\_

Q No. 2:- Choose the correct option:

1. Which of the following is the standard form of  $-\frac{36}{24}$ ?

(a)  $-\frac{3}{2}$

(b)  $\frac{3}{2}$

(c)  $\frac{2}{3}$

(d)  $-\frac{2}{3}$

2. A rational number between  $-\frac{1}{2}$  and  $\frac{1}{2}$  is

(a)  $-\frac{3}{4}$

(b)  $\frac{3}{4}$

(c) 1

(d) None of these

3.  $(a + b) + c = a + (b + c)$  is \_\_\_\_\_ property.

(a) Closure

(b) Associative

(c) Commutative

(d) Distributive

4. The reciprocal of  $-\frac{6}{7}$  is

(a)  $\frac{6}{7}$

(b)  $-\frac{7}{6}$

(c)  $-\frac{6}{-7}$

(d)  $\frac{7}{6}$

5. \_\_\_\_\_ does not have a reciprocal

(a) 1

(b) 2

(c) 0

(d) -1

6. The additive inverse of  $\frac{8}{-17}$  will be

(a)  $\frac{8}{17}$

(b)  $\frac{17}{8}$

(c)  $-\frac{8}{17}$

(d)  $-\frac{17}{8}$

7. The additive identity for rational number is :

(a) 1

(b) -1

(c) 0

(d) None of these

8. Which of the following is the Multiplicative identity for rational number?

(a) 1

(b) 0

(c) -1

(d) None of these

9. A number which can be put in the form of  $\frac{p}{q}$  where p and q are integers and  $q \neq 0$  is

(a) Natural Number

(b) Whole Number

(c) Integers

(d) Rational Number

10. Which of the following is neither a positive nor a negative rational numbers?

(a) 0

(b) 1

(c) -1

(d) None of these

## CHAPTER : 2 LINEAR EQUATION IN ONE VARIABLE

- ❖ **Linear Equation in one variable:-** An equation which can be expressed in the form of  $ax + b = 0$ , where  $a$  and  $b$  are two integers,  $x$  is a variable and has only one solution.
- ❖ For example,  $5x + 2 = 7$  is a linear equation having single variable in it. Therefore, this equation has only one solution, which is  $x = 1$
- ❖ **Equation:-** An equation is a condition on a variable such that two expressions in the variable should have equal value.
  - ✓ The value of the variable for which the equation is satisfied is called the solution of the equation.
  - ✓ An equation remains the same if the LHS and the RHS are interchanged.
- In case of the balanced equation, if we
  - (i) Add the same number to both the sides, or
  - (ii) Subtract the same number from both sides, or
  - (iii) Multiply both sides by the same number, or
  - (iv) Divide both sides by the same number, the balance remains undistributed i.e. the value of the LHS remains equal to the value of RHS.

For Example

$$(a) \quad x - 3 = 6$$

*Sol:- Adding 3 with both sides*

$$x - 3 + 3 = 6 + 3$$

$$x + 0 = 9$$

$$x = 9$$

$$(b) \quad x + 3 = 6$$

*Sol:- Subtracting 3 from both sides*

$$x + 3 - 3 = 6 - 3$$

$$x + 0 = 3$$

$$x = 3$$

$$(c) \quad \frac{x}{5} = 3$$

*Sol:- Multiplying 5 with both sides*

$$\frac{x}{5} \times 5 = 3 \times 5$$

$$x \times 1 = 15$$

$$x = 15$$

$$(d) \quad 6x = 36$$

*Sol:- Dividing both sides by 6*

$$\frac{6x}{6} = \frac{36}{6}$$

$$x = 6$$

- ❖ **Transposing** :- Transposing means moving to the other side. Transportation of a number has the same effect as adding same number to (or subtracting the same number from) both sides of the equation. When you transport a number from one side of the equation to the other side, you change its sign.

For Example  $x - 3 = 6$

(b)  $x + 3 = 6$

*Sol:- Transpose (-3) from LHS to RHS*

*Sol:- Transpose (+3) from LHS to RHS*

$$x = 6 + 3$$

$$x = 9$$

$$x = 6 - 3$$

$$x = 3$$

❖ **Word Problem:-**

To solve the word problem, procedure followed is as under,

- ✓ Read the problem, carefully and note down the important points.
- ✓ Observe, what are the unknowns or what is to find?
- ✓ Take unknown as variable 'x'.
- ✓ Form an equation as per the question
- ✓ Solve the formed equation for unknown.

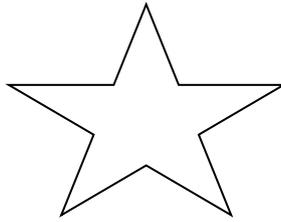
Q No. 3:- Choose the correct option:

1. Linear equations have the power of the variable as  
(a) 0 (b) 1 (c) 2 (d) -1
2. If  $-y = -7 + 1$ , value of y is  
(a) 7 (b) 8 (c) -6 (d) 6
3. If 5 times a number increased by 4 is 39, the number is  
(a) 9 (b) 7 (c) 11 (d) 5
4. The solution of  $4m - 4 = 2m + 6$  is  
(a)  $m = 4$  (b)  $m = 6$  (c)  $m = 5$  (d)  $m = 7$
5. If  $4a = \frac{1}{2}$ , then the value of a is  
(a) 0 (b) 1 (c) 8 (d)  $\frac{1}{8}$
6. If  $\frac{b}{3} + \frac{b}{5} = 8$ , value of b is  
(a) 16 (b) 15 (c) 64 (d) -8
7. If  $5(a - 3) - 4(a - 2) = 0$ , then the value of a is  
(a) 7 (b) 5 (c) 4 (d) -3
8. If  $\frac{5x}{6} + \frac{3x}{4} = \frac{19}{12}$ , then the value of x is  
(a) 4 (b) 2 (c) 3 (d) 1
9. If  $p - \frac{p}{2} = \frac{9}{2}$ , then the value of p is  
(a) 9 (b) 8 (c) 7 (d) 6
10. The sum of three consecutive even numbers is 42. The numbers are  
(a) 10,12,14 (b) 12,14,16  
(c) 14,16,18 (d) 16,18,22

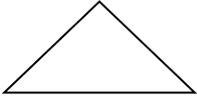
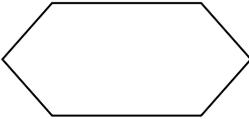
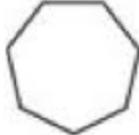
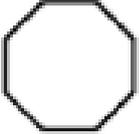
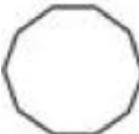
## CHAPTER : 3 UNDERSTANDING QUADRILATERALS

- ❖ **Plane Curve:-** When we join a number of points without lifting a pencil from the paper (and without retracing any portion of the drawing other than single points) we get a plane curve .
- ❖ **Polygons:-** A simple closed curve made up of only line segments is called polygons.

For example

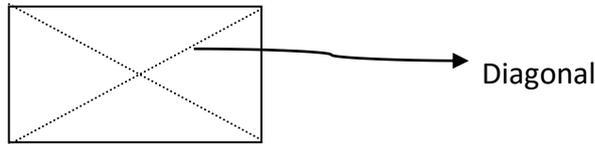


Classification of polygons:- We classify polygons according to the number of sides (or vertices) they have

Number of sides or vertices	Classification	Sample Figure
3	Triangle	
4	Quadrilateral	
5	Pentagon	
6	Hexagon	
7	Heptagon	
8	Octagon	
9	Nonagon	
10	Decagon	

❖ **Diagonals:-** A diagonal is a line segment connecting two non – consecutive vertices of a polygon.

For Example



❖ **Convex and Concave Polygons:-**

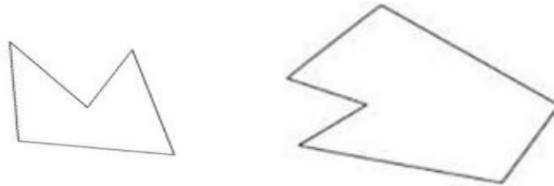
**Convex Polygons :-** Polygons that have no portion of their diagonals in their exteriors are called convex polygons.

For Example



**Concave Polygons:-** Polygons that may have portion of their diagonals in their exteriors are called convex polygons.

For Example



❖ **Kinds of Quadrilaterals:-**

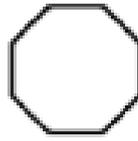
- ✓ **Parallelogram:-** Opposite sides and angles are equal and diagonals bisect each other.
- ✓ **Rhombus:-** All sides equal and diagonals bisect each other at right angle.
- ✓ **Rectangle:-** A closed figure with four sides, such that opposite sides are of equal length and parallel. Each angle is a right angle, diagonals are equal and bisect each other.
- ✓ **Square:-** All sides are equal each angle measures  $90^0$  and diagonals are equal and bisect each other at right angle
- ✓ **Trapezium:-** Having exactly one pair of parallel side

Q No. 1:- State True or False:

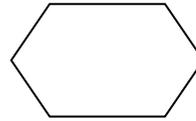
- (i) All squares are rectangle \_\_\_\_\_
- (ii) Sum of all angles of a trapezium is  $360^0$  \_\_\_\_\_
- (iii) Every trapezium is a square \_\_\_\_\_
- (iv) All squares are rhombus \_\_\_\_\_
- (v) All rectangles are a parallelogram \_\_\_\_\_
- (vi) A rhombus is a square \_\_\_\_\_
- (vii) All parallelogram are trapezium \_\_\_\_\_
- (viii) A rectangle is a square \_\_\_\_\_
- (ix) At least one pair of opposite sides of a trapezium are parallel \_\_\_\_\_
- (x) If the diagonals of a parallelogram are equal then it is rectangle . \_\_\_\_\_

Q No. 2:- Match the following:

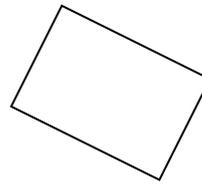
(i) Triangle



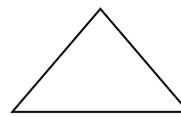
(ii) Quadrilateral



(iii) Octagon



(iv) Hexagon



Q No. 3:- Choose the correct option:

- A quadrilateral with only one pair of opposite sides parallel is a  
(a) Parallelogram                      (b) Rhombus                      (c) Trapezium                      (d) Square
- A quadrilateral with all sides, angles and diagonals equal is a  
(a) Square                      (b) Rhombus                      (c) Trapezium                      (d) Rectangle
- The three angles of a quadrilateral are  $110^\circ$ ,  $120^\circ$ ,  $40^\circ$ , The fourth angle is  
(a)  $120^\circ$                       (b)  $100^\circ$                       (c)  $110^\circ$                       (d)  $90^\circ$
- The sum of the exterior angle of a hexagon is  
(a)  $180^\circ$                       (b)  $220^\circ$                       (c)  $360^\circ$                       (d)  $400^\circ$
- Each exterior angle of a rectangle is  
(a)  $45^\circ$                       (b)  $120^\circ$                       (c)  $90^\circ$                       (d) None of these
- The angles of a quadrilateral in the ratio 1:2:3:4 so the smallest angle is  
(a)  $40^\circ$                       (b)  $36^\circ$                       (c)  $18^\circ$                       (d)  $27^\circ$
- Each exterior angle of a regular polygon is  $30^\circ$ , so the polygon has  
(a) 10sides                      (b) 12 sides                      (c) 8 sides                      (d) 6 sides

Q No. 4:- Fill in the blanks:

- A regular polygon has all of its \_\_\_\_\_ and \_\_\_\_\_ equal.
- Sum of the exterior angles of a polygon is equal to \_\_\_\_\_
- The diagonals of a parallelogram \_\_\_\_\_ each other.

## CHAPTER : 4 PRACTICAL GEOMETRY

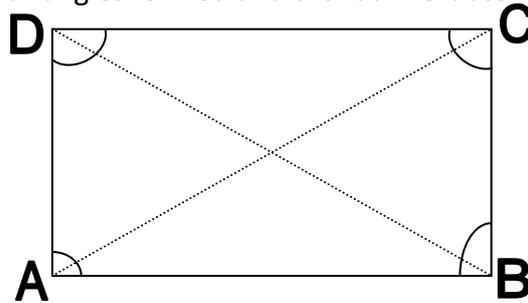
❖ **Quadrilateral:-** A figure bounded by four sides such that no two sides intersect each other except at their end points.

❖ **Construction of Quadrilaterals:-**

To construct a quadrilateral, either of the following are necessary.

- (i) Four sides and a diagonal
- (ii) Three sides and two diagonals
- (iii) Three sides and two included angles.
- (iv) Two adjacent sides and three angles

❖ **Angles:-** There are four angles formed and the four vertices A, B, C and D



$\angle A$  and  $\angle B$  share a common side AB, so they are called adjacent angles.

$\angle A$  and  $\angle C$  have no common side, so they are called opposite angles

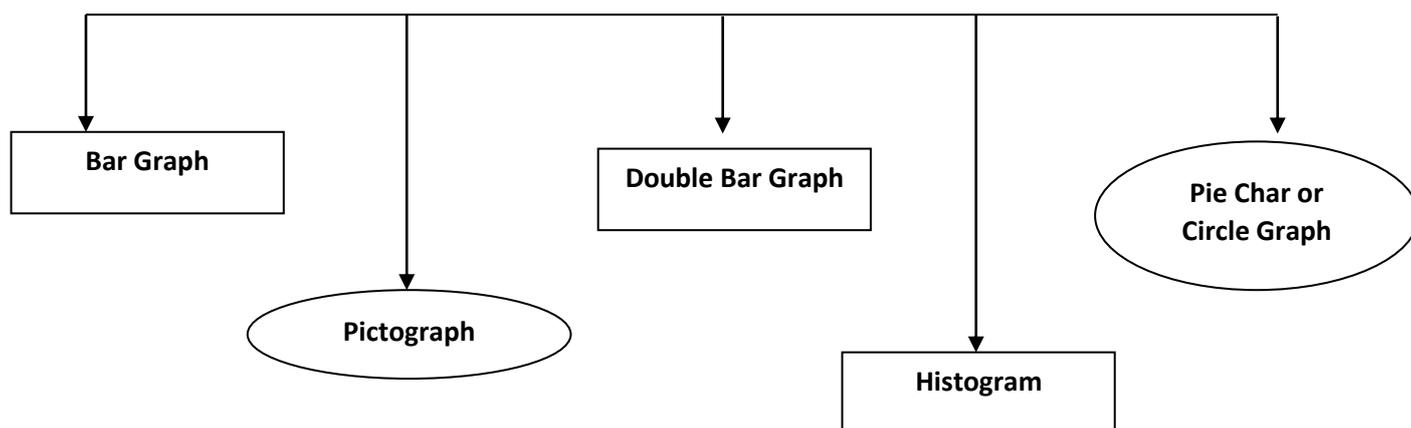
The lines joining the opposite vertices of the quadrilateral i.e. AC and BD are called diagonals.

**Q No. 1:- Choose the correct option:**

1. In the quadrilateral ABCD , the diagonals are
  - (a) AB and CD
  - (b) AC and BD
  - (c) BC and AD
  - (d) CD and BC
2. If we draw one diagonal of a rectangle, we get two triangles which are
  - (a) Scalene
  - (b) Isosceles
  - (c) Equilateral
  - (d) None of these
3. The length of one diagonal of a rectangle is 6.2 cm, so the length of other diagonal is
  - (a) 8.4 cm
  - (b) 12.4 cm
  - (c) 3.1 cm
  - (d) 6.2 cm
4. In which quadrilateral only one diagonal is bisected?
  - (a) Square
  - (b) Rhombus
  - (c) Rectangle
  - (d) Kite
5. The diagonal of which quadrilateral bisect each other at right angle
  - (a) Kite
  - (b) Rectangle
  - (c) Trapezium
  - (d) Square
6. In a parallelogram PQRS, the measure of  $\angle P = 75^\circ$  , so the measure of  $\angle Q$  will be
  - (a)  $75^\circ$
  - (b)  $105^\circ$
  - (c)  $100^\circ$
  - (d) None of these

## CHAPTER : 5 DATA HANDLING

- ❖ **Data** Collection of information is called data. Observations generally gathered initially are called raw data
- ❖ **Frequency:-** Number of times particular observation occurs is called frequency.
- ❖ **Frequency Table:-** A table showing the frequencies of various observations of data is called a frequency distribution table or simply a frequency table.
- ❖ **Tally Marks:-** When the number of observations is large, we make use of tally marks to count the frequencies. Tallies are usually marked in bunch of five for ease of counting.
- ❖ **Graphical representation of data:-**



- ❖ **Bar Graph:-** A representation of information using bars to uniform width, the length ( or height ) of which is proportional to given values.
- ❖ **Pictograph:-** A pictograph representation of data using symbols to represent a group of items.
- ❖ **Double Bar Graph:-** It is a bar graph which shows two sets of data on the same graph. It is useful for the comparison of data.
- ❖ **Histogram:-** The graphs of grouped frequency distribution having rectangles with class intervals as the bases and the corresponding frequencies as the length are known as histogram.
- ❖ **Pie Chart or Circle Graph:-** In a pie chart , the values of different components are represented by the sectors of a circle. The total angle of  $360^{\circ}$  at the centre of a circle is divided according to the values of the component.

$$\text{Central angle for a component} = \frac{\text{Value of component}}{\text{Total Value}} \times 360^{\circ}$$

- ❖ **Probability:-** It is a quantitative measure of certainty .

$$\text{Probability of occurrence of an event} = \frac{\text{Number of cases favourable to event}}{\text{Total number of possible cases}}$$

Q No. 1:- Choose the correct option:

- The number of times an observation occurs in a data is called its  
(a) Range (b) Raw data (c) Frequency (d) Interval
- The shape of a pie chart is  
(a) Square (b) oval (c) Rectangular (d) Circular
- The pie chart is divided into  
(a) Segments (b) Sectors (c) Circles (d) Squares
- The central total angle in a pie chart is  
(a)  $180^{\circ}$  (b)  $200^{\circ}$  (c)  $280^{\circ}$  (d)  $360^{\circ}$
- In the class interval 70 – 80, 80 is the  
(a) Lower Limit (b) Range (c) Upper limit (d) Frequency
- An unbiased die is tossed once. Which of the following is the probability of getting an even number  
(a) 1 (b)  $\frac{1}{2}$  (c)  $\frac{1}{3}$  (d)  $\frac{1}{4}$
- A container contains 3 red and 4 black balls. If one ball is selected at random from the container, what is the probability that it is black?  
(a)  $\frac{3}{7}$  (b)  $\frac{4}{7}$  (c) 1 (d) Zero

Q No. 2:- Fill in the blanks:-

<b>Event</b>	<b>Pictograph</b>	<b>Bar graph</b>
<b>Size</b>		<b>Frequency</b>

- A \_\_\_\_\_ is a pictorial representation of data using symbols.
- A \_\_\_\_\_ is a display of information using bars of uniform width, their heights, being proportional to the respective values.
- \_\_\_\_\_ gives the number of times that a particular entry occurs.
- The difference between upper class limit and the lower limit is called the \_\_\_\_\_ of the class interval.
- One or more outcome of an experiment make an \_\_\_\_\_.

\*\*\*\*\*

CHAPTER: MICRO-ORGANISMS: FRIEND AND FOE

**Microorganisms:**

(i) Organisms which are too small to be seen by the naked eye, especially a single celled organism, are called microorganisms or microbes.

ii) Micro-organisms are classified into four major groups- Bacteria, Protozoa, Algae and Fungi



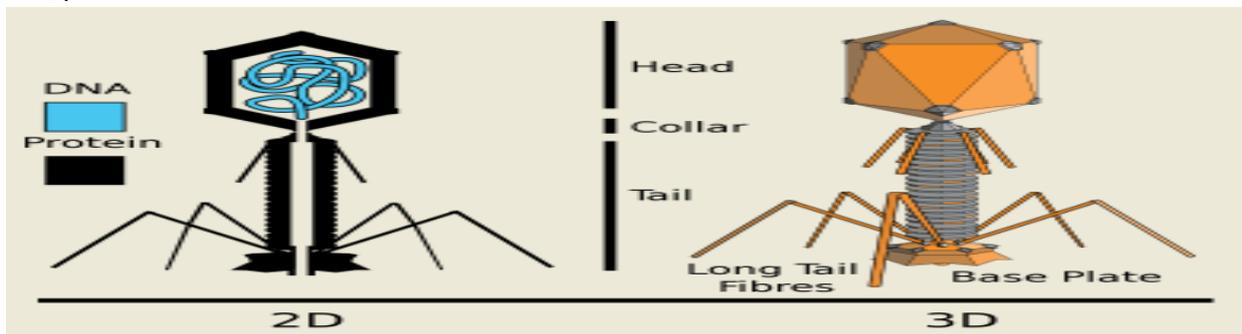
Bacteria

Protozoa

Algae

Fungi

(iii) Viruses are also microscopic. They reproduce only inside the cells of the host organism, which may be a bacterium, plant or animal.



Virus

**Where do Microorganisms Live?**

- (i) Microorganisms may be single celled (bacteria, some algae and protozoa) or multi cellular (algae and fungi) can survive under all types of environment, ranging from ice cold climate to hot springs and deserts to marshy lands.
- (ii) They are also found inside the bodies of other organisms including humans.
- (iii) Growth of some microorganisms depends on other organisms while other organisms exist freely.
- (iv) Microorganisms like amoeba can live alone, while fungi and bacteria may live in colonies.

**Microorganisms and Us:**

Some of Microorganisms are beneficial in many ways while some others are harmful and cause diseases.

**Friendly Microorganisms:**

Microorganisms are used for various purposes

- a. Commercial Use.
- b. Medicinal Use.
- c. Vaccine.

- d. Increasing Soil Fertility.
- e. Cleaning the Environment.

### **Harmful Microorganisms:**

- (i) Some of microorganisms are harmful in many ways.
- (ii) In human beings, plants and animals, some microorganisms cause diseases. Such disease-causing microorganisms are called pathogens.
- (iii) Food, clothing and leather are spoiled due to some harmful microorganisms.

### **Disease-causing Microorganisms in Animals:**

Some microorganisms not only cause diseases in humans and plants, but also in other animals. For example: anthrax is an example of dangerous human and cattle disease caused by a bacterium. Foot and mouth disease of cattle is caused by a virus.

### **Disease-causing Microorganisms in Plants:**

Some of microorganisms cause diseases in plants such as wheat, rice, potato, sugarcane, orange, apple and others. These diseases reduce the yield of crops. They can be controlled by the use of certain chemicals or pesticides which kill the microbes that affect the yield the crops.

### **Food Poisoning:**

Food poisoning in humans is caused by consuming food spoilt by some microorganisms. Microorganisms that grow on our food produce toxic substances and make the food poisonous causing serious diseases. So, it is very important that we preserve food to prevent it from being spoilt by the microorganisms.

### **Food Preservation:**

Microorganisms spoil our food. Spoiled food emits bad smell and has a bad taste and changed colour. Here are some common methods to preserve food in our homes:

- a. Chemical Method.
- b. Preservation by Common Salt.
- c. Preservation by Sugar.
- d. Preservation by Oil and Vinegar.
- e. Heat and Cold Treatments.
- f. Storage and Packing.

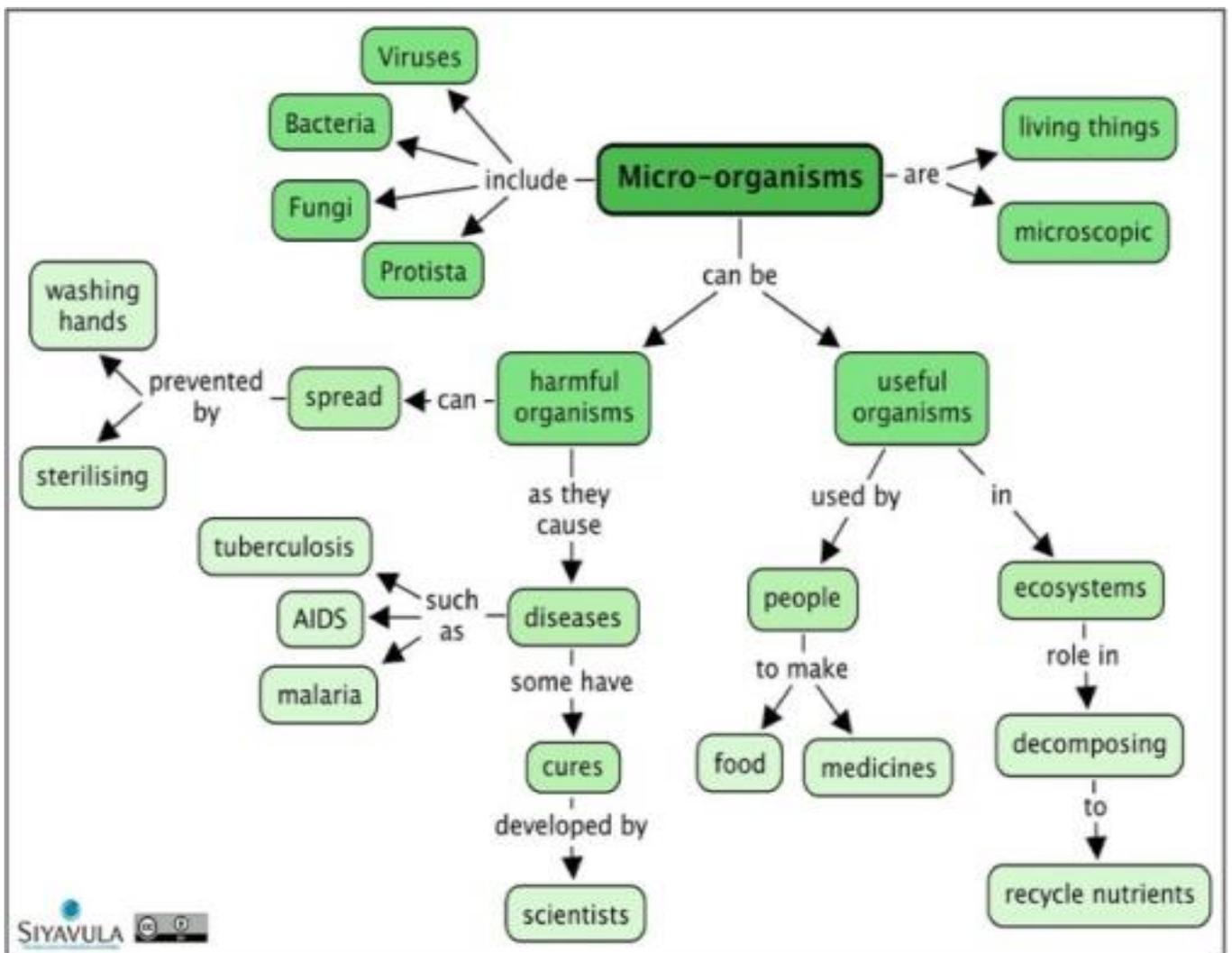
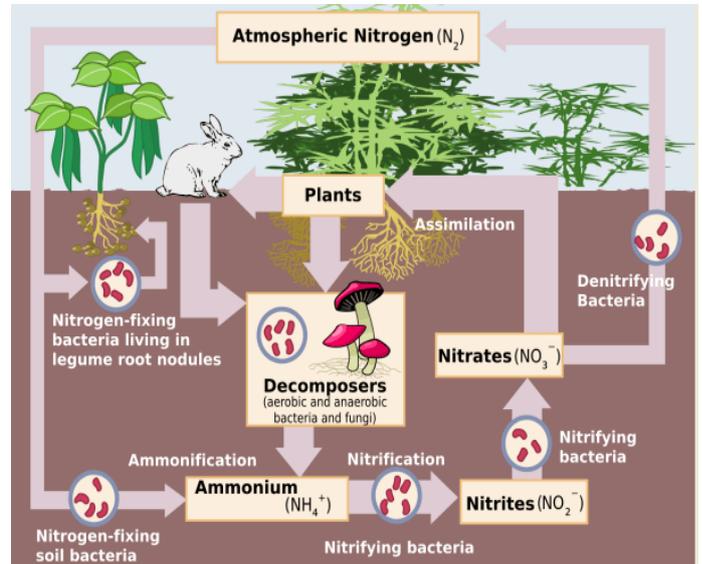
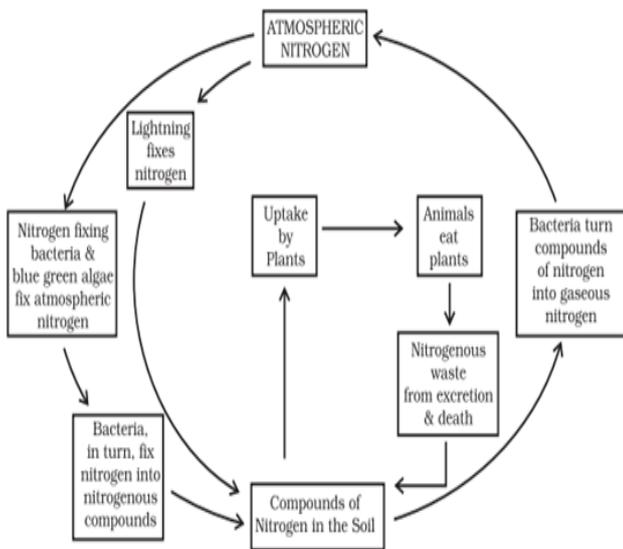
### **Nitrogen Fixation:**

- (i) Rhizobium is involved in the fixation of nitrogen in leguminous plants (pulses).
- (ii) Nitrogen also gets fixed through the action of lightning. But the amount of nitrogen remains constant in the atmosphere.

### **Nitrogen Cycle:**

- (i) Nitrogen is one of the essential constituents of all living organisms as part of proteins, chlorophyll, nucleic acids and vitamins, available 78% in our atmosphere. Bacteria and blue green algae present in the soil are used for fixing nitrogen from the atmosphere and then converting it into compounds of nitrogen.

- (ii) After this, usable compounds can be utilised by plants from the soil through their root system. These compounds are then used for the synthesis of plant proteins and other compounds. Animals feeding on plants get these proteins and other nitrogen compounds.
- (iii) When plants and animals die, bacteria and fungi present in the soil convert the nitrogenous wastes into nitrogenous compounds to be used by plants again. Certain other bacteria convert some part of them into nitrogen gas which goes back into the atmosphere. As a result, the percentage of nitrogen in the atmosphere remains more or less constant.



(Lesson Mapping)

## EVALUATION:

Q1. Define Micro-organisms?

Q2. Give uses of Micro-organisms?

Q3. List a few harmful effects of micro-organisms.

Q4. Fill in the blanks.

- a. Organisms which are too small to be seen with the naked eye are called \_\_\_\_\_.
- b. Micro-organisms are classified into \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ & \_\_\_\_\_.
- c. Food, clothing and leather are spoiled due to some \_\_\_\_\_ micro-organisms.
- d. \_\_\_\_\_ is involved in the fixation of nitrogen in leguminous plants.
- e. Disease causing micro-organisms are called \_\_\_\_\_.

Q5. Draw a Nitrogen Cycle.

## CHAPTER: Solar Stars and the System

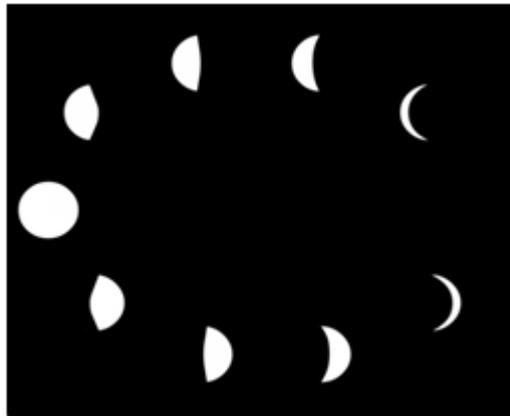
**Celestial Objects:** Things like stars, planets, moons, etc. which are present in the space are known as celestial objects.



Celestial objects

### The Moon:

**1. Phases of the moon:** The different shapes of moon visible during various days in a month are called as phases of the moon.



Different Phases of Moon

**2. Full moon day:** It is the day on which the full moon is visible.



Full Moon

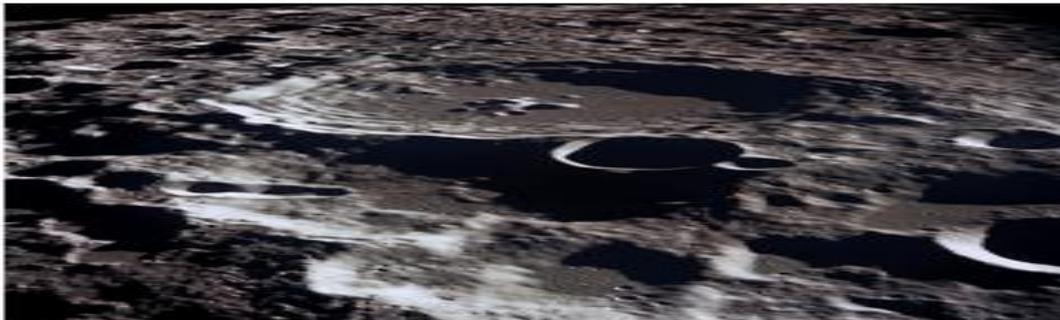
**3. New Moon day:** After the full moon day, the moon appears to become thinner and thinner. On the fifteenth day the moon is not visible. This day is known as the new moon day.

#### 4. Why does Moon have different phases?

- (i) Moon does not have its own light and actually it reflects the light coming from sun which is responsible for various phases of the moon.
- (ii) After new moon day, the visibility size of illuminated part of moon seen from Earth keeps increasing and after full moon day it keeps decreasing.

#### 5. The Moon's Surface:

- (i) The Moon's surface is dusty, barren and has many different sized craters on it. Moreover, there are many big and small mountains.
- (ii) The Moon has no atmosphere or water.



Surface of Moon

#### The Stars:

- (i) These are the objects that twinkle in the sky at night.
- (ii) Sun is the nearest star to our planet which is approx 150 million km away from us.

#### Light Year:

- (i) It is defined as the distance travelled by light in one year. And it is the unit to measure large distances.
- (ii) The speed of light is about 300,000 km per second.
- (iii) The distance of the Sun from the Earth is said to be about 8 light minutes.

**Pole Star:** It is the star which is situated in the direction of the earth's axis.

#### Constellations:

The different known shapes that are formed by a group of stars, is known as a constellation.

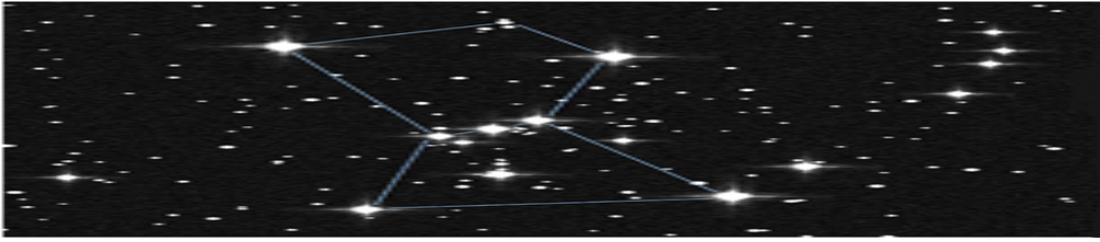
#### Ursa Major:

This constellation consists of seven stars. It is also known as Big Dipper, The Great Bear or the Saptarishi.



## 2. Orion:

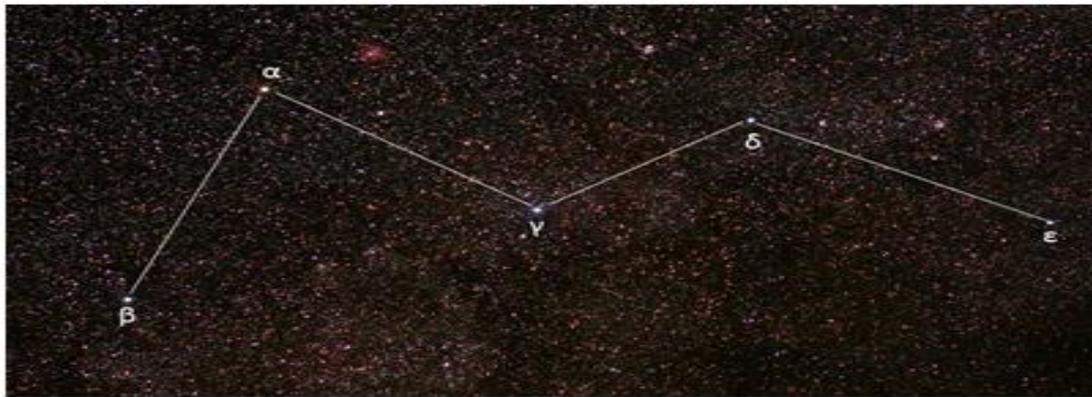
- (i) It is another well known constellation visible during late evenings in winter. It also consists of seven or eight bright stars. Orion is also called the Hunter.



## 3. Sirius: It is the brightest star in the sky.

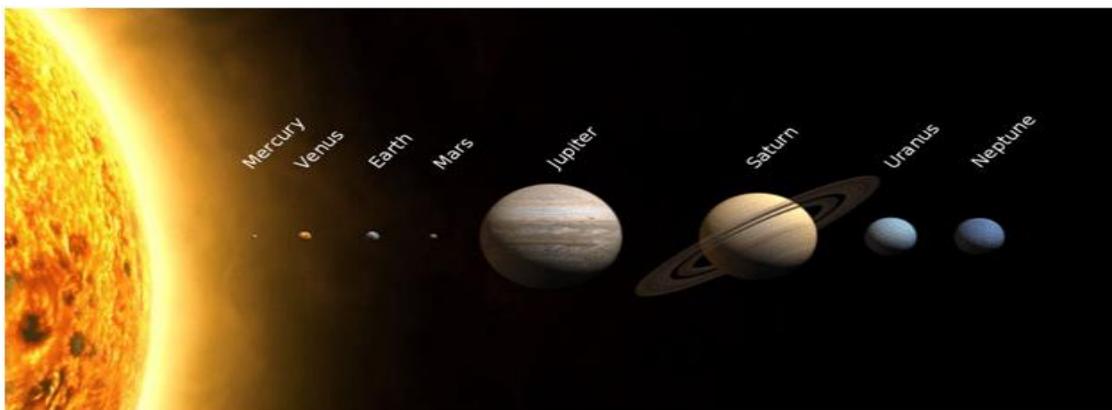


4. Cassiopeia: It is another popular constellation in the northern sky. It is visible during winter in the early part of the night. It looks like a distorted letter W or M.



## The Solar System:

1. It consists of the Sun and other celestial objects present in the space revolving around the sun. The various entities like planets, meteors, comets, etc. are part of our solar system.
2. The eight planets in their order of distance from the Sun are: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.



### 1. The Sun:

The Sun is the nearest star amongst all the stars present in the universe. It is the main source of heat and light for all the planets specially Earth.

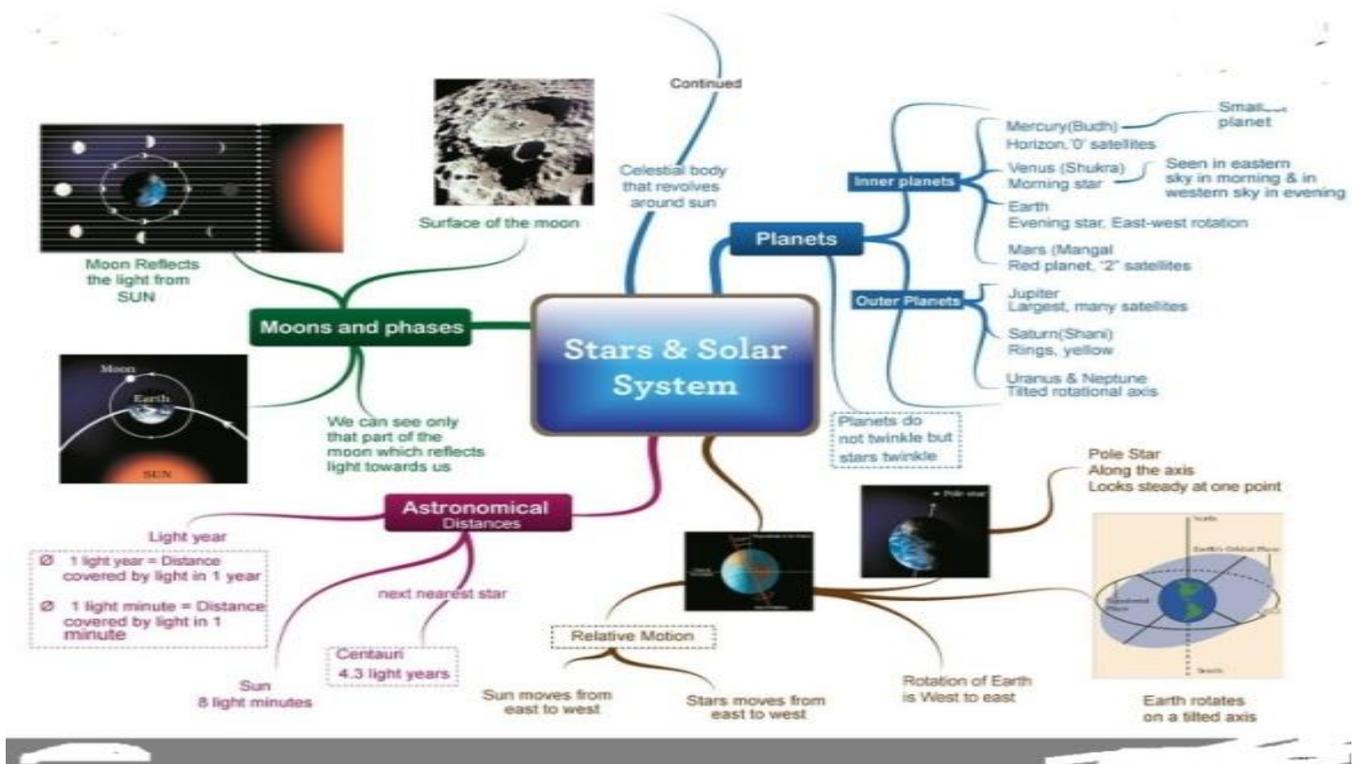
### 2. The Planets:

The planets are like stars, but they do not have light of their own. They merely reflect the sunlight that falls on them. The planets keep changing their positions with respect to the stars. These are the objects revolving around the sun in fixed path. This fixed path is termed as an orbit.

1. **Period of revolution:** It is the time taken by a planet to complete full revolution around the sun.
2. **Period of rotation:** It is the time taken by planet to complete one rotation around its own axis.
3. **Satellite:** These are the celestial bodies present around other celestial body. Example Moon is a satellite of the Earth.
4. **Artificial satellite:** These are the man-made satellites present around the Earth.

### Some Other Celestial Members of the Solar System:

1. **Asteroids:** The small rock like substances that are orbiting around the Sun are called asteroids.
2. **Comets:** They revolve around the Sun in highly elliptical or circular orbits. It looks like as if it has a bright head with a long tail and it is been seen that the tail keeps growing in size as it keeps approaching the sun.
3. **Meteors:** These are small objects that sometimes enter the Earth's atmosphere. It occasionally enters the earth's atmosphere with very high speed.
4. **Meteorite:** These are the leftover objects that reach the Earth. Meteorites help scientists in investigating the nature of the material from which the solar system was formed.
5. **Artificial Satellites:** These are man-made satellites that revolve around the Earth. Aryabhata was the first Indian satellite. Some other Indian satellites are INSAT, IRS, Kalpana-1, EDUSAT, etc. They are used for forecasting weather, transmitting television and radio signals. They are also used for telecommunication and remote sensing.



## ASSESSMENT

Q1. Choose the correct option.

i) Which of the following is not a member of the solar system?

(a) An asteroid (b) A satellite

(c) A constellation (d) A comet

ii) Which of the following is not a planet of the sun?

(a) Sirius (b) Mercury

(c) Saturn (d) Earth

iii) Phases of the moon occur because:

(a) We can see only that part of the moon which reflects light towards us.

(b) Our distance from the moon keeps changing.

(c) The shadow of the earth covers only a part of moon's surface.

(d) The thickness of the moon's atmosphere is not constant.

Q2. Fill in the blanks:

(a) The planet which is farthest from the sun is \_\_\_\_\_.

(b) The planet where life exists is \_\_\_\_\_.

(c) A group of stars that appear to form a pattern in the sky is known as a \_\_\_\_\_.

(d) A celestial body that revolves around a planet is known as \_\_\_\_\_.

Q3. Why does the moon have different phases?

Q4. Define artificial satellite. Give some examples and its uses?

Q5. Give diagrammatic representation of solar system.

**CHAPTER: Coal and Petroleum**

**Natural Resources:**

The resources which are obtained from nature are called as natural resources.

**Types of Natural Resources:**

- (i) Inexhaustible Natural Resources
- (ii) Exhaustible Natural Resources

**1. Inexhaustible natural resources:**

The resources which are available in large quantities in nature and will not be depleted even after continuous usage are known as Inexhaustible natural resources. e.g. sunlight, water, wind etc.



**Sun**



**Water**



**Air**

**2. Exhaustible Natural Resources:**

The resources which are available in limited quantities in nature and will get depleted after continuous usage are known as Exhaustible natural resources. Examples are forests, coal, natural gas, etc.



**Forest**



**Coal**



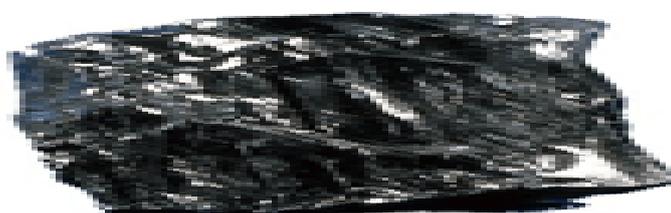
**Natural Gases**

In this chapter we will discuss the some exhaustible natural resources Like Coal, Petroleum and natural Gases.

**Fossil Fuels:**

Some of the exhaustible natural resources like coal, petroleum, etc. are formed from dead remains of the living organisms. These kinds of resources are known as fossil fuels.

- 1. **Coal:** It is a hard stone like substance and black in colour. It has many uses since old times like it was used as heat source to cook food, to produce steam to run train and other engines, in thermal power plants to produce electricity etc.



**Coal**

**Carbonisation:** The process of conversion of dead plants or vegetation into coal is known as carbonisation. It has been found that coal mainly contains carbon and on burning in air produces carbon dioxide gas.

**Some products obtained from coal:**

**(a) Coke:** It is hard, porous and black in colour. It is the purest form of carbon. It is used in the manufacture of steel, extraction of metals etc.



Coke

**(b) Coal Tar:** It is thick black coloured liquid having foul smell. It is mixture of about 200 substances.



Coal Tar

**Applications:** The by-products obtained from coal tar are used in manufacturing of synthetic dyes, drugs, explosives, perfumes, etc. Interestingly, naphthalene balls used to repel moths and other insects are also obtained from coal tar.

**(c) Coal Gas:** It is obtained when coal is processed to obtain the coke. Coal gas was used for street lighting for the first time in London in 1810 and in New York around 1820. Nowadays, it is used as a source of heat rather than light. It is mainly used as fuel in industries.

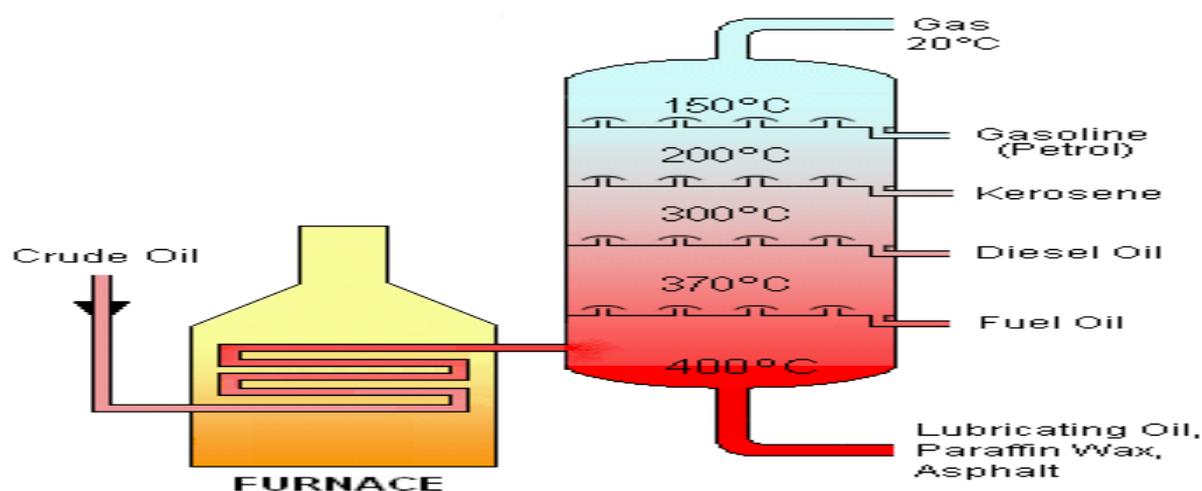


Coal Gas

2. **Petroleum:** When the organisms living in seas or oceans die, their bodies get settled at the bottom of the sea and eventually layers of sand and clay gets deposited over them. After millions of years, the absence of air, temperature and pressure converts them into petroleum.

**Refining of Petroleum:** Petroleum is a dark, oily liquid and has foul smell. It contains many constituents like petroleum gas, petrol, diesel, lubricating oil, paraffin wax, etc. It is the process of separating the various constituents of petroleum.

## Process of refining petroleum:



(A petroleum refinery)

## Different constituents of petrol and their uses:

No.	Constituents of petroleum	Uses
1	Liquefied Petroleum Gas (LPG)	As fuel for home and industry
2	Petrol	As fuel for automobiles and as solvent for dry cleaning
3	Kerosene	As fuel for stoves, lamps, etc.
4	Diesel	As fuel for heavy motor vehicles, generators, etc.
5	Lubricating Oil	For lubrication
6	Paraffin Wax	In ointments, candles, vaselines, etc.
7	Bitumen	For making paints, surfacing roads, etc.

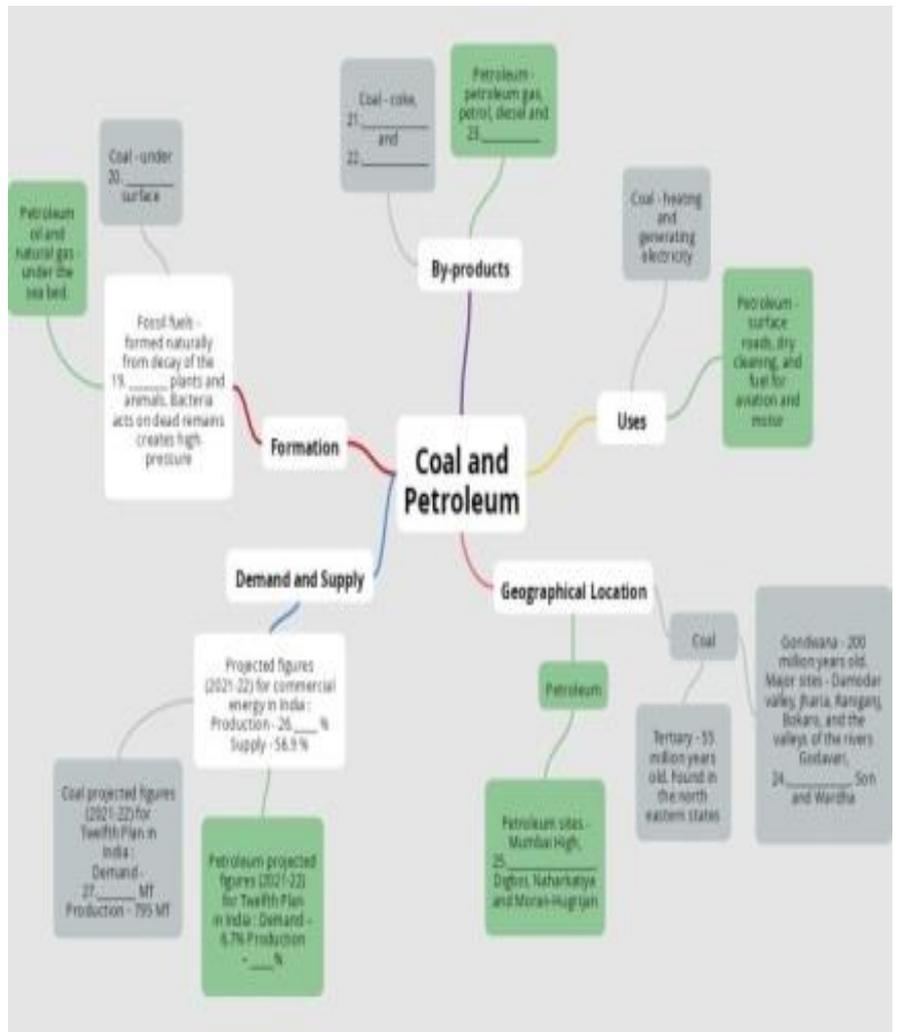
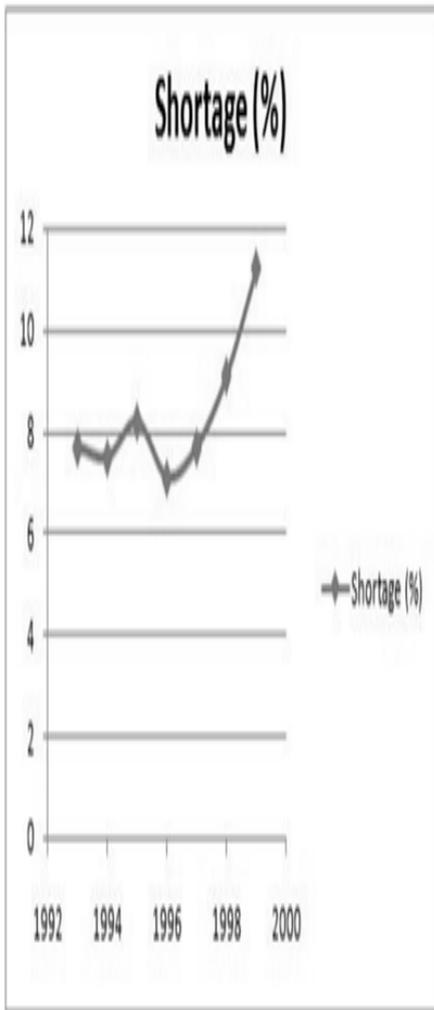
**3. Natural Gas:** It is another significant fossil fuel and it is really convenient to send it through pipes. In our country, natural gas has been found in Tripura, Rajasthan, Maharashtra and in the Krishna Godavari delta. It causes less pollution. Moreover, it can be used directly at homes and factories for burning and other purposes as it can be easily be transported through pipes.

### Applications:

It is used as fuel in automobile, manufacturing of many chemicals and fertilizers.

### Some preventive measures to save fuels by Petroleum Conservation Research Association (PCRA)

- (i) Drive vehicles at average and constant speed.
- (ii) When not necessary shut down the vehicle's engines.
- (iii) Make sure pressure in tyres is correct.
- (iv) Always keep vehicles in good condition.



### Lesson Strategy

#### ASSESSMENT:

Q1. What are the advantages of using CNG and LPG as fuel?

Q2. Fill in the blanks:

- (a) Fossil fuels are \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.
- (b) Process of separation of different constituents from petroleum is called \_\_\_\_\_.
- (c) Least polluting fuel for vehicle is \_\_\_\_\_.

Q3. Tick True/False against the following statements:

- (a) Fossil fuels can be made in the laboratory. (T/F)
- (b) CNG is more polluting fuel than petrol. (T/F)
- (c) Coke is almost pure form of carbon. (T/F)
- (d) Coal tar is a mixture of various substances. (T/F)
- (e) Kerosene is not a fossil fuel. (T/F)

Q4. Differentiate between exhaustible and inexhaustible resource.

Q5. List petroleum products and their uses.

## CHAPTER: Conservation of Plants & Animals

We know that large varieties of plants and animals are present on the earth.



(Different kinds of Plants and Animals)

**Deforestation:** The clearing of forests and using the land for various purposes is termed as deforestation. It is a reason of survival threat to many living organisms.

### Causes of deforestation:

1. Rapid urban development.
2. Agriculture related purposes.
3. Making furniture.
4. Moreover, natural causes like forest fires, droughts, etc. are also responsible for deforestation.

### Consequences of deforestation:

1. Increase in the temperature and pollution level.
2. Decrease in the ground water level.
3. Decrease in rainfall and fertility of soil.
4. Increase in natural calamities like floods, droughts, etc.
5. Decrease in the water holding capacity and water infiltration rate of soil. The other properties of the soil like nutrient content, texture, etc. also change because of deforestation
6. *Global warming:* Deforestation will decrease number of trees that will lead to increase in carbon dioxide level in the atmosphere. The carbon dioxide gas traps the heat rays reflected from earth's surface and this will result in increase in temperature on earth and it will disturb the water cycle too and may reduce rainfall. This could cause droughts.
7. *Desertification:* Deforestation is also responsible for the change in the soil properties. Lesser number of trees will result into more soil erosion. The removal of top layer of soil will result into hard rocky layer which is less fertile and humus. Eventually, the fertile land will be converted into deserts. Such a process is known as desertification.

### Conservation of Forest and Wildlife:

- (i) To prevent deforestation and for the conservation of forests and wildlife, the government has implemented many rules, methods and policies.
- (ii) Amongst many steps, areas called sanctuaries, national parks and biosphere reserves have been marked where activities like plantation, cultivation, grazing, hunting, poaching etc. are prohibited.

### Sanctuary:

These are the places where animals and their habitats are safe from any external disturbances with very limited human activities. Some of the well known sanctuaries in India are Corbett National Park in Uttarakhand, Ranthambore National Park in Rajasthan, etc.

### National Park:

These are the places where animals can use their habitats and natural resources freely. Some of the well known sanctuaries in India are Bandipur National Park in Karnataka, Keoladeo Ghana National Park in Rajasthan, etc.

### Biosphere Reserve:

- (i) These are the places for conservation of wild life, animals, plants, traditional life of tribes, etc.
- (ii) These are the areas meant for the conservation of bio diversity.
- (iii) The biosphere reserve conserves the biodiversity and culture of that particular area.

**Biological Diversity or Biodiversity:** It refers to the variety of organisms living on the earth, their inter-relationships and their relationships with the environment.

### Flora and fauna:

**(1) Flora:** The plants of a particular region or area are termed as its flora. Examples of flora include sal, coral, teak, mango, jamun, sunflower, etc.

**(2) Fauna:** The animals of a particular region or area are termed as its fauna. Examples of fauna include deer, lion, parrot, eagle, ant, goldfish, etc.

### Species:

It is a group of organisms which are capable of interbreeding. They can reproduce and give births to infants of the same kind and not of other kinds. These organisms will possess the same characteristics.

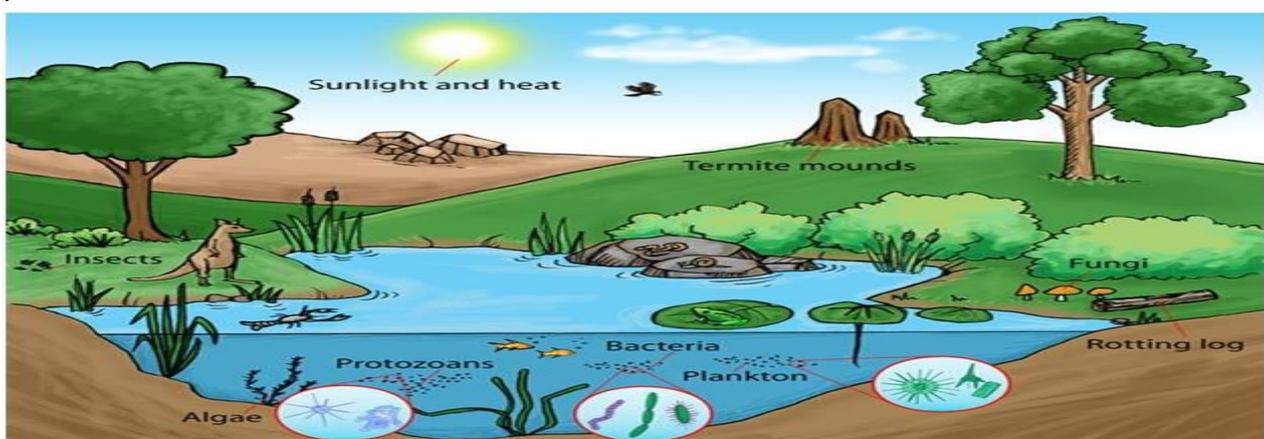
**Endemic Species:** These are the species which are completely confined in a particular area and not found anywhere else. Example of endemic species includes tree like sal, wild mango, etc. and animals like bison, Indian giant squirrel, etc. which are found only in Pachmarhi Biosphere Reserve.

**Wildlife Sanctuary:** These are the areas reserved for the protection and giving suitable living conditions to animals. Activities like hunting; poaching, capturing, etc. of animals are prohibited in these sanctuaries.

**National Park:** These are the reserves that are large and diverse and provide protection to entire ecosystem. They preserve plants, animals, lands and historic objects etc. of that particular area.

**Endangered species:** The animals that are gradually decreasing in number and are feared to get extinct in future are known as endangered animals. Examples of some endangered animals are snow leopard, Giant Panda, whooping crane, etc.

**Ecosystem:** It is a system that comprises of all the plants, animals and micro-organisms dwelling in a particular area along with non-living things like air, water, soil, etc. There is an equal importance of each and every organism whether it may be snakes, frogs, lizards, bats, etc. for proper functioning of an ecosystem.



**Red Data Book:** It is a book which has list of all the endangered plants and animals.

**Migration:** It is the seasonal movement of animals, birds, etc. from one place to another in search for better climate, breeding place, food, etc.

**Recycling of Paper:**

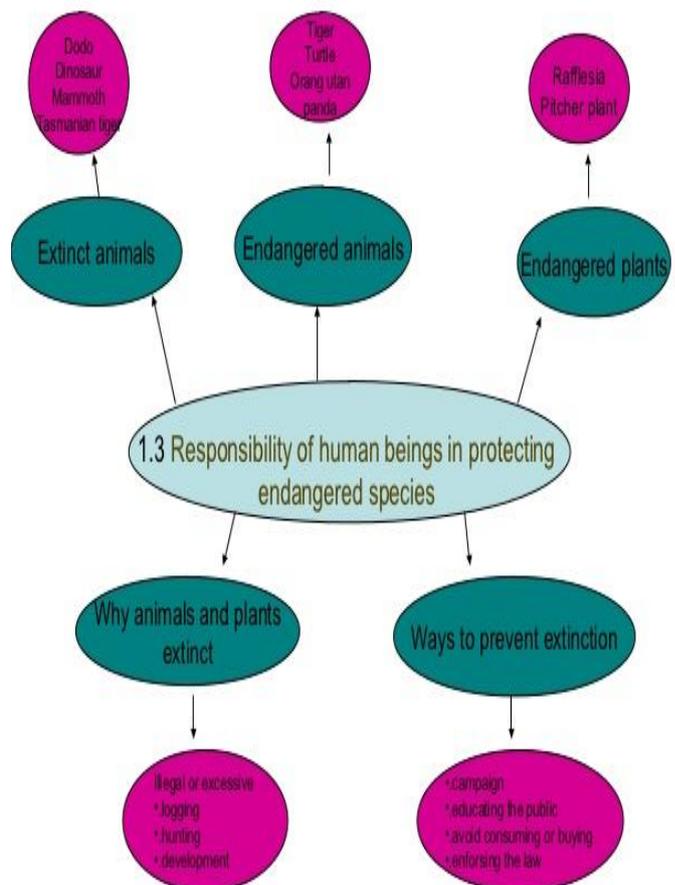
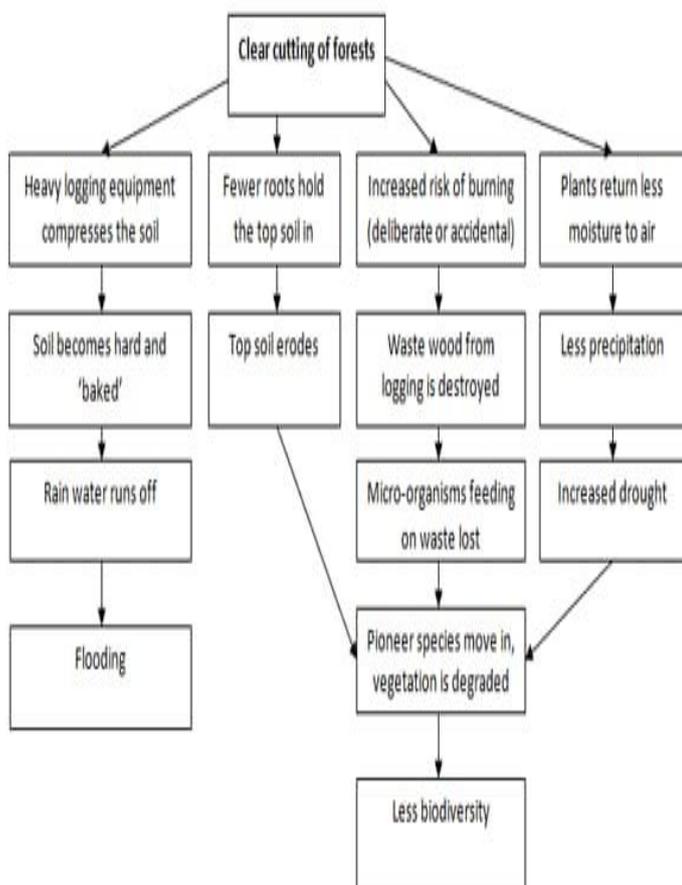
One of the reasons for deforestation is the manufacturing of the paper. Remember, lots of harmful chemicals are utilized in manufacturing process of paper. It takes 17 full grown trees to make one ton of paper. Hence, it is advisable to save, reuse and recycle paper. Paper can be recycled five to seven times for use.

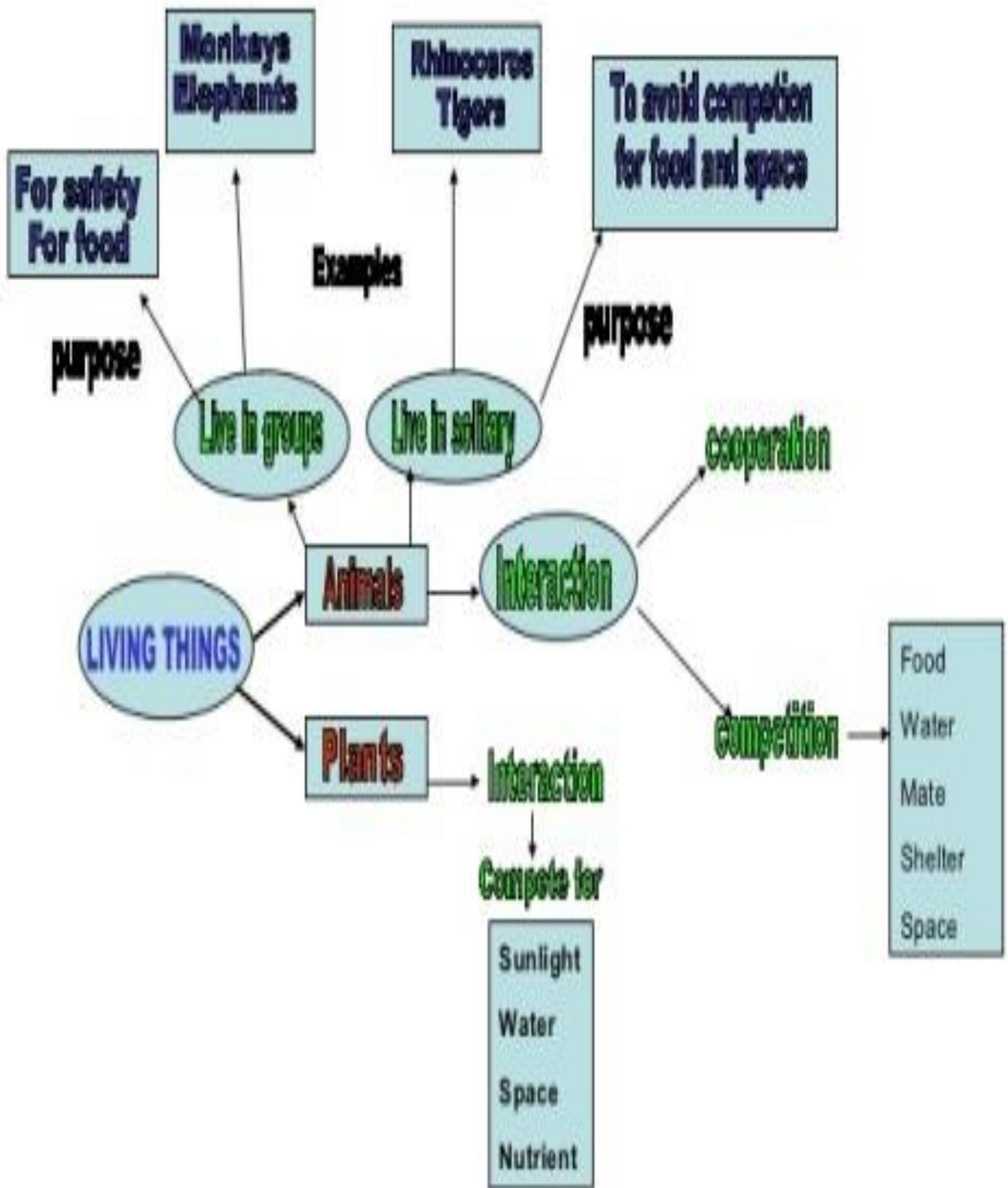


**Reforestation:** It is the restocking of deforested forests by planting new trees.

**Steps to follow reforestation:**

1. Try to implant new plants of same species which were present before.
2. Try to plant the same or more number of trees as are cut.
3. *Natural reforestation* – It is the natural growth of trees taking place at deforestation site if left undisturbed. No human involvement is needed in this case.
4. *Forest Act* - It is the act initiated to preserve and conserve forests, so that people inhabiting these forests can fulfill their basic needs.





(Lesson Mapping)

**ASSESSMENT:**

**Q1.** Fill in the blanks:

- (a) A place where animals are protected in their natural habitat is called \_\_\_\_\_.
- (b) Species found only in a particular area is known as \_\_\_\_\_
- (c) Migratory birds fly to far away places because of \_\_\_\_\_ changes.

**Q2.** Differentiate between the following:

- (a) Wildlife sanctuary and biosphere reserve.
- (b) Endangered and extinct species.
- (d) Flora and fauna.

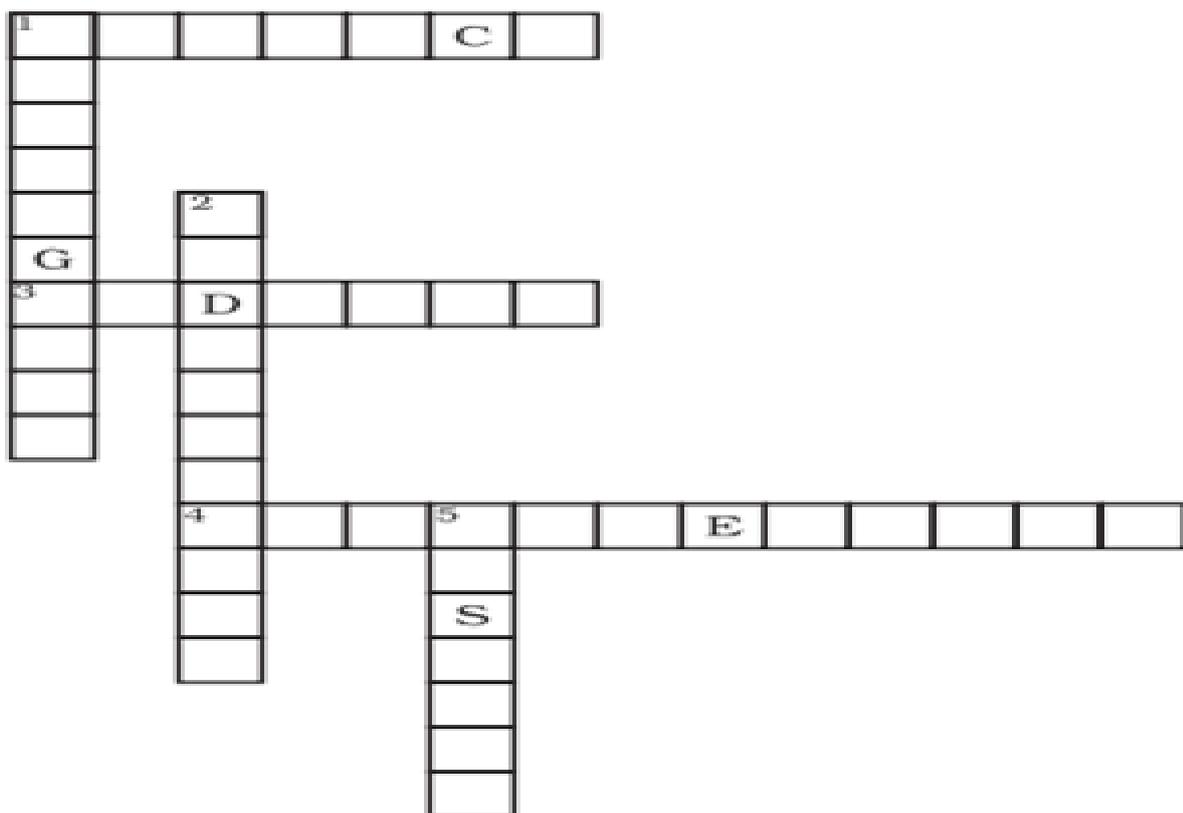
**Q3.** Complete the word puzzle:

**Down:**

- 1. Species on the verge of extinction.
- 2. A book carrying information about endangered species.
- 5. Consequence of deforestation.

**Across:**

- 1. Species which have vanished.
- 3. Species found only in a particular habitat.
- 4. Variety of plants, animals and microorganisms found in an area



**Q4.** Explain ecosystem diagrammatically?

## CHAPTER: Sound

**Sound:** Sound is a form of energy like heat energy, light energy, potential energy and kinetic energy. It causes a sensation of hearing in our ears. Sound helps us to communicate with each other.

### Production of Sound:

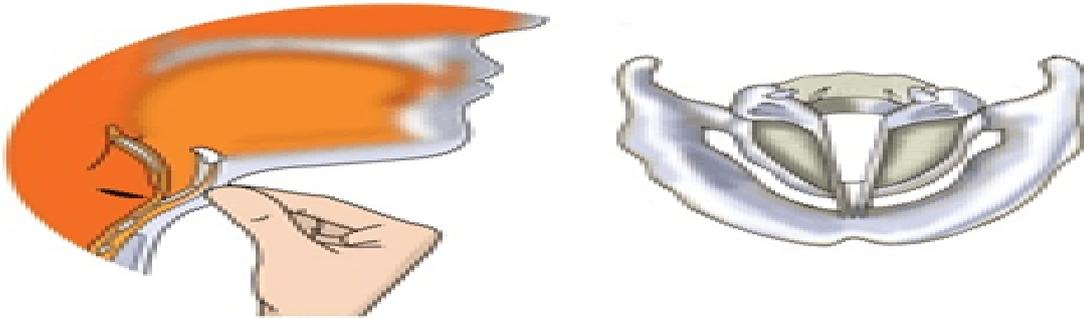
- (i) Sound is produced due to the vibration of object.
- (ii) The motion of materials or objects causes vibration.
- (iii) Vibration is a kind of rapid to and fro motion of an object from central position. It is also referred to as oscillation.

Examples:

- (a) A stretched rubber band when plucked vibrates and produces sound.
- (b) In the music room of your school you hear the sounds made by musical instruments like flute, tabla, harmonium, guitar etc. because of vibration.
- (c) When a spoon is beaten on the plate, it starts vibrating and produces sound.

### Sound Produced by Humans:

- (i) In humans, sound is produced because of vibration of the voice box or larynx.
- (ii) It is situated at the upper end of windpipe. There are two stretched membranes called vocal cords attached in larynx with a narrow slit between them through which air passes.



(Voice Box in Humans)

- (iii) Muscles attached to the vocal cords can make the cords tight or loose. When the vocal cords are tight and thin, they produce different types or qualities of voice.

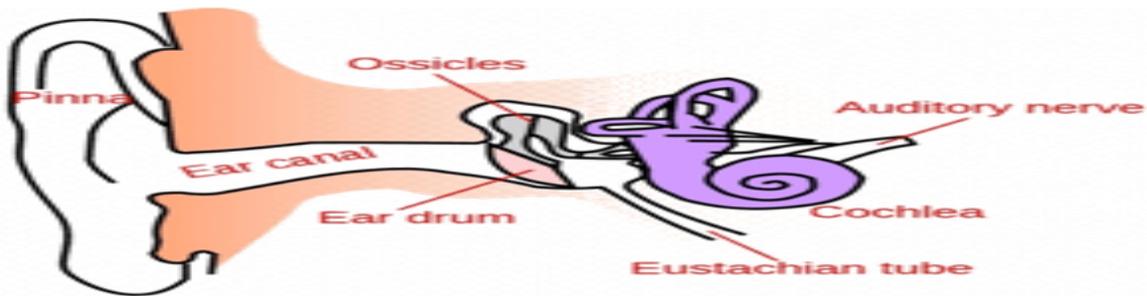
**Propagation of Sound:** The travelling of sound is called propagation of sound. Sound is propagated by the to and fro motion of particles of the medium.

### Sound needs a medium to propagate:

- (i) A medium is necessary for the propagation of sound waves.
- (ii) The matter or substance through which sound is transmitted is called a medium. The medium can be solid, liquid or gas.
- (iii) Sound cannot travel in vacuum. A true vacuum refers to the complete absence of matter. Sound wave can travel only through matter. So, sound needs a physical medium in order to propagate anywhere.
- (iv) We hear sound which comes to us through air medium particles.
- (v) Aquatic animals communicate as sound travels through water.

## We hear Sound through Our Ears:

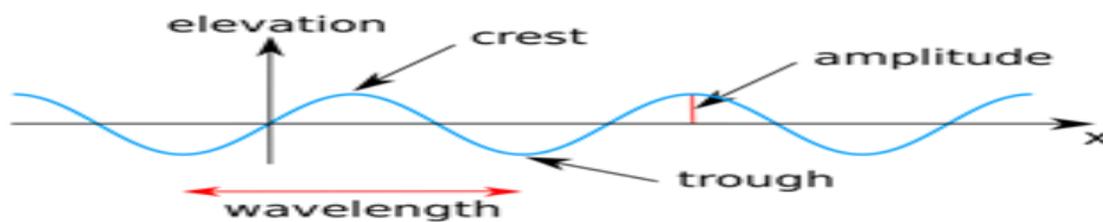
- (i) The funnel shaped outer ear collects the sound. The sound wave passes through the ear canal to thin and stretched membrane called eardrum or tympanum. The ear drum vibrates and produces vibrations.
- (ii) The vibrations are amplified by the three bones of the middle ear called hammer, anvil and stirrup. The middle ear then transmits the sound wave to the inner ear.
- (iii) In the inner ear the sound wave is converted into electrical signals by cochlea and sent to the brain through the auditory nerves. The brain interprets the signals as sound. That is how we hear.



(Structure of Ear)

## Amplitude, Time Period and Frequency of a Sound:

1. **Amplitude:** In a sound wave, the maximum displacement associated with the particle constituting a wave is called its amplitude. It is represented by 'A'. SI unit is metre.



## 2. Frequency:

- (i) The number of vibrations and oscillations completed by an object in one second is the frequency of the sound.

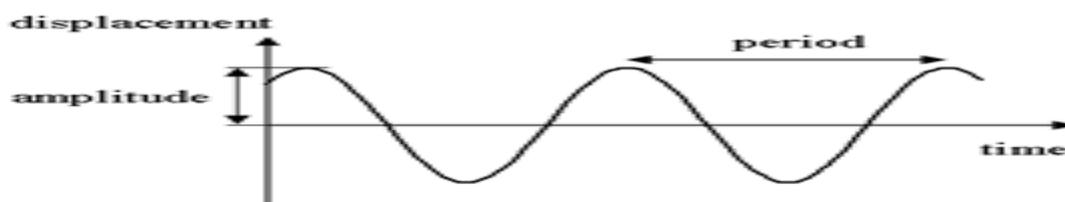
$$\text{Frequency} = \text{Number of Oscillation} / \text{Total time, } \nu = 1/T$$

- (ii) Frequency is expressed in hertz. It is represented by Hz.
- (iii) A frequency of 20 Hz is twenty oscillations per second.
- (iv) If an object oscillates or vibrates 80 times in 1 second, then its frequency will be equal to 80 hertz.



In the above figure waves have same amplitude but number of vibrations per second are different. So their frequencies are different.

3. **Time period:** The time taken by object or the particle of the medium for completing one oscillation or vibration is called the time period. It is represented by 'T'. SI unit is Second.



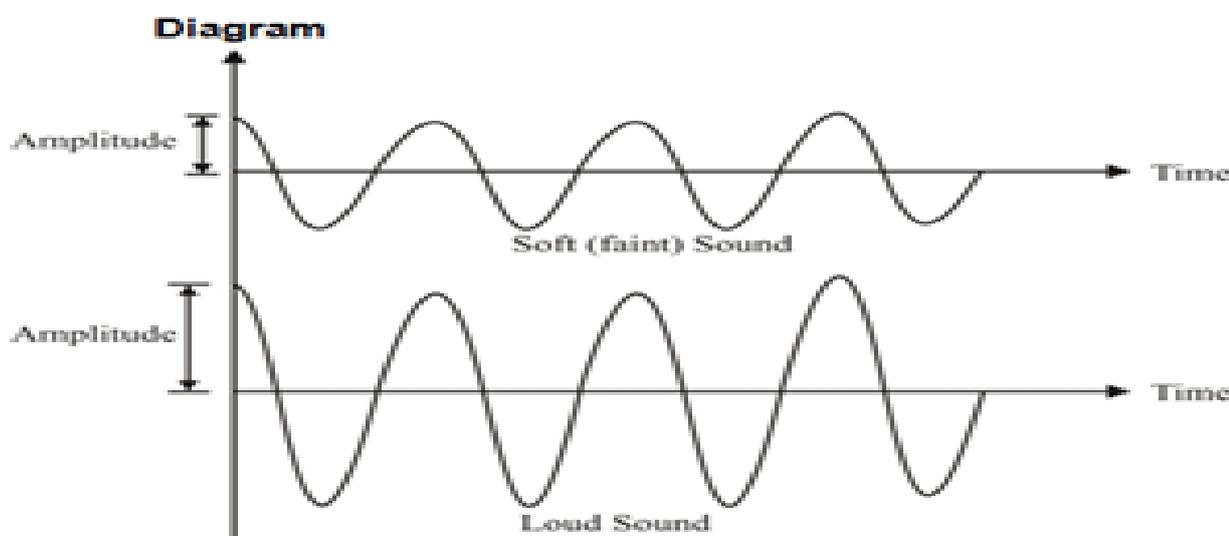
$$\text{Time period} = \text{Time} / \text{Numbers of oscillation.}$$

**Loudness and Pitch:**

1. **Loudness:** Loudness of sound is the measure of sound energy reaching the ear per second. Loudness or softness of a sound depends upon its amplitude. Loudness of sound is proportional to the square of the amplitude of the vibration producing the sound. Loudness of sound is measured in decibel (dB).

$$\text{Loudness} \propto (\text{Amplitude})^2$$

If the amplitude becomes twice, the loudness increases by a factor of 4.



*The following table gives different types of loudness of sound coming from various sources.*

Normal breathing	10 dB
Soft whisper (at 5m)	30dB
Normal conversation	60dB
Busy traffic	70dB
Average factory	80dB

2. **Pitch or Shrillness:** Pitch is the sensation (Brain interpretation) of the frequency of an emitted sound. The pitch of sound (Shrillness or flatness) depends on the frequency of vibration. *Examples:*

- (i) Children and women produce high frequency sound so their sound is shriller or of higher pitch. On the other hand, an adult male produces lower frequency sound so his sound is less shrill or of lower pitch.
- (ii) A drum produces lower frequency sound which is less shrill or of lower pitch, while a whistle produces higher frequency sound which is shriller or of higher pitch.

**Audible and Inaudible Sound:**

- (i) Sounds having frequency range between 20 Hz to 20,000 Hz are called audible sounds. The human beings can hear the sound range between 20 hertz to 20,000 hertz.
- (ii) Sound having frequency below 20 hertz and above 20,000 hertz is called sound of inaudible range. Humans cannot hear the sound of inaudible range.
- (iii) Many animals, such as dogs, cats, etc. can hear the sound with frequency above 20,000 hertz.

**Noise and Music:**

1. **Noise:** It is the sound that is unpleasant to hear. (E.g., Sound produced by vehicles)
2. **Music:** It is the sound that is pleasant to hear. (E.g., Sound coming out of musical instruments)

**Noise Pollution:** Presence of excessive, loud, unwanted or unbearable sound to our ears in the environment is called noise pollution. Examples: sounds of vehicles, explosions including bursting of crackers, machines, loudspeakers, television with high volume, loudspeakers etc.

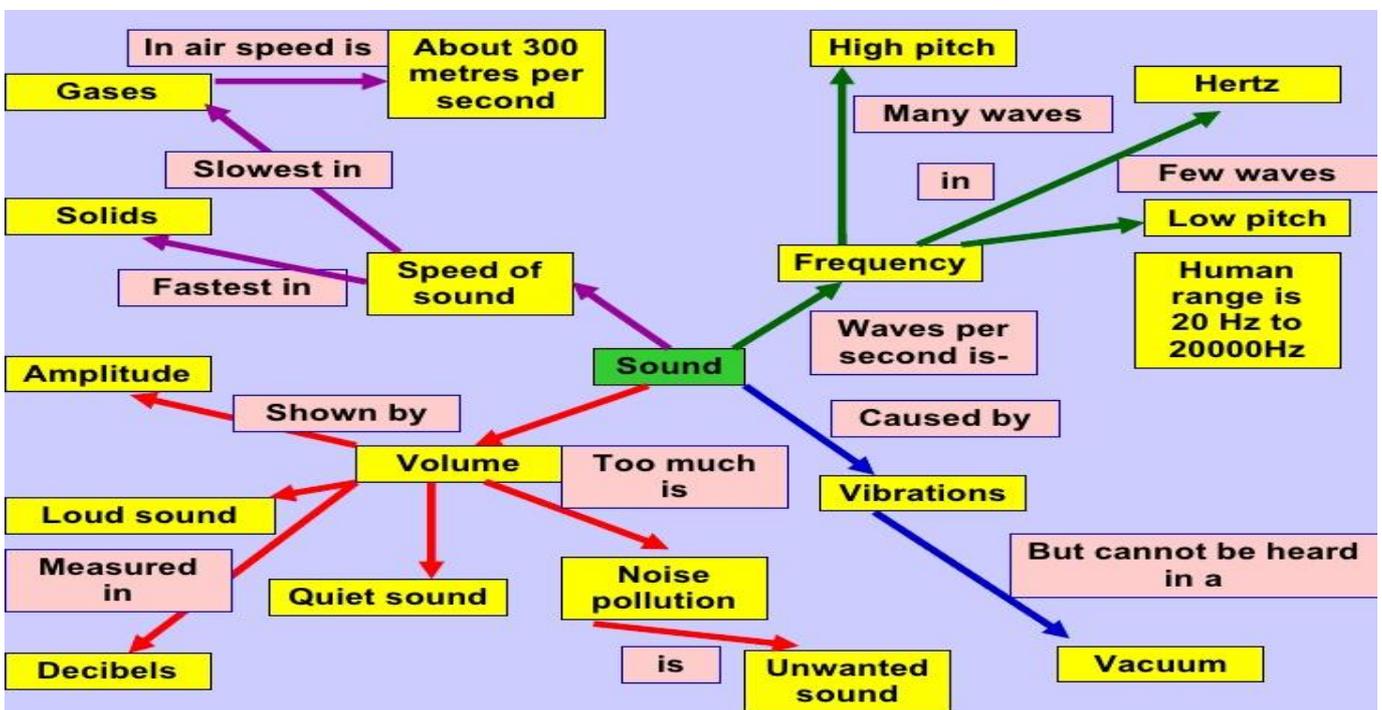
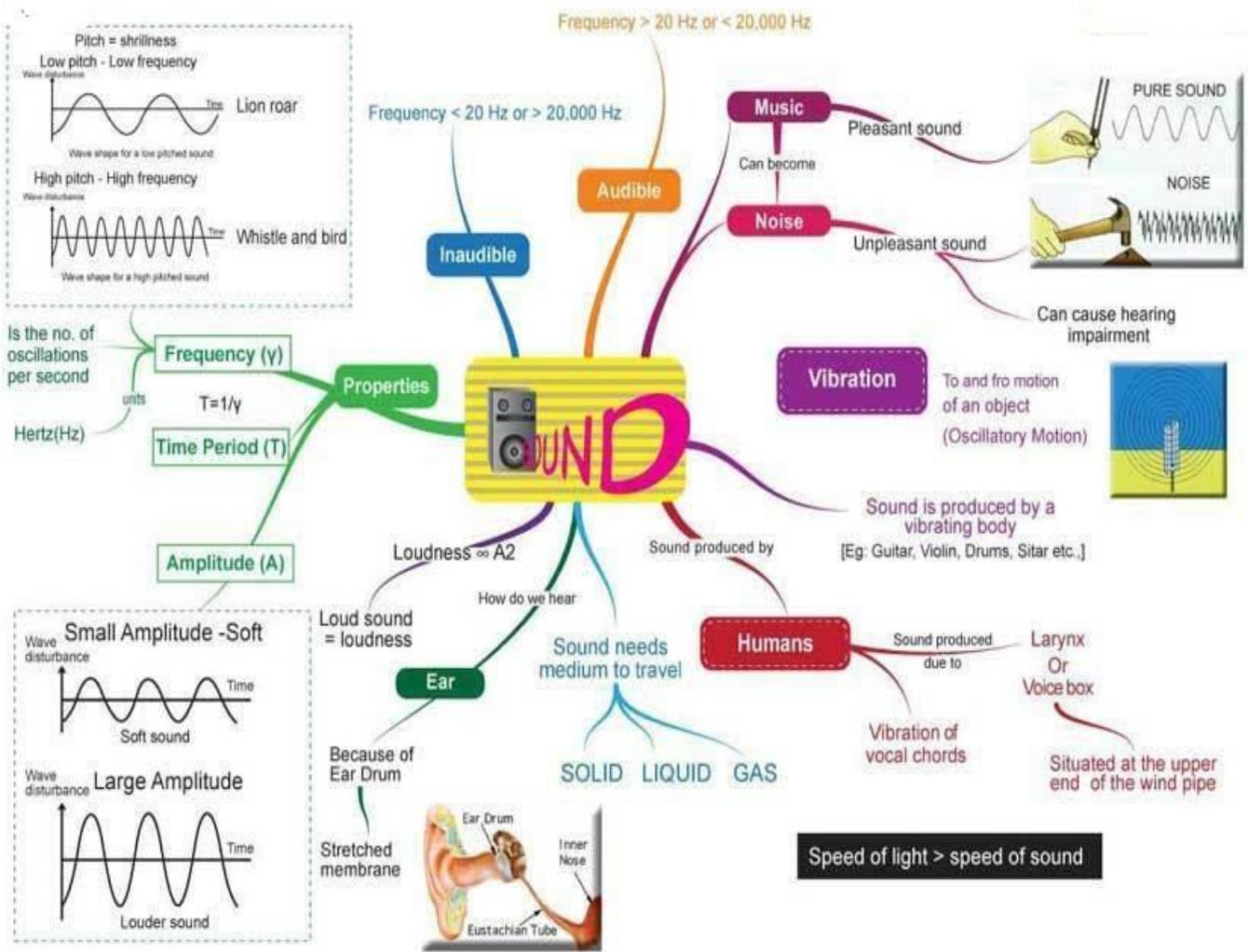
**Problems due to Noise Pollution:**

- (i) Due to noise pollution many types of health related problems occurs, such as lack of sleep (insomnia), hypertension (High blood pressure), loss of hearing, anxiety, etc. Sound above 80 dB is very painful to hear.
- (ii) A person who is exposed to loud sound continuously may get permanent or temporary impairment of hearing or loss of hearing.

**Measures to Limit Noise Pollution:**

Noise can be limited or controlled by controlling the noise source. Noise pollution can be controlled by taking following steps:

- (i) TV, radio or loudspeakers should be played at low volume.
- (ii) By installing high quality silencing devices in vehicles, air craft engines, industrial machines and home appliances.
- (iii) We should not use loud vehicle horns.
- (iv) Noise producing industries should be set up away from residential areas.
- (v) Trees absorb sound. So plantation of trees should be done along the road sides and around buildings.
- (vi) Awareness campaign and noisy operations should be done to make people aware about the harmful effects of noise pollution and measures to control noise pollution.



(Lesson Mapping)

## ASSESSMENT

Q1 Choose the correct answers:

i) Sound can travel through

(a) gases only

(b) solids only

(c) liquids only

(d) solids, liquids, gases

ii) Which of the following voices is likely to have minimum frequency?

(a) Baby girl

(b) Baby boy

(c) A man

(d) A woman

Q2. In the following statements, tick T against those which are true, and F against those which are false:

(a) Sound cannot travel in vacuum.

(T/F)

(b) The number of oscillations per second of a vibrating object is called its time period.

(T/F)

(c) If the amplitude of vibration is large, sound is feeble.

(T/F)

(d) For human ears, the audible range is 20 Hz to 20,000 Hz.

(T/F)

(e) The lower the frequency of vibration, the higher is the pitch.

(T/F)

(f) Unwanted or unpleasant sound is termed as music.

(T/F)

(g) Noise pollution may cause partial hearing impairment.

(T/F)

Q3. Fill in the blanks with suitable words.

(a) Time taken by an object to complete one oscillation is called .....

(b) Loudness is determined by the ..... of vibration.

(c) The unit of frequency is .....

(d) Unwanted sound is called .....

(e) Shrillness of a sound is determined by the ..... of vibration.

Q4. A pendulum oscillates 40 times in 4 seconds. Find its time period and frequency.

Q5. What is the difference between noise and music?

Q6. List sources of noise pollution in your surroundings.

Q7. Draw structure of human ear.

**LESSON 1: HOW, WHEN AND WHERE? (HISTORY)****HIGHLIGHTS OF THE CONTENT**

Dear students, you are well aware about the nature and meaning of the subject 'History' which means the study of the past. Imagine that you want to know about your great grandparents and distinct ancestors. For that you need to know about your family's past. This lesson tells us about the past of India during modern period along with the different sources used to write history. Let's start with the importance of dates in history.

**How important are dates?**

"History is certainly about changes that occur over time". History is synonymous with dates.

We compare the past with the present. We continue to associate history with a string of dates.

We study dates to find out the sequence of events and significance of those events.

- Now the question arises, Which Dates?

Selection of dates depends on the story of past. Focusing on a particular set of events is important.

By studying the dates, reasons and consequences of events are understood in a better way.

**How do we Periodise?**

According to James Mill, only British rules, culture and laws could make Indians civilised. There are significant sources to study the periods of events and by studying different historical evidences a string of time periods can be framed. James Mill divided Indian history into three periods – Hindu, Muslim & British. But, this periodization has its own problem. Dividing Indian history into 'Hindu' or 'Muslim' is problematic because a variety of other faiths existed simultaneously during these periods. It is also not right to characterise an age on the basis of the religion of the rulers of the time. What it suggests is that the people belonging to other faiths do not really matter.

- What is colonisation:

When the subjugation of one country by another country leads to change in social, cultural, economic and political sphere, it leads to colonisation.

British rule in India brought about changes in values and tastes, customs and practices.

- How do we know Administration:

One important source is the official records of the British administration.

The British felt all important documents and letters needed to be preserved.

Specialized institutions like archives and museums were established to preserve important records.

Administrative source only represents half of the picture as they all were written and maintained by British officials.

Several other sources studied together give a better picture of administration.

### **Sources of Information:**

Official records, letters, memos, surveys, newspapers, magazines, autobiographies, reports, experiences of travellers, novels and poems are some important sources of information of British rule and atrocities.

The practice of surveying became common under colonial administration.

Surveys like botanical, zoological, archaeological, anthropological and forest surveys were in the list of British administration.

Sources kept and written by both Indians and British studied together represents several aspects of British rule and their efforts to modernise or subjugate Indian population.

- What do Official Records not Tell:

The official records do not tell us about the needs of people of India.

Many official records hide the truth and only show one aspect of the event.

The official records do not represent the fall-outs of British administration and also do not represent the reactions and situation of Indians of every sphere of society.

### **EVALUATION/PROGRESS CHECK:**

A) Multiple choice questions/ one word substitution:

(i) A History of British India was written by

a) Charles Darwin    b) James Mill    c) Albert Einstein    d) Thomas Charles

(ii) The first Governor General of India was

a) Lord Mountbatten    b) Lord Bentinck    c) Lord Warren Hastings    d)

Mr. Yousuf T.

(iii) The word 'Calligrapher' means

a) One who is specialised in the art of painting.    B) One who is specialised in the art of music.

C) One who is specialised in the art of beautiful writing. D) One who is specialised in the public speaking.

Iv) James Mill divided Indian history into how many periods?

a) Two    b) three    c) four    D) five

V) J. Mill divided Indian history into periods of \_\_\_\_\_, \_\_\_\_\_ & \_\_\_\_\_

B) Short answer questions:

1. Name some sources of modern Indian history.
2. James Mill's periodisation of Indian history is not correct, state why?
3. What do Official Records not tell?

## LESSON 1: THE INDIAN CONSTITUTION (CIVICS)

### HIGHLIGHTS OF THE CONTENT:

Dear students we are going to begin with football game, a game you have perhaps played. According to the rules of the football, if the ball touches the arm of any player, it is considered a foul. Similarly other games, hockey or cricket have also rules according to which the games are played.

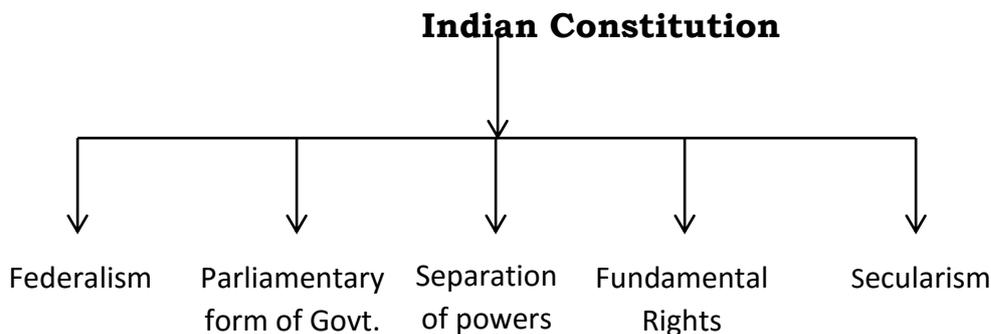
Similarly a constitution is a set of fundamental rules by which a state or country is governed. The Indian constitution was adopted on 26 November 1949.

### Why does a country need a constitution?

Dear students you will understand that the constitution plays a very important role in a country.

1. A constitution tells us what the fundamental laws of our society are.
2. There is always the possibility that our leaders might misuse their authority and the constitution usually provides safeguard against this.
3. It is the relation between the citizens and the government.
4. It defines the fundamental rights of the citizens.
5. It ensures that a dominant group does not use its power against less powerful people.

### Key Features of Indian Constitution



1. **Federalism:** It refers to the existence of more than one level of government in the country. In India, we have state government and centre government, and Panchayati Raj is the third tier of Government about which you have read in previous class.

2. **Parliamentary form of Government:** It means that people of India have a direct role in electing their representatives for the state and for the country.

3. **Separation of powers:** There are three organs of government. These are the legislature (our elected representatives), the executive (people responsible for running the government) and the judiciary (system of courts).

**4. Fundamental Rights:** They protect citizens against the absolute exercise of power (the power that is produced) by the state.

**5. Secularism:** It refers that a state does not promote any one religion.

### **The Fundamental Rights in the Indian Constitution:**

**1. Right to Equality:** All persons are equal before law.

**2. Right to Freedom of Expression:** This includes the right to freedom of speech and expression.

**3. Right against Exploitation:** It prohibits human trafficking (buying and selling of human beings), forced labour and employment of children less than 14 years of age.

**4. Right to Freedom of religion:** Every person has the right to practice the religion of their choice.

**5. Cultural and Educational Rights:** It states that all religions can set up their own educational institutions.

**6. Right to Constitutional Remedies: The Right to Constitutional Remedies empowers citizens to approach the Supreme Court of India to seek enforcement, or protection against infringement, of their Fundamental Rights.**

### **EVALUATION/PROGRESS CHECK:**

Q1. Fill in the blanks.

a. A constitution is a set of fundamental \_\_\_\_\_ by which a state is governed.

b. A constitution is the \_\_\_\_\_ between the citizens and the government.

c. There are three organs of the government. These are the legislature, \_\_\_\_\_ and \_\_\_\_\_.

d. All persons are \_\_\_\_\_ before law.

Q2. MCQs/Objective type questions.

1. The Constitution divides the state into \_\_\_\_\_ organs.

a) One

b) Two

c) Three

d) Four

2. We need the constitution to \_\_\_\_\_ us from ourselves.

- a) Borrow
- c) Send

- b) Save
- d) Lend

3. Which of the following is not an organ of government?

- a) Legislature
- c) Judiciary

- b) Executive
- d) Marxism

4. Which right guarantees equality to every person before law?

- a) Right to freedom
- c) Cultural rights

- b) Right to equality
- d) None of the above

5. Which one is not a key feature of Indian Constitution?

- a) Federalism
- c) Separation of powers

- b) Secularism
- d) Tyranny

6. Which of the following is not a fundamental right in India?

- a) Right to Equality

- b) Cultural and Educational Rights

- c) Right to Property

- d) Right against Exploitation

Q3. Answer the following questions briefly.

A) Define constitution.

B) List down the fundamental rights.

C) Write about the key features of constitution of India.

## LESSON 1: RESOURCES (GEOGRAPHY)

### HIGHLIGHTS OF THE CONTENT

Dear students, you must have seen lot of things in your surroundings, home, neighbourhood or locality. Most of them are useful to us like trees, animals, buildings, etc.

**Resource:** Anything that has some ability to satisfy our needs is known as a resource. Hence, only those things which are useful to humans are termed as resources.

**Summary:** In this chapter, we learn about resources and the ways to put them to use in our lives. Things become resources only when they have a value. Its use or ability gives it a value. Time and technology are two important factors that can change substances into resources. People themselves are the important resources. Their ideas, knowledge and inventions lead to the creation of more resources. All the useful elements of environment which satisfy human needs are called resources. Balancing and carefully utilising resources so that they meet the requirements of the future generation is called sustainable development.

#### Classification of resources:

Resources are generally classified into three types:

- Natural resources
- Human made resources
- Human resources

1. Natural Resources: Rocks, minerals, soils, air, water, fuels, plants and wildlife are called natural resources. Natural resources are free gifts of nature. They are renewable.

2. Human Made Resources: Building, computers, tools, houses, machines etc are called man made resources. Things that are created by humans are called Human made resources.

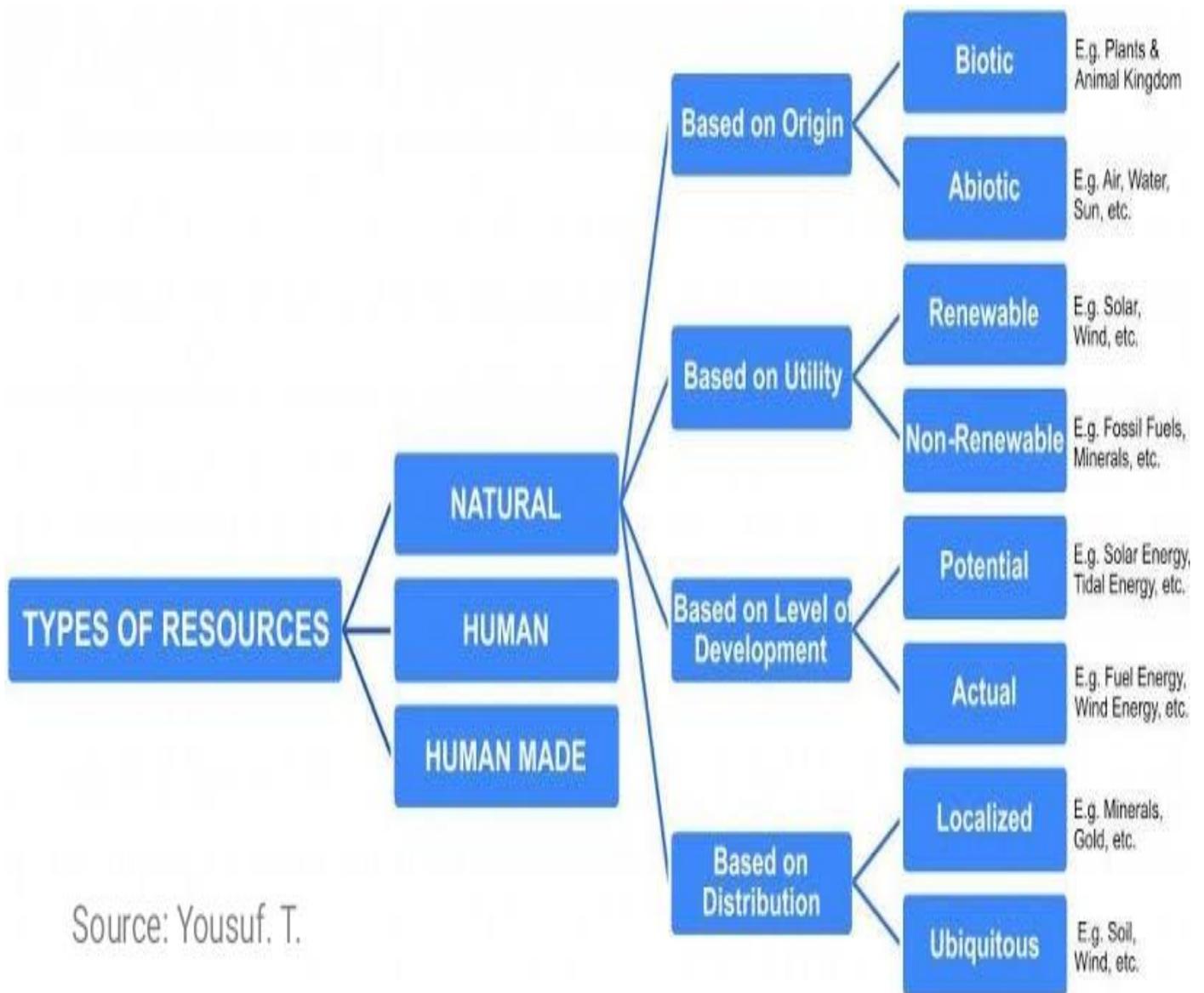
4. Human Resources: Human skill, education, health and technology are called human resources. People can make the best use of nature to create more resources when they have the knowledge, skill and the technology to do so. That is why human beings are important resources. It is to note here that it is due to use by humans that anything becomes a resource.

Further there are different types of natural resources -

- On basis of origin:- biotic/abiotic
- On basis of level of development:- actual/potential
- On basis of utility:- renewable/non-renewable

- On the basis of distribution:- localised/ubiquitous

A flow chart depicts this as follows:



## Resource Conservation

Resource conservation means using the available resources carefully and giving them time to get renewed. Sustainable development means balancing our present needs of using resources without compromising the ability of future generations to meet their own needs.

Basic principles of sustainable development are: Respect and care for all forms of life, right to a healthy and productive life for all human beings, conserve the earth's ecosystem and biological diversity, minimize the depletion of natural resources, sharing educational programmes and information to change people's attitude and adopt practices to save the environment and enabling communities and groups to care for their own environment.

The golden rule of resource conservation is – the three R's –

- A) Reduce
- B) Reuse and
- C) Recycle.



**EVALUATION/PROGRESS CHECK:**

A) Multiple choice questions/Objective types questions:

(i) Which one of the following does NOT make substance a resource?

- a) Utility    b) Value    c) Quantity    d) All of the above

**(ii) Which one of the following is a human made resource?**

- a) Medicine to treat Covid-19                      b) Spring water
- c) Tropical forest                                      d) Petroleum and Natural gas

(iii) Which of the following is a renewable resource?

- a) Solar energy    b) coal    c) Petroleum    d) Mineral

(iv) Which one of the following is a non-renewable resource?

- a) Sea salt            b) oceanic water            c) Petroleum            d) oxygen

(v) Biotic resources are derived from

- a) living things    b) human activities
- c) non-living things                      d) Both A and C

(vi) Which of the following is Not a Human made resource?

- a) Flyovers                      b) Computer              c) Internet                      d) Water

B) Choose correct option (True/False).

1. Non-renewable resources are renewed again themselves. (True/False)
2. Medicine to treat cancer patients is a man made resource. (True/False)
3. Coal is a biotic resource. (True/False)
4. Computer is a man made resource. (True/False)
5. Education and Health is a human resource. (True/False)
6. Petrol is a renewable resource. (True/False)
7. Resources satisfy human needs. (True/False)
8. Buildings and monuments are natural resources. (True/False)
9. Resources derived from non-living things are called abiotic resources. (True/False)

C) Fill in the blanks

1. Metals have \_\_\_\_\_ value.
2. Resources are \_\_\_\_\_ of nature.
3. Non living resources are \_\_\_\_\_.
4. People are \_\_\_\_\_ resources.
5. Rocks and \_\_\_\_\_ are natural resources.

D) Short answer questions:

1. Define resource.
2. List different types of resources.
3. Why are human resources important?
4. What is resource conservation?
5. Define Sustainable development.

**LESSON 2: FROM TRADE TO TERRITORY (HISTORY)****HIGHLIGHTS OF THE CONTENT:**

Dear students, in the previous lesson you learnt about the different sources of modern Indian history. This lesson deals with the various events that show the gradual change in the thinking of British East India Company from their initial purpose of trade towards eyeing the territory (land) of India. The lesson also briefly describes different British policies of annexing or Controlling India. Let's start with the background of Mughal Empire and rulers who were ruling India during 17<sup>th</sup> century.

You know that Aurangzeb was the last powerful Mughal ruler. After the death of Aurangzeb, the later Mughal rulers proved to be inefficient and foreign powers got opportunity to establish their rule in India.

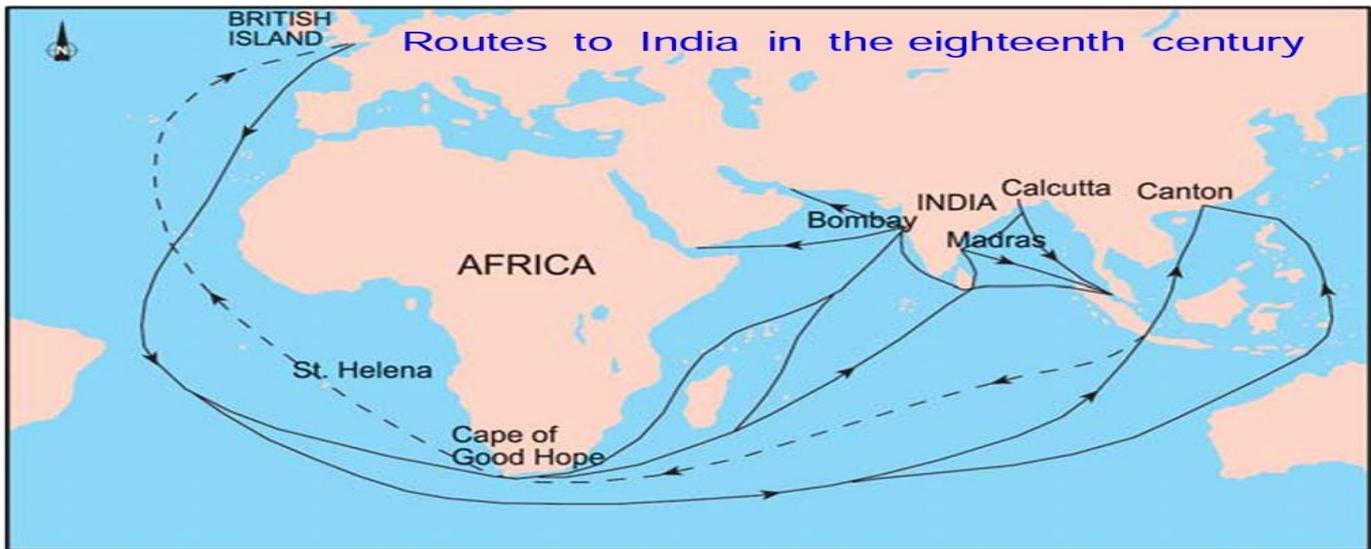
**East India Company comes East:**

In 1600 Royal Charter granted East India Company the sole right to trade with the East.

East India Company bought goods at a cheap price in India and sold them at a higher price in Europe. Cotton and silk produced in India had a big market in Europe. Pepper, cloves, cardamom, and cinnamon were in great demand.

East India Company and its officials accumulated wealth by the trade of India, which caught attention of other European powers. English East India Company had to compete with other European companies such as French, Dutch, and Portuguese.

Because of the powerful naval force, British won over other European powers and became the champion of struggle of monopoly of trade.



### **India Company begins Trade in Bengal:**

In 1651, the first English factory was set up on the banks of river Hugli and first English factory was opened up at Surat in 1608. Aurangzeb issued a 'farman' granting the company the right to trade duty-free. The company tried to press for more concessions and manipulate existing privileges.

For trading purpose, the passes were issued to company officials but they misused these passes for private trade and accumulate wealth on the name of company. Soon, because of private trade, the company suffered and went into losses. To cure this anomaly British government made strict rules.

### **How did Trade Lead to Battles:**

After the death of Aurangzeb, the Bengal Nawabs asserted their power and autonomy. The Nawabs of Bengal refused to grant the company concessions as it was making the revenue from Bengal trade less profitable.

The British wanted the duties to be abolished but Bengal Nawab's rejected the demands. British official knew the condition of administration in Bengal and tried to assert their autonomy by use of force.

#### **- The Battle of Plassey:**

As a result of denial of trading rights, on 23<sup>rd</sup> June 1757, Battle of Plassey was fought and it was the first major victory of English in India. Alivardi Khan died in 1756 and Sirajuddaulah became the Nawab of Bengal. In 1757, Robert Clive led the Company's army against Sirajuddaulah at Plassey.

Main reason for defeat of the Nawab was that the forces led by Mir Jafar, one of Sirajuddaulah's commanders, betrayed Sirajuddaulah and never fought the battle.

Mir Jafar was promised by Clive to be made Nawab after crushing Sirajuddaulah. As per the deal Mir Jafar became the Nawab of Bengal after the defeat and death of Sirajuddaulah. But he was the nominal head of Bengal and actual power remained in the hands of British.

- The Battle of Buxar:

After the defeat at Plassey, Sirajuddaulah was assassinated and Mir Jafar was made the Nawab. Mir Jafar was just a puppet in the hands of Britishers.

In 1764, the battle of Buxar was fought between Britishers and Mir Qasim, when Mir Qasim denied the privileges given to Britishers. Mir Qasim abolished the trade duty for everyone and transferred his capital from Murshidabad to Mungair. But this was against the interest of British and they declared war.

In this battle Mir Qasim, the Nawab of Bengal, Shujauddaulah, the Nawab of Awadh and Shah Alam the Mughal King fought against British and British forces were led by Hector Munro.

In this battle British become victorious and they decided to control the territory by their own. In 1765, the Mughal emperor appointed the company as the Diwan of the provinces of Bengal and they also got the Diwani rights of Bihar and Odisha.

- Company Officials become 'Nabobs':

In 1764, Robert Clive was appointed Governor of Bengal. 'Nabobs'-an anglicized version of the Indian word Nawab as British were leading a lavish life similar to Nawabs and everyone was on the mercy of British.

### **Company Rule Expands:**

The process of annexation of Indian states by the East India Company from 1757 to 1857 brought forth some key aspects like the company rarely launched a direct military attack on an unknown territory.

After battle of Buxar, the company appointed residents in Indian states. The company forced the states into a 'subsidiary alliance' and the king had to put an army of British.

### Subsidiary Alliance:

Under the system of 'subsidiary alliance', Indian rulers were not allowed to have their independent armed forces. They were to be protected by the Company, but had to pay for the 'subsidiary forces' that the Company was supposed to receive in exchange of this protection. If the Indian rulers failed to make the payment, the part of their territory was taken away as penalty. In the case of non payment to army the Nawab or the king had to give some part of its territory. The Nawab of Awadh and the Nizam of Hyderabad were forced to cede territories and accept the subsidiary alliances.

### Tipu Sultan-‘The Tiger of Mysore’:

Tipu Sultan was the brave son of Haidar Ali, ruler of Mysore. Tipu Sultan ruled Mysore from 1782 to 1799. Tipu Sultan took the help of French to modernise his army and sent foreign delegates to help against British.

Four wars were fought between Britishers and Mysore and were known as the Anglo-Mysore wars (1767-1769, 1780-84, 1790-92 and 1799). In 1799, the Britishers won the battle of Seringapatam against Mysore. Tipu Sultan was killed defending his capital Seringapatam.

#### - Claim to paramountcy:

As British were proving themselves as the best power across the India, this enhanced their desire to rule whole territories and they started direct conquest under Lord Hastings (1813-23).

British also wanted to secure North West front of their empire in India. For this they fought wars with Afghanistan and Punjab and finally won over its territories in 1843 and 1849 respectively.

### Doctrine of Lapse:

Under the reign of Lord Dalhousie (1848-56), they adopted the policy of Lapse. According to this policy, the rulers who do not have any legal heir could not pass

on their property to the adopted son and it would be taken over by British. Satara (1848), Sambhalpur (1850), Jhansi (1854) were annexed by this policy.

- Administration under British:

In 1773, Warren Hastings becomes the Governor General of Bengal and controlled the governors of other presidencies of Madras and Bombay. Separate civil and criminal courts were set up under the supervision of collector.

New set of laws were compiled by muftis and Brahmins for the religious interpretation.



Fig. 11 a

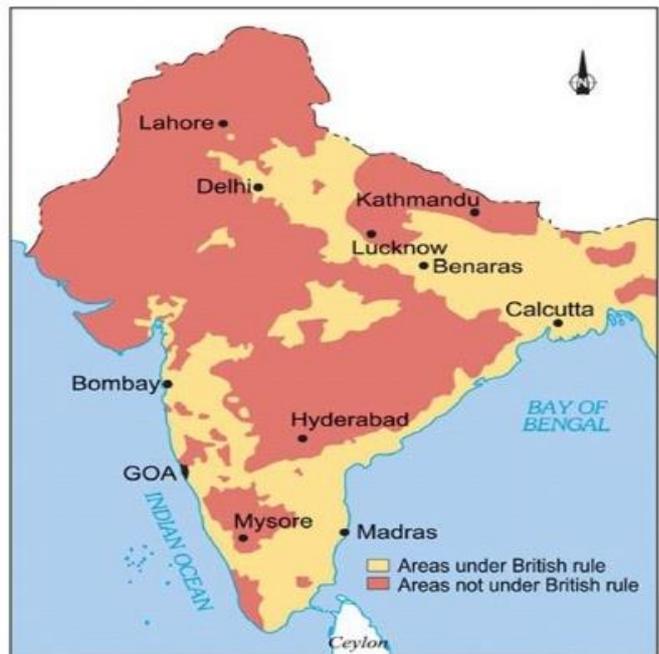


Fig. 11 b



Fig. 11 c

**Fig. 11 a, b, c** - Expansion of British territorial power in India

Look at these maps along with a present-day political map of India. In each of these maps, try and identify the different parts of India that were not under British rule.

## **EVALUATION/PROGRESS CHECK:**

A) MCQs/objective type questions:

i) Battle of Buxar was fought in year

- a) 1788            b) 1764            c) 1746            d) None of these

ii) Doctrine of Lapse was introduced by

- a) Lord Crippin   b) Dr Dodoo        c) Lord Dalhousie   d) Lord Lapse

iii) "Tiger of Mysore" was title given to

- a) Haider Ali        b) Tipu Sultan        c) Sher Shah Suri   d) All of them

B) Fill in the blanks:

i) The British conquest of Bengal began with the Battle of \_\_\_\_\_.

(ii) Haidar Ali and Tipu Sultan were the rulers of \_\_\_\_\_.

(iii) \_\_\_\_\_, \_\_\_\_\_ were annexed through subsidiary alliance.

(iv) Subsidiary alliance was introduced by \_\_\_\_\_.

C) Short answer questions:

1. What do you know about Subsidiary alliance?

2. What is Doctrine of Lapse?

3. What attracted European trading companies to India?

## **LESSON 3: RULING THE COUNTRYSIDE**

### **HIGHLIGHTS OF THE CONTENT:**

Dear students, in the previous chapter you learnt about change in ideology of British East India company from their initial purpose of trade towards the controlling and ruling the territory (land) of India. The previous lesson also described different British policies of annexing or Controlling India like Subsidiary alliance and Doctrine of Lapse. This lesson deals with the different events and administrative policies/schemes introduced by Britishers to rule the country side. Let's again go back to Mughal rule during 18<sup>th</sup> century.

On 12 August 1765, the Mughal emperor appointed the East India Company as the Diwan of Bengal. As Diwan, the company became the chief financial administrator of the territory under its control.

The company came to colonise the countryside, organize revenue resources, redefine the rights of people and produce the crops it wanted.

### **Revenue for the Company:**

The company got the Diwani rights and started extracting more and more revenue out of it and used various measures to get it but still saw itself primarily as a trader. Before 1865, the company purchased goods in India by importing gold and silver from Britain. Now the revenue collected in Bengal was used for the purchase of goods for exports. Bengal economy was facing a deep crisis. Peasants and craftsmen were not getting the proper amount of their sell.

In 1770, a terrible famine killed ten million people in Bengal. But no one gave attention to the plight of affected people as revenue was under the control of British and they did not pay heed to any of the matter related to peasants as their main task was to make money by trade.

### **A) The Need to Improve Agriculture:**

The company introduced Permanent Settlement in 1793 under the reign of Lord Cornwallis. Under Permanent Settlement, a fixed revenue was to be given to British and it would not increase in future.

Under Permanent settlement, Zamindars were recognised as the collectors of revenue and it was assumed that they would invest money to improve the crop production and fertility of soil. Zamindars did not pay attention to the condition of land and tried to keep more and more money left after collection.

The Rajas and Taluqdars were recognized as Zamindars. As a result of greed for more revenue they blindly exploited the land resources.

- The Problem:

Numerous zamindaris were sold off at auctions organized by the company, as anyone who failed to pay the revenue lost his Zamindari. The Zamindars were not interested in the improvement of land which led to reduced production of crop. But with the rise in crop expansion and prices of crops in the nineteenth century, the income of Britishers was not increasing. This concerned them a lot.

Because of the less revenue collection, British tried some other new method of revenue generation such as Mahalwari system and Ryotwari system.

**B.) A New System is Devised:**

By the early nineteenth century, many of the company officials were convinced that the system of revenue had to be changed again in order to get maximum profit. An Englishman, Holt Machenzie devised the new system which came into effect in 1822. This was introduced in North India and came to be known as Mahalwari settlement.

Mahalwari system gave the revenue collection work to the village headman (Mahal) instead of Zamindars and revenue was not fixed permanently. Under this system the revenue was collected by Mahal and was given to British exchequer. This system was initiated in central part of India.

**C.) The Munro/Ryotwari System:**

In the British territories in the south, a new system was devised which was known as Ryotwar or Ryotwari. Ryotwari was initiated by Captain Alexander Read and Thomas Munro. This system was extended all over South India. In this system, ryots were directly involved for the collection of revenue and it was fixed

after the proper assessment of individual land. British officials were appointed to collect the revenue and used coercive methods for revenue collection.

- All was Not Well:

As they desired to increase the income from land, revenue officials fixed the revenue rate very high. As peasants were unable to pay, ryots fled the countryside and villages became deserted in many regions. Peasants were forcefully evicted from their lands and had to leave their places and clashes happened at different places.

- Crops for Europe:

By the late eighteenth century, the company was trying to expand the cultivation of opium and indigo, which was highly demanded in Europe. The Britishers forced cultivators to produce jute, tea, sugarcane, wheat, cotton and rice in various parts of India.

Indigo was highly demanded in Europe. To get the Indigo cultivation, the tinkathia system was introduced. Under this system, peasants had to cultivate indigo on 3/20<sup>th</sup> part of their land. Because of the production of the cash crops and indigo which had to be grown on the most fertile land, the farmers were left with little fertile region to grow. These crops reduced the production of food crops.

- Does Colour have a History:

The rich blue colour was commonly called as Indigo and it was on a high demand in Europe as it was used for dyeing purpose. India was the biggest supplier of indigo in the world in 19<sup>th</sup> century

Indigo cultivation was one of the reasons for poor condition of farmers and led ryots in various farmers.

**Why the Demand for Indian Indigo:**

By the thirteenth century, Indian Indigo was being used by cloth manufacturers in Italy, France, and Britain to dye cloth. Indigo produced a rich blue colour whereas the dye from wood another plant was pale and dull. Indigo plantations came up in many parts of North America and Mexico, but during the wars in

these regions and abolition of slavery in French colonies, British started depending on India for the cultivation expansion of Indigo.

Increased demand of indigo also came because of the heavy industrialization in Britain. To fulfil the demand of Indigo British used their colonies in tropical region and mainly in Africa and India as the availability of land and cheap labour were available.

- Britain turns to India:

The company in India expanded the area under the indigo cultivation to meet the rising demand for indigo in Europe. As the indigo trade grew commercial agents and officials of the company began investing in indigo production.

### **How was Indigo Cultivated?**

There were two main systems of Indigo cultivation: Nij and Ryoti.

In Nij system, the planter produced indigo in lands that he directly controlled or rented from Zamindars.

The Problem with Nij Cultivation:

This cultivation needed fertile and big lands and it was difficult to get big areas as they were already highly populated. For this, they had to evict population which led to conflicts.

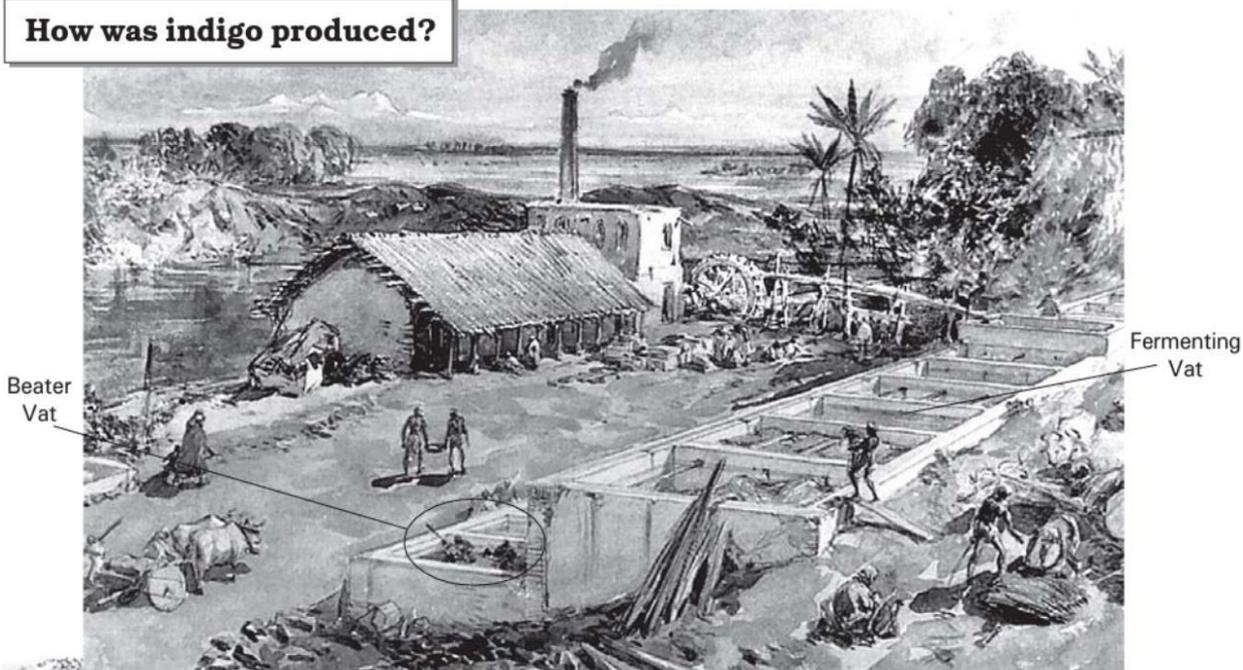
Nij cultivation on a large scale required many ploughs and bullocks. Investing on purchase and maintenance of ploughs was a big problem. At the same time of its cultivation, the cultivation of rice also took place, which is why ploughs were not available on rent too. Availability of labour was also a problem as peasants were engaged in rice cultivation at the same time.

- Indigo on the Land of Ryots:

In Ryoti system, the planters forced the ryots to sign a contract an agreement (satta). Those who signed the contract got cash advances from planters at low rates of interest to produce indigo. The peasants got very low price for the indigo they produced and the cycle of loans never ended.

After an indigo harvest, the land could not be sown with rice which the peasants preferred as Indigo production reduced the fertility of soil.

**How was indigo produced?**



**Fig. 10** – An indigo factory located near indigo fields, painting by William Simpson, 1863

The indigo villages were usually around indigo factories owned by planters. After harvest, the indigo plant was taken to the **vats** in the indigo factory. Three or four vats were needed to manufacture the dye. Each vat had a separate function. The leaves stripped off the indigo plant were first soaked in warm water in a vat (known as the fermenting or steeper vat) for several hours. When the plants fermented, the liquid began to boil and bubble. Now the rotten leaves were taken out and the liquid drained into another vat that was placed just below the first vat.

In the second vat (known as the beater vat) the solution was continuously stirred and beaten with paddles. When the liquid gradually turned green and then blue, lime water was added to the vat. Gradually the indigo separated out in flakes, a muddy sediment settled at the bottom of the vat and a clear liquid rose to the surface. The liquid was drained off and the sediment – the indigo pulp – transferred to another vat (known as the settling vat), and then pressed and dried for sale.



**Fig. 11** – Women usually carried the indigo plant to the vats.

**Fig. 12** – The Vat-Beater

The indigo worker here is standing with the paddle that was used to stir the solution in the vat. These workers had to remain in waist-deep water for over eight hours to beat the indigo solution.



**Fig. 13** – The indigo is ready for sale

Here you can see the last stage of the production – workers stamping and cutting the indigo pulp that has been pressed and moulded. In the background you can see a worker carrying away the blocks for drying.

**Vat** – A fermenting or storage vessel

### **The 'Blue Rebellion' and after:**

In March 1859 thousands of ryots in Bengal refused to grow indigo. As the rebellion spread, ryots refused to pay rents to the planters and attacked indigo factories. Ryots swore they would no longer take advances to sow indigo nor be bullied by the planters' lathiyals. The government set up the indigo commission to enquire into the system of indigo production.

It declared that indigo cultivation was not profitable for ryots. Hence they could refuse to produce indigo in future. After the revolt, indigo production collapsed in Bengal. The planters now shifted their operations to Bihar. In Bihar, the Champaran movement led by Gandhi Ji in 1917 ended the Indigo production through tinkathia system.

### **EVALUATION/PROGRESS CHECK:**

A) MCQs/objective type questions:

(i) Ryots in Bengal refused to grow indigo and refused to pay rents to the planters, this was termed as

- a) White rebellion      b) black rebellion.      c) blue rebellion

(ii) Which of the following revenue collection systems was first introduced?

- a) Mahalwari system      b) permanent settlement      c) Ryoti revenue      d) Landing tax

(iii) Under the reign of Lord Cornwallis, which system was introduced to collect agricultural revenue?

- a) Ryotwari      b) Mahalwari      c) permanent settlement      d) All of these

B) Fill in the blanks:

(a) In 1765, the Mughal emperor appointed the East India Company as \_\_\_\_\_ of Bengal.

(b) The demand for indigo increased in late 18<sup>th</sup> century Britain because of \_\_\_\_\_.

(c) The international demand for indigo was affected by the discovery of \_\_\_\_\_.

(d) The Champaran movement was against \_\_\_\_\_.

C) Short answer questions:

1. Write few lines on Mahalwari system and Ryotwari system.

2. List any three differences between permanent settlement and Mahalwari system.

D) Match the following:

Ryot	cultivation on ryots lands
Mahal	village
Nijryotwari	system
Ryoti	cultivation on planter's own land
Munro system	peasant

## LESSON 2: UNDERSTANDING SECULARISM (CIVICS)

### HIGHLIGHTS OF THE CONTENT:

Dear students imagine yourself as a Muslim or Hindu living in the United States of America where Christianity is very powerful. Suppose no US citizen is willing to rent their houses to you. How would you feel? Would it not make you angry?

You may fight stating that there should be no discrimination on the basis religion. Now however, The Jews of Israel treat their own Muslim and Christian minorities (smaller number) badly. In Saudi Arabia, Non Muslims are not allowed to build a Temple, Church etc.

In all of the above examples, Members of one religious community discriminate (treating someone as inferior) against other religious communities.

### What is secularism?

The Indian constitution allows individuals (people) the freedom to live by their religious beliefs and practices.

Secularism refers to the separation of religion from the state. It means that state should not encourage or discriminate any religion.

Every person has a right to propagate his/her religion.

### Why is it important to separate religion from the state?

The most important aspect of secularism is its separation of religion from state power. This is important for a country to function democratically.

Almost all countries of the world have more than one religious group and within them one group is in majority. If this majority group discriminates against other religions and has access to power, it could result in killing of religious minorities and denial of fundamental rights. That is why it is important to separate the state and religion.

### What is Indian Secularism?

India is a secular country which means that all Indians - Hindus, Muslims, Sikhs, Christians and others have the freedom to practice their religion. The three objectives of a secular state:

1. That one religious community does not dominate (command) another.
2. That some members do not dominate (command) other people of the same religion.
3. Responsible for running the government and the judiciary (system of courts).
4. **Fundamental Rights:** They protect citizens against the absolute exercise of power (the power that is produced) by the state.
5. **Cultural and Educational rights:** It states that all religions can set up their own educational institutes.

## EVALUATION/PROGRESS CHECK:

Q1) Fill in the blanks

1. A constitution is a set of fundamental \_\_\_\_\_ by which a state is governed.
2. The constitution is the \_\_\_\_\_ between the citizens and the government.
3. There are three organs of the government. These are the legislature, \_\_\_\_\_ and \_\_\_\_\_.
4. All persons are \_\_\_\_\_ before law.

Q2) 1. The constitution divides the state into \_\_\_\_\_ organs.

- |          |         |
|----------|---------|
| a) One   | b) Two  |
| c) Three | d) Four |

2. We need the constitution to \_\_\_\_\_ us from ourselves.

- |           |         |
|-----------|---------|
| a) Borrow | b) Save |
| c) Send   | d) Lend |

3. Which of the following is not an organ of government?

- |                |              |
|----------------|--------------|
| a) Legislature | b) Executive |
| c) Judiciary   | d) Marxism   |

4. Which right guarantees equality to every person before law?

- |                     |                      |
|---------------------|----------------------|
| a) Right to freedom | b) Right to equality |
| c) Cultural right   | d) None of the above |

5. Which one is not a key feature of Indian constitution?

- |                         |               |
|-------------------------|---------------|
| a) Federalism           | b) Secularism |
| c) Separation of powers | d) Tyranny    |

Q3). Answer the following questions briefly.

A) Define secularism.

B) What is Indian Secularism?

## LESSON3: WHY DO WE NEED PARLIAMENT? (CIVICS)

### HIGHLIGHTS OF THE CONTENT:

**Parliament:** The Parliament of India is the supreme legislative body of the Republic of India. It is a bicameral legislature composed of the President of India and the two houses viz the Rajya Sabha and the Lok Sabha: it is the voice of the people.

#### (1) Why Do We Need Parliament-

It is the most important symbol of India democracy. The laws for the country are made by the parliament. It enables citizens of India to participate in Government formation.

#### (2) Why should people decide their representatives -

Dear students, as we know that India became independent on 15<sup>th</sup> August 1947. It was a long struggle in which every society participated. The people had lived in fear of the British Government and did not agree with many of their decisions. British government did not allow for all adults to vote nor could people participate in decision making.

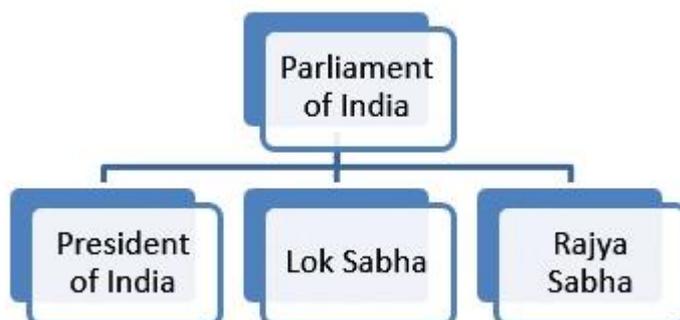
With the coming of the independence we were going to be citizens of a free country--where all adult citizens of the country have the right to vote (Universal Adult Franchise).

It is the decision of people that creates democratic government and decides its functioning. The citizen is the most important person in this democratic government.

#### (3) The role of the Parliament -

The citizens give approval to the central government through parliamentary elections. People would elect their representative (MPs) to the Parliament, then one group from these elected representatives having majority forms the government. The parliament which is made up of all representatives together controls the government. In this sense people, through their chosen representatives form the government.

Broadly, the Indian parliament has three parts.



(1) President: - The President is the head of our country. The prime minister and his ministers govern the country in the name of President.

He/She is elected by members of Lok Sabha, Rajya Sabha and state legislative assemblies for a period of five years.

(2) Lok Sabha: - It is the lower house of parliament and members are directly elected by the people of India for a period of five years. The Lok Sabha consists of 552 Members. It is also called as house of people.

(3) Rajya Sabha: - It is the upper house of the parliament. They are elected by the members of state legislative assembly (who are running the government at the state levels) for a period of six years. It consists of 250 members. It is also called as house of states.

Dear students, the parliament, while in session begins with a question hour. In this question hour, the MPs (Members of parliament) get information about the working of the government. By asking questions the government is alerted to its shortcoming and also comes to know the opinion of the people through MPs. The opposition parties play a critical role, they highlight drawbacks (mistakes) in various policies and programmes of the government. The government gets valuable feedback. This is the way in which the parliament controls, guides and informs the government.

**EVALUATION/PROGRESS CHECK:**

Q1. Define Parliament.

Q2. What is Rajya Sabha?

Q3. What is Lok Sabha?

Q4. Write any two functions of parliament.

Q5. Fill in the blanks:

(i) The laws for the whole country are made by the \_\_\_\_\_.

(ii) The Rajya Sabha consists of \_\_\_\_\_members.

(iii) The Lok Sabha Consists of\_\_\_\_\_members.

(iv) The President is elected for a period of \_\_\_\_\_years.

(v) The Parliament has three parts \_\_\_\_\_and\_\_\_\_\_.

(vi) The house of people is \_\_\_\_\_ Sabha.

(vii) Upper house of parliament is \_\_\_\_\_.

(viii) \_\_\_\_\_ is the head of Indian Republic. (President/Prime Minister).

(ix) The supreme legislative body of the Republic of India is \_\_\_\_\_.

## **Lesson 2: LAND, SOIL, WATER, NATURAL VEGETATION AND WILD LIFE RESOURCES (GEOGRAPHY)**

### **HIGHLIGHTS OF THE CONTENT:**

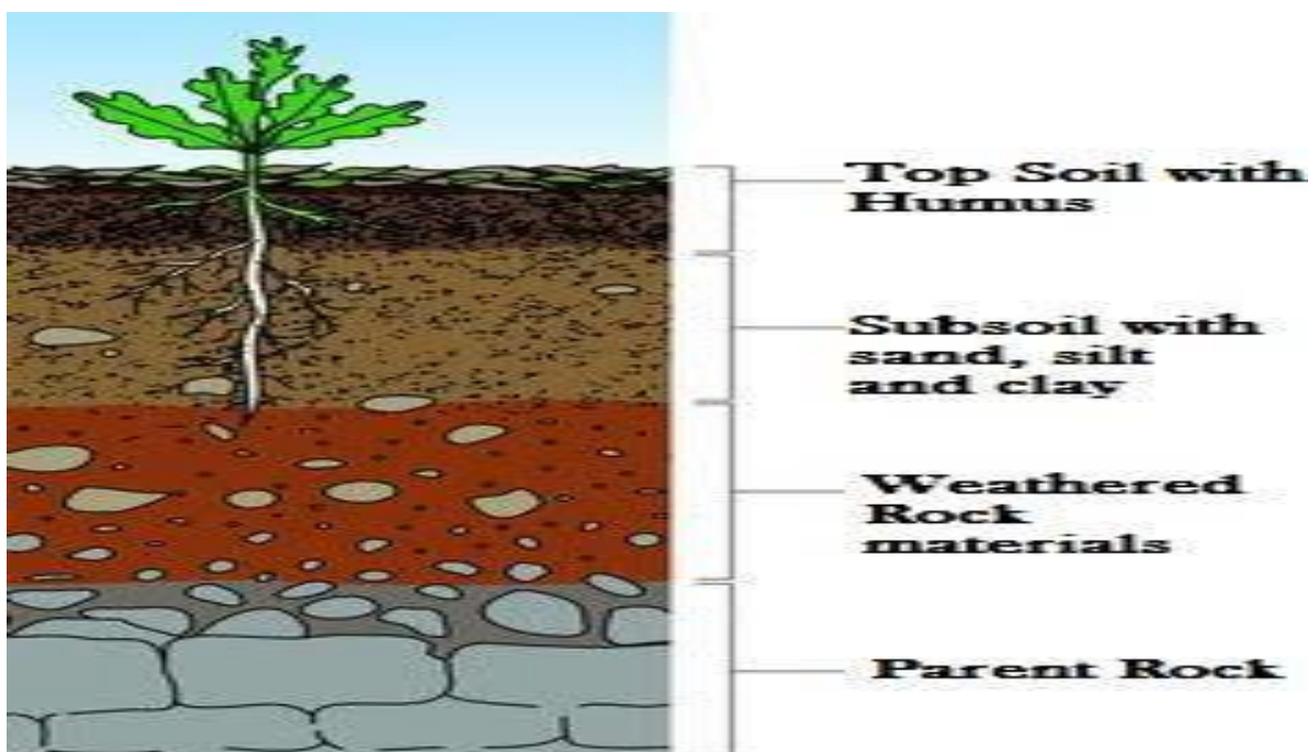
Dear students you should know that about 90% of the world population occupies only 30% of the land area. The remaining 70% of the land is either sparsely populated or uninhabited. You also see that the people who stay in two different parts of the world lead very different lives, because of the differences in the quality of land, soil, water, natural vegetation, animals and the usage of technology. The availability of such resources is the main reason places differ from each other.

### **Land resource:**

Land is the most important natural resource. It is used for different purposes such as agriculture, forestry, mining, building, roads and setting up of industries. The use of land for different activities is commonly termed as land use.

**Conservation of land Resource:** Growing population and their ever growing demand has led to a large scale destruction of forest cover and has created a fear of losing this natural resource.

**Soil:** The thin layer of grainy substances covering the surface of the earth is called Soil. Land forms determine the type of soil. It is made up of organic matter, minerals and weathered rocks formed on the earth. This happens through the process of weathering.

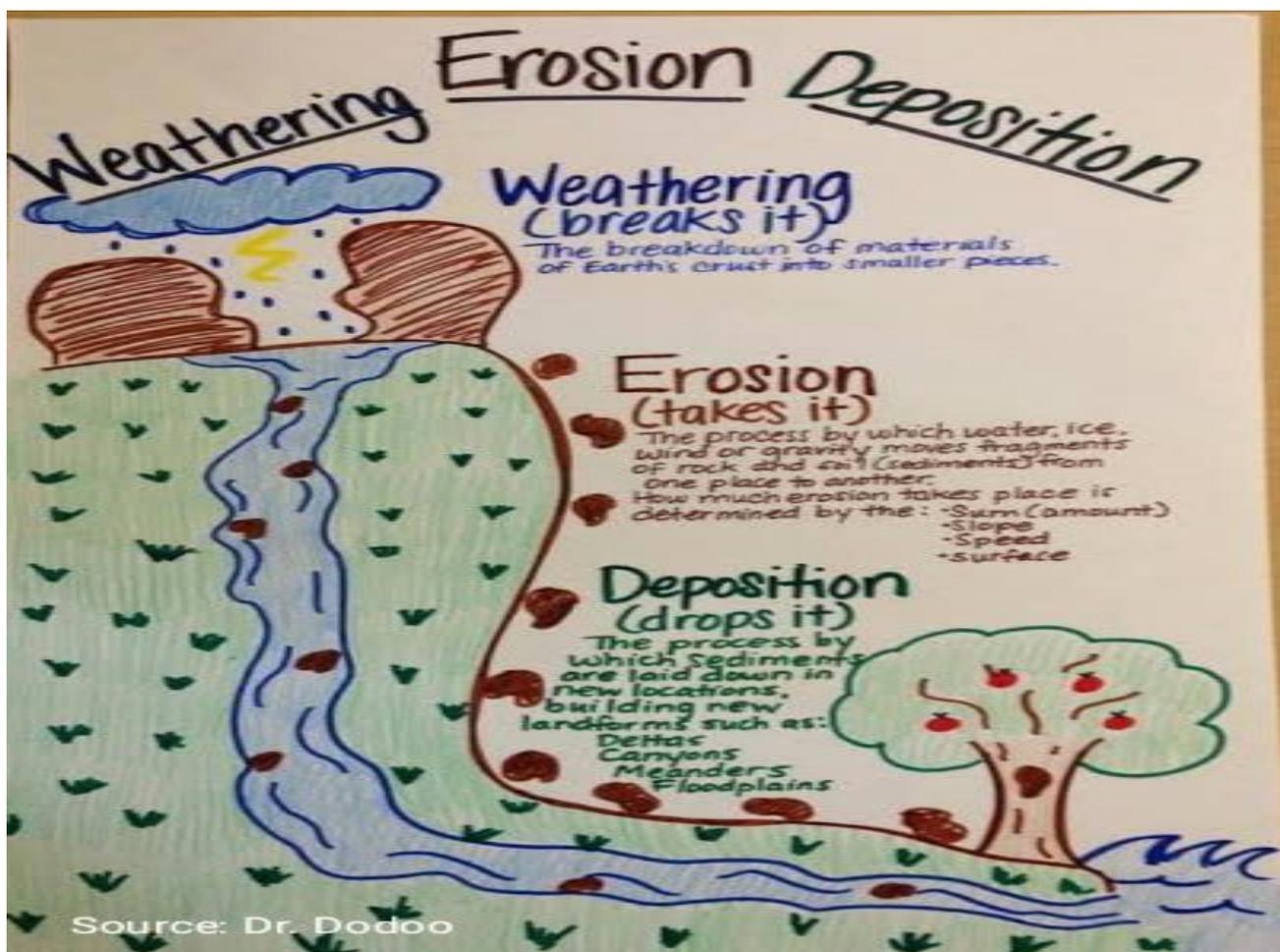


**Landslides:** These are defined as the mass movement of rocks, debris or earth down a slope. The prolonged spell of rainfall can cause heavy land slide that block flow of river for quite some time.

### Factors of soil Formation:

Major factors of soil formation are the nature of the parent rock and climate. Other factors include topography, role of organic material and time taken for the composition of soil formation.

Soil erosion is the displacement of the upper layer of soil, it is one form of soil degradation. This natural process is caused by the dynamic activity of erosive agents, that is, water, ice, snow, air, plants, animals, and humans.



### Water Resources:

Water is a renewable natural resource. Three fourth's of the earth's surface is covered with water. Earth is thus called as water planet. Water is used in day to day life. Water cannot be added or subtracted. Its volume remains constant. (Water cycle as read in previous classes).

### **Conservation of water resource.**

There are many ways to conserve water, major of them are

- a. Afforestation by increasing forest cover and other vegetation to slow the surface runoff.

- b. Replenishing underground water through rain water harvesting.
- c. Reducing loss of water in irrigation and shifting to less water-intensive methods of agriculture.
- d. Construction of canals for irrigation.

Rain water harvesting (RWH) is a technique of collection and storage of rainwater into natural reservoirs or tanks, or the infiltration of surface water into subsurface aquifers (before it is lost as surface runoff).



### **Natural vegetation and wildlife:**

**Biosphere:** It is the narrow zone where land, water and air interact. Life exists in this zone where all the components are found viz. Atmosphere, lithosphere and hydrosphere.

**Ecosystem:** It is a system formed by the interaction of all living organisms with each other and with the physical and chemical factors of the environment in which they live, all linked by transfer of energy and material.

### **Conservation of natural vegetation and wildlife:**

1. Stop poaching of animals.
2. Awareness programmes like soil forestry and vanmahotsav should be encouraged.
3. School children should be encouraged for bird watching and visit nature camps.
4. Protection of wildlife sanctuaries.
5. An international convention CITES be established.
6. Duty of every citizen to conserve plants and animals.

## **EVALUATION/PROGRESS CHECK:**

Q1: Multiple choice questions/objective type questions.

(A) Land is made up of

- a) Rocks b) Minerals
- c) Both A and B d) None

(B) Factor for destruction of forests

- a) Growing population b) Soil preservation
- c) Use of pesticides d) None

(C) Which one of the following is not a factor of soil formation?

- (a) Time (b) farm texture (c) Organic matter (d) All

(D) Which one of the following methods is most appropriate to check soil erosion on steep slopes?

- (a) Shelter belts (b) Mulching (c) Terrace cultivation (d) Gardening

(E) Which one of the following is not in favour of the conservation of nature?

- (a) Switch off the bulb when not in use (b) Close the tap immediately after using
- (c) Ask for poly-packs/polythene after shopping (d) All of these

Q2: Answer the following questions briefly.

- (i) Define soil.
- (ii) What are the different factors of soil formation?
- (iii) Write any three ways of water conservation.
- (iv) What does rain water harvesting mean?
- (v) What do you mean by biosphere?
- (vi) What is land use?
- (vii) Land is an important natural resource. Explain.
- (viii) Suggest few ways for conservation of natural vegetation and wildlife.

Q3: Match the following:

### **COLUMN A**

Land use

Humus

Biosphere

Rock Dams

### **COLUMN B**

prevent soil erosion

organic matter deposited on top soil

productive use of land

narrow zone of contact between lithosphere, hydrosphere and atmosphere

اُوٹھہ جاز باسپتہ یونٹ 1 تہ یونٹ 2 خاکرہ گہ نام

یونٹ: 1

سبق: دعا

تعارف :- دعا سبق چھ نامور شاہد غلام ادر فاضل مابن لیلکت - شہنشاہیہ باسپتہ  
 Introduction لکھنے آمت یہ دعا چھ شہزہ "دعا معصوم" کتابہ منز تہ درج -

خلاصہ : دعا نظم چھ سانیہ لفظا کتابہ "کاشر کتاب منز درج" - آتھ نظم منز چھ تائیر  
 Summary

معصوم شہزہ زیوہ خدائیں منگان زہ اے خدایہ فیانی کلامس یا آتھن  
 دتہ تہ تاشہ بیٹہ ستر لکھ متیہ کن مایل سپن - میہ کر تہ علمہ ادبک  
 تہ سنہر تہ تھز عطا زہ ہمالہ بال تہ قلزم سدر تہ روزہ حارن - شاکر چھ  
 خدائیں تن نسبت مہرانی تہ مشکلاتن ہنہزہ آسانی ہند دعا منگان تہ شیطان زہ  
 خواصاب تقاؤن آسنہزہ نمزہ منز تمہ سوننگ بہار قائم تہ ڈیم ، بیٹہ بہار س نہ  
 واک ڈ تہ ہر دل شہر پتہ آسہ یعنی سو وائس بیٹہ اندر نہ غم تہ پریشانی آسہ -  
 شاکر چھ شہزہ زیوہ چھ معصوم شہزہ خدائیں کسر کردار تہ گفتار شہزہ سوزن  
 بیٹہ دارو مدار تھامون -

تجلیج  
 Evaluation

- (i) دعا نظم کئی شاکر چھ لیچہ تہ؟
- (ii) معصوم شہزہ کئی چھ ہمالس تہ قلزمس حاران دراؤن نیرھان؟
- (iii) شاکر کیتھ بہارہ خاطرہ چھ دعا منگان؟
- (iv) معصوم شہزہ زندی منز کیتھ ہکی خوشیں بندی بانہ چھو لٹھ؟
- (v) پوانتر مس شہزہ ستر کیتھ کر طرہ خاطرہ چھ دعا منگان آت؟
- (vi) مانگ تہ "ہر" کس بندی ناہ چھ؟
- (vii) آتہ "تور" تہ چھ قافیہ - نظمہ منز شہزہ لکھ بیٹہ سوز دقیم قافیہ -
- (viii) سوزر منھر - تہ ڈے لفظن ہند معنی ووز لو -
- (ix) شہزہ شہس وائس چھ خدائیں منگان؟
- (x) غلام ادر فاضل شہزہ کیتھ کتابہ منز چھ یہ دعا درج -

اولیٰ حصہ جازا با ستمہ یونٹ 1 تہ یونٹ 2 خاطر گہ کام

یونٹ 1

سبق :- دہرانی

تعارف Introduction  
 دہرانی سقمس منتر چھ لکیرہ ہنرہ مشور زنائہ حکمران دہرانی ہنرہ حالات زوی  
 تیسویں لکرائس تہ بحسب حکمران بجائی ہنرہ کامیں ہنرہ تدریکہ -

خلاصہ Summary  
 1۔ رازہ کیم گپت یس 350 عیسوی منر لکیرہ ہنرہ رازہ بنیو اوس عاش و عشرتس تہ ناکرہ  
 کامیں سہماہ لود - ایک ناکرہ آشر ہنرہ سلطنتس پٹیوتہ - کیم گپت نمود حادثات طور ہولہ  
 مسیح ہمارہ سیتی - تیشز خانہ طرینی لوسہ لوسہ کوٹیکس رازہ سندر کور آس مسیح ہنرہ  
 ہنرہ سہماہ نا با یخ آسہ کئی پانہ حکومتک تمام کار جلاونہ - تہ آشر ہنرہ ہنرہ تہ جلال سک ہنرہ  
 پھر تہ بغاوت کرن واکر دہرانی تہ وزیر کاپہ تہ کورہ کتیرہ منر اسن واسان قائم - تہ کتہ  
 بجائی تہ پاپ بجائی ہنرہ واریاہ کامہ تہ ہنرہ صیائی منرہ بنوون ہنرہ بابہر پو کتر سندر راج  
 ویا تہد - یس اتہ لاکیرہ باسیوس -

جاء / Evaluation :-

- 1) رازہ کیم گپتس کس لود عاب اوس ؟
- 2) رازہ کیم گپت کیم ہمارہ سیتی نمود ؟
- 3) کیم گپت سندر آشرینی کئی سندر کور آس ؟
- 4) دہرانی کتیرہ کور اسن واسان قائم ؟
- 5) دہرانی کس بنوون پش ولی ہنرہ تہ کتیرہ کئی ؟
- 6) لور آس - سورہ ساوہ کرن - بیل اسن - کس ہنرہ تہ کتہ کتیرہ فاون ہنرہ  
 منی کتیرہ کتیرہ ستم وارہ باکڑ زہن نشین کتیرہ -
- 7) نر ناوتہن مقابلہ کتیرہ ہادی ناوتہ :  
 کتہ - دائرہ - ہاپت -
- 8) ککل - کتہ - لاک - ناک - کتہ - آر - وورر لفظ ور تاویز کتہ تہ کتہ ہنرہ  
 زہ نر تہ ہادی ہنرہ لورن - امثال : کتاب : سائر کتاب چھ منرین پیٹھ (ہادی ناوتہ)
- 9) جمیہ کس پانٹرن تاشن ہنرہ ناویکھو -
- 10) کتیرہ ہنرہن دور رازن ہنرہ فوضر حالات ہنرہ کتیرہ -

اُوْلُوْهُ جَارًا بِاَسِيْقَةٍ لُّوْنًا 1 تَبَّ لُوْنًا 2 خَا طَرَهُ كَبَّ كَامًا

سبق : ان پوشتہ تیلہ تیلہ وک پوشتہ لُوْنًا 2

تعارف - ان پوشتہ تیلہ تیلہ وک پوشتہ سبق میں شریف نے حضرت شیخ العالم رحمہ اللہ سے  
Introduction

آج مشورہ ڈپس سائنسی طریقہ و پٹھانہ کر کے آئی ہے کہیں کہیں ہندو فائیو ہے  
اسپیٹ گنز اور آئیڈیز۔

خلاصہ : جنٹل چھ سائیڈ بڈ آر زتھ - امہ سٹی ٹیچہ اسہ نہ صرف یزہ تہیرا کی کامیں  
Summary

ہندو باہیچہ کلب یا ف سپان بیکہ ٹیچہ رہبر تہہ کاغذ بناوینہ خاطرہ خام مال  
تہہ اسیر کلبی مہیا کران۔ وک چھ زالیں دریاں تھاوان تہہ وین منیرہ چھ دور میں مشر  
ور تاعتر بینہ واجبہ لغز تہہ پوشتہ تہہ لہنہ لوانا۔ وک چھ زمینیں رڈ گتھنہ لٹہ  
تہہ بچاوان۔ اگلی گئی باڈو دار تہہ مؤلہ دار کلبی چھ سپلا بک زور کم کتبیں منیرہ تہہ  
مدد دون۔ کلبی کئی چھ ہوا صاف تھاوان تہہ ماحولس تہہ ڈبجہ تھاوان۔ کلبیں ہندو  
سبز پینہ وقت چھ کاربن ڈائ آکسائیڈ پائس انڈر سٹر سپراوان تہہ آگینی واپس تہراوان  
تھہ پیوٹ زڈ زائر ہندو زغہ روزگ دارو اسرار ٹیچہ۔ لہذا منو بہہ وین را چھ کر تہہ

جواب : 1) ولو منیرہ کس کس فایوہ دینہ وکل چیز چھ حاصل سپراوان ؟  
Evaluation

2) وک کتبہ کئی چھ سپلا بک زور کتبیں منیرہ مدد کران ؟

3) جنٹل کیا زہ چھ "بڈار زتھ" وینہ آمت ؟

4) "ان پوشتہ تیلہ تیلہ وک پوشتہ" سبقس وارہ نظر دیکھہ کڈو اچھہ ڈپس وائش۔

5) منیرہ پینہ وقت کیاہ چھ کرکٹ ؟

6) سبقس مندرجہ مشق (Exercise) وارہ وچھتھہ لیکھو اشارہ ناوتیں ہندو (3) قسم۔

7) مثالہ دیکھہ کڈو کینہ اشارہ ناوتی درجہ۔ (5) و احوال صاف تھاوان کیا زہ چھ ضروری ؟

8) "سہمیچہ گتھہ بہتتھہ" اچھہ ڈپس کر تہہ وضاحت۔ گتھہ کس تالیہ زمینیں پیکو تہی مدد بہتھہ۔

10) آج سر سبز کلبی تہرا بہہ کڈو تھویر بناوہ۔





# گھریلو کام بابت جاننے آٹھویں برائے یونٹ اول / یونٹ دوم

یونٹ: 1

سبق: دل دیر

تعارف: - سبق دل دیر میں کثیر کی عظیم روحانی شاعرہ دل دیر کی حالات زندگی اور ان کے اختتام Introduction کلام پر بات کاٹا ہے۔

خلاصہ Summary: چودھویں صدی کے وسط میں سریندر سے چھ میل دور جنوب مشرق میں واقع نامک سیمپور میں پیدا ہوئی دل دیر کی ازدواجی زندگی ساس اور سرس کے بڑے سلوک کی وجہ سے بہت ہی تلخ تھی۔ عظیم دل دیر نے ان تکالیف کا صبر و سکون سے مقابلہ کرتا نام آفرین ایک دین صبر کا یہ بیان لہریز ہو گیا اور گھریلو زندگی کو خیر باد کہہ کر وہ ایک مسرت اعلیٰ کی طرف جلد جگہ اٹھنے لگی۔ اور حقیقی عرفان ڈھونڈنے لگی۔ حضرت امیر کبیر میر سید علی بہرائی رہا اور شیخ لودھیوں میں لڑائی لڑا جیسی عظیم شخصیات دل دیر کے روحانی مسرتی سے متاثر تھے۔

دل دیر ایک فطری شاعرہ تھیں جن کے کلام میں اونچے نیچے اور ذات

پات کے غیر فطری ہر لفظ کو لٹورنے اور اعلیٰ انسانی قدروں کو اپنانے کا بات کہی گئی ہے۔

جارج: 10: دل دیر کون تھی؟

Evaluation

11: دل دیر کے زمانے کا دور بزرگ شخصیات کا نام بتائیے۔

12: دل دیر کی ازدواجی زندگی کیسی تھی؟

13: گھریلو زندگی کو چھوڑ کر انہوں نے کیا کیا؟

14: سیمپور کہاں واقع ہے؟

15: دل دیر کے کلام میں کیا بات کہی گئی ہے؟

16: سبق کی مشق کو دیکھ کر بتائیے کہ روایت سب سے ساختہ - بتا اور لاج الفطرت سے کیا ہے

17: اپنے گھر کے بڑوں کی مور سے دل دیر کے کلام میں سے چند بند (واکھ) لکھیے۔

18: دل دیر اور کون ناموں سے یاد کی جاتی ہے؟

19: دل دیر کے علاوہ اور کس خاتون کثیر کی شاعرہ کا نام بتائیے۔

ASSIGNMENT OF CLASS 8TH, FOR U<sub>1</sub> & U<sub>2</sub>.

گھریلو کام بابت رجاست آٹھویں سہائے یونٹ اول / یونٹ دوام۔

یونٹ 2

سبق: لؤیل انعام کی ہانی

تعارف - سبق لؤیل انعام کی کہانی میں مشہور سائنس دان اور ڈائنامائٹ کے موجد الؤڈ لؤیل کی زندگی، ان کے مڈناموں اور ان کے نام پر قائم لؤیل انعام کے متعلق بات کی گئی ہے۔  
Introduction

ڈاکٹر الؤڈ لؤیل کے نام پر دیا جانے والا لؤیل انعام ہر سال امن، ادب، فزیکس کی پیشہوری، ادویات اور اقیصا یاات سے متعلقے میں نمایاں کارناموں پر دیے جاتے ہیں۔  
Summary  
ان انعام کی رقم تقریباً 15 لاکھ روپے ہے اور اب تک متعدد ہندوستانیوں جن میں راجدوناٹھ ٹیگور، ڈاکٹر پرگوبند کھورنہ، ڈاکٹر چندر شیکھر، بی بی رین امرتھیہ میں آمد مدد ٹریسا جیسی شخصیات کو یہ انعام ملا ہے۔ الؤڈ ایک ذہین اور محنتی شخص تھے جو اس وراثتی کے حامل تھے۔ اپنی کی وصیت کے مطابق ان کی ایجادات سے حاصل کردہ رقم سے ہر سال لؤیل انعامات تقسیم کیے جاتے ہیں۔

جاغ Evaluation - 1 لؤیل انعام کیں کے نام پر دیا جاتاہے؟

2 لؤیل انعامات کیں شجہ جات میں دیے جاتے ہیں؟

3 الؤڈ لؤیل کیں اہم چیز کے موجد تھے؟

4 ہندوستان میں لؤیل انعام پانے والے شخصیات کے نام لکھیے۔

5 الؤڈ لؤیل کیسے شخص تھے؟

6 اعزاز، ادویات، متعدد، وصیت جیسے الفاظ کے معنی لکھیے۔

7 صفت کے معنی میں کمی کی اچھا یا بری ظاہر کرنا۔ زیر نظر سبق میں ایسے 15 الفاظ ڈالو جنہ سے جو صفت کے توفیق میں آتے ہوں۔

8 فراغ دل، برآمو کرنا، جیسے الفاظ کے مختلف جملے بنائیے۔

9 سبق کو غور سے پڑھ کر بتائیے کہ مدد ٹریسا کو لؤیل انعام کیوں دیا گیا؟

10 لؤیل انعام کے دو اطراف کی ایک رنگین تصویر بنائیے۔

ASSIGNMENT OF CLASS 8TH, FOR U1 & U2.

گھریلو کام بابت جماعت آٹھویں براءے یونٹ اول / یونٹ دوم۔

یونٹ 1۔

سبق 1۔ نعت

تعارف 1۔ سبق 'نعت' بنی کریمؐ کی مسج میں پڑھنا اور نفاذ الطاف حسین حالی کا لکھا ہوا ایک مقبول نعت ہے۔ جو زبان زریعہ ہے۔  
Introduction

خلاصہ Summary  
الطاف حسین حالیؒ پیغمبر حضرت محمد ﷺ کی تعریف اور ان کے اوصاف

بیان کرتے ہوئے کہتے ہیں کہ یہ آغوشہٴ جن میں جو تمام نیوں میں خاص اور بلند مقام رکھتے ہیں۔ جن کا لقب رحمت اللعالمین ہے اور جنہوں نے دنیا کو جہالت، لاعلمی، گمراہی اور کفر و شرک کی تاریکی سے نکال کر علم، صداقت اور ایمان کی روشنی سے واقف کروایا۔ آپؐ ہر ایک کے لیے رحمت ہیں۔ آپؐ نے صلح کروانا، محاف کروانا اور ایک دوسرے کے کام آنا سکھایا۔ آپؐ ہر ایک کا خیال رکھتے۔ آپؐ پر بارگاہِ نبویؐ کی یہاں قرآن شریف اور تیسرا بند ہے۔ یہ مشکل راہ ہے۔

جاغ Evaluation  
1۔ 'نعت' جو آپؐ کی کتاب میں درج ہے کس شمارے لکھا ہے؟

- 2۔ نعت کے معنی تلاش کیجیے۔
- 3۔ آپؐ کا لقب 'رحمت اللعالمین' کیوں ہے؟
- 4۔ آپؐ نے دنیا کو کس چیز سے واقف کروایا؟
- 5۔ آپؐ نے لوگوں کو کیا سکھایا؟ (6) درگاہِ حضرت بل سے متعلق چند معلومات لکھا کر کے لکھیے۔
- 6۔ نعت لکھ کر کیا ہے؟
- 7۔ نعت کو عذرا پڑھ کر بنی کریمؐ کی بیان کی گئی خوبیوں کو درج کیجیے۔
- 8۔ برلانا۔ مہجا۔ مسخام۔ کندن۔ ضعیف جیسے الفاظ کے معنی لکھیے۔
- 9۔ اس شعر کی تشریح کیجیے: رہا زہ نہ میرے کو موجِ بلا کا
- 10۔ اس شعر سے اظہار کیا گیا ہے ہوا کا

# ASSIGNMENT OF CLASS 8TH, FOR U1 & U2.

گھریلو کام بابت جماعت آٹھویں نیاٹھ لائن اول / لائن دوم

لائن 2

سبق - استاد کا احترام

تعارف :- سبق استاد کا احترام میں استاد کے پیشے کی عظمت اور اہمیت منظر و احوال کی مدد سے بیان کی گئی ہے۔ تاکہ طلباء استاد کی عظمت ذہن نشین کر سکیں۔

Introduction

خلاصہ :- استاد کا پیشہ سب سے عظیم اور مقدس پیشہ ہوتا ہے۔ ذہنیات تمام مذاہب میں اس پیشے کی عظمت اور برائی کو تسلیم کیا گیا ہے۔ استاد انسان کی تربیت کر کے اس کی زندگی کی تمام ناپسندیدگیوں کو دور کر کے اس کے لیے زندگی کا سفر آسان بنا دیتا ہے۔

Summary

استاد سے استفادہ ہونا سیکھنے کے لیے ضروری ہے کہ شاگرد استاد کے لیے اپنے دل میں محبت اور احترام پیدا کرے۔ اس سے انسان مشکل سے مشکل کاموں کا سفر آسانی سے کر کے کامیاب حاصل کر سکتا ہے۔ ہم سب کو چاہیے کہ ہم اپنے اساتذہ کی عزت اور ان کا احترام کریں۔

خلاصہ  
Evaluation

1. آئیں پیسہ عظیم اور مقدس کہا گیا ہے؟
2. استاد کس طرح زندگی کا سفر آسان بنا دیتا ہے؟
3. استاد سے استفادہ ہونے کے لیے کیا لازمہ ہے؟
4. استاد کی عظمت کے حوالے سے اپنے سبق میں دو دو کوئی ایک واقعہ درج کریں۔
5. سبق کی مشق کو پڑھ کر عظیم معلوم۔ کثیر اور چیت الفاظ لکھیں۔
6. درج ذیل الفاظ کو مختصر جملوں میں استعمال کیجیے:  
تاریک - پرہیزگار - عظیم
7. زیر نظر سبق کو پڑھ کر بتائیے کہ استاد کس طرح سے سوار قوم ہوتا ہے؟
  1. سبق میں دو دو مشہور مفردوں کے نام بتائیے۔
  2. جملہ مکمل کریں: "استاد مجھ اور چلے میں..... ہے"
  3. اپنے پسندیدہ استاد کے بارے میں چند جملے لکھیں۔

