

CLASS - X

ENGLISH HOLIDAYS HOMEWORK

Do the following in your Goyal's Assignment book :-

•Factual passage

Pg - A 6,8,11. Assignment - 2,3,6

•Discursive passage

Pg - A 24,27,37 Assignment - 2,4,9

•Letter to editor

Pg - B1-5,6,7 Assignment - 1,2,3

•Gap filling

Pg - B2-57,58,61. Assignment - 11.3 A,B,C,G,H

•Editing errors

Pg - B2-48,49,51 Assignment -11. 1B,C,F

•Editing omissions

Pg -B2-55,56 Assignment - 11.2D,E

•Reported speech

Pg - B2- 66,67,68 Assignment - 11.5C,D,E

CBSE Class 10 Science
Revision Notes
CHAPTER – 6
LIFE PROCESSES

- All living things perform certain life processes like growth, excretion, respiration, circulation etc.
- The basic functions performed by living organisms for their survival and body maintenance are called life process.

Basic life processes are : Nutrition, Respiration, Transportation, Excretion etc.

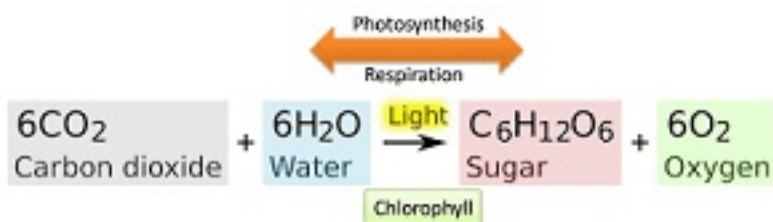
Life Processes require energy which is provided by nutrition.

Modes of Nutrition

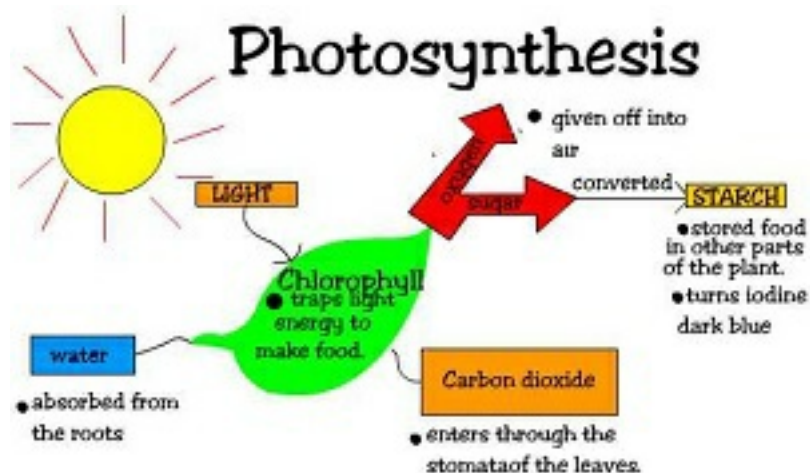
1. **Autotrophic** :-Kind of nutrition in which organisms can synthesize their own food Eg. Green Plants
2. **Heterotrophic**:- Kind of nutrition of which organisms do not possess the ability to synthesize their own food. They depend on autotrophs for their food supply directly or indirectly. Eg. Animals, Fungi

Autotrophic Nutrition

- **Autotrophs** : The organisms which can make their own food are called autotrophs (green plants).
- **Photosynthesis** : The process by which green plants make their own food with the help of CO_2 and H_2O in the presence of chlorophyll and sunlight is also called photosynthesis.
- **Raw Materials for Photosynthesis** : CO_2 and H_2O
- **Site of Photosynthesis** : Chloroplast in the leaf. Chloroplast contain chlorophyll. (green pigment).



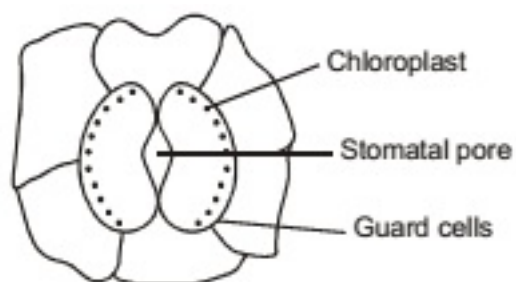
• **Main Events of Photosynthesis**



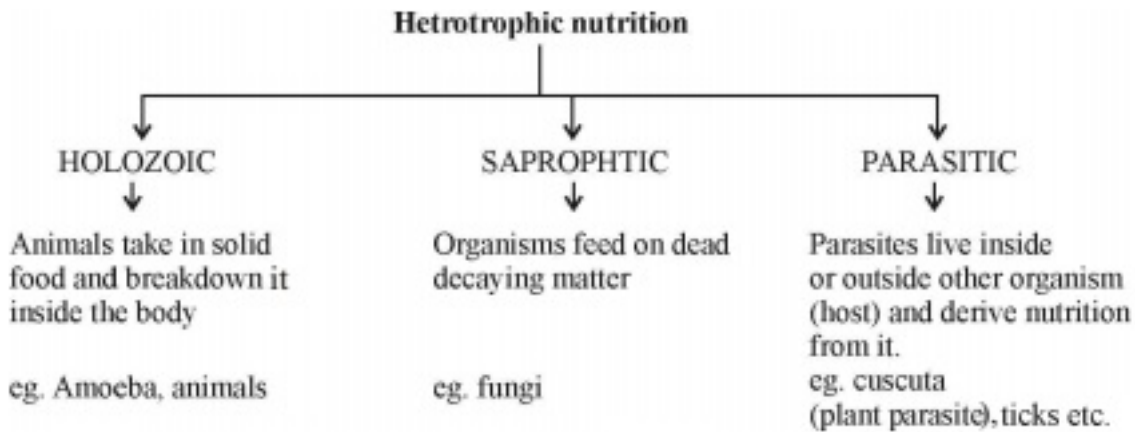
Absorption of Sunlight energy by chlorophyll

CO_2 to carbohydrates.

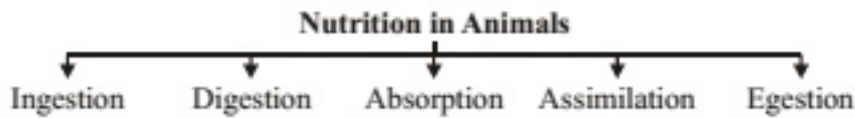
- **Stomata** : Tiny pores present on the surface of the leaves.
- **Functions of Stomata**
- (i) Exchange of gases O_2/CO_2
- (ii) Loses large amount of water [water vapour] during transpiration and helps in up flow of water



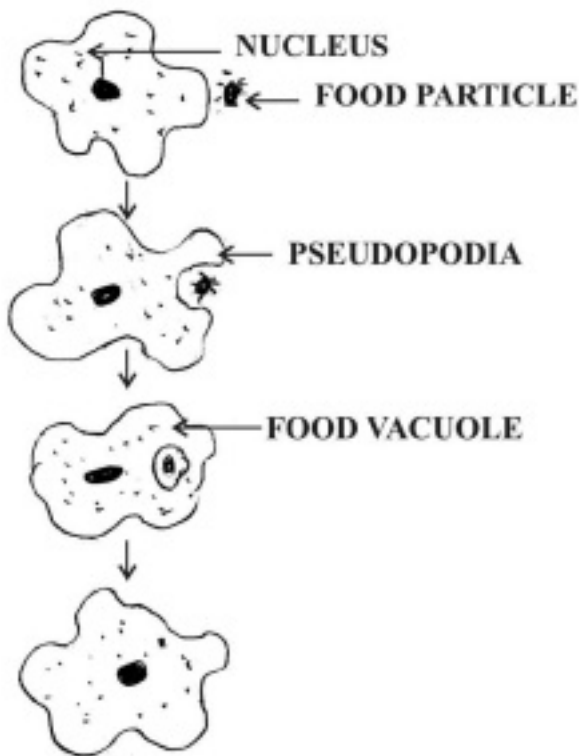
Chloroplast contains the green pigment chlorophyll which has a pivotal role in photosynthesis.



- Nutrition in Animals



- Nutrition in Amoeba



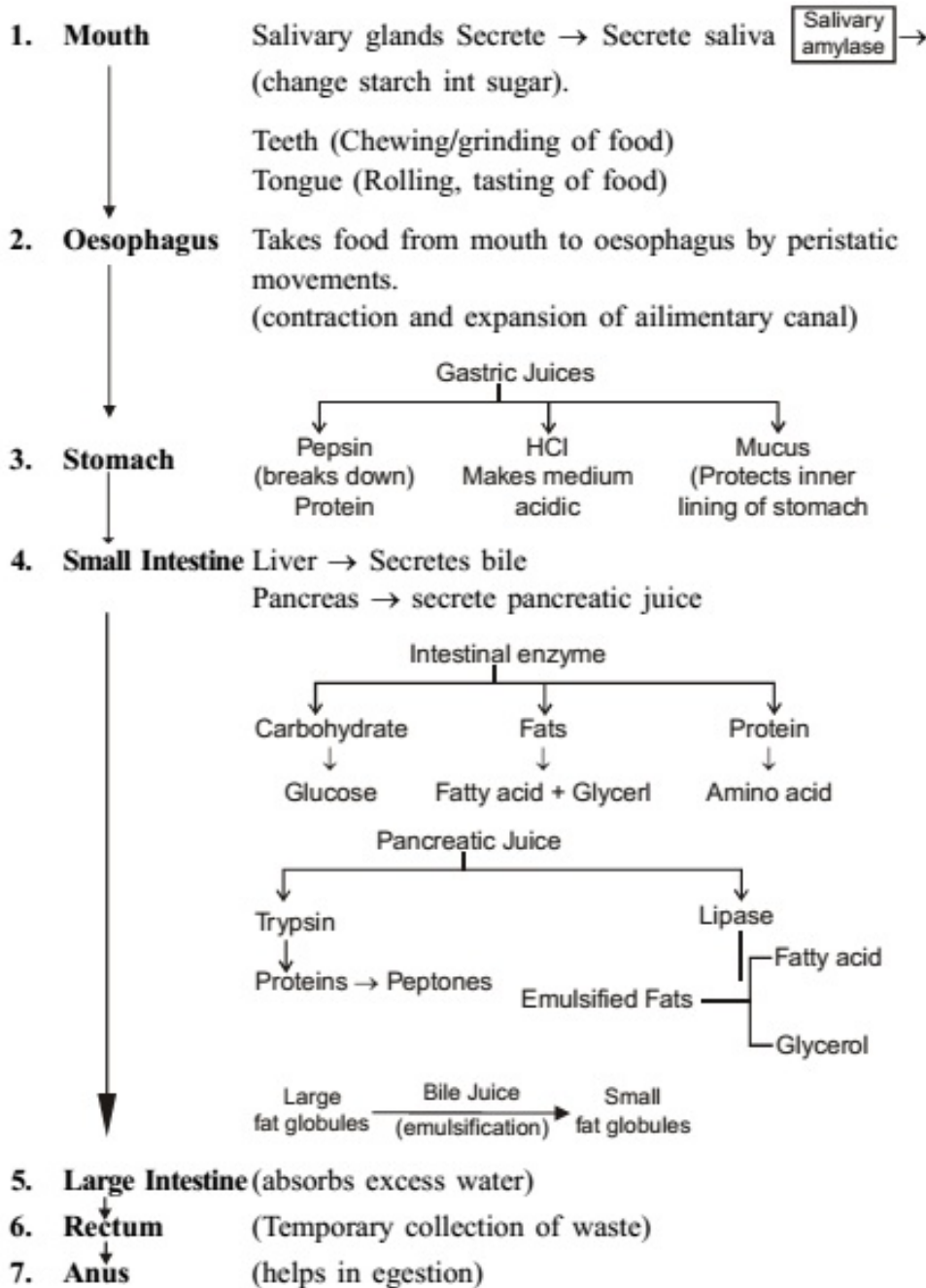
Amoeba has a holozoic nutrition. Thus, solid food particles are ingested which react with enzymes and are digested. It is an omnivore.

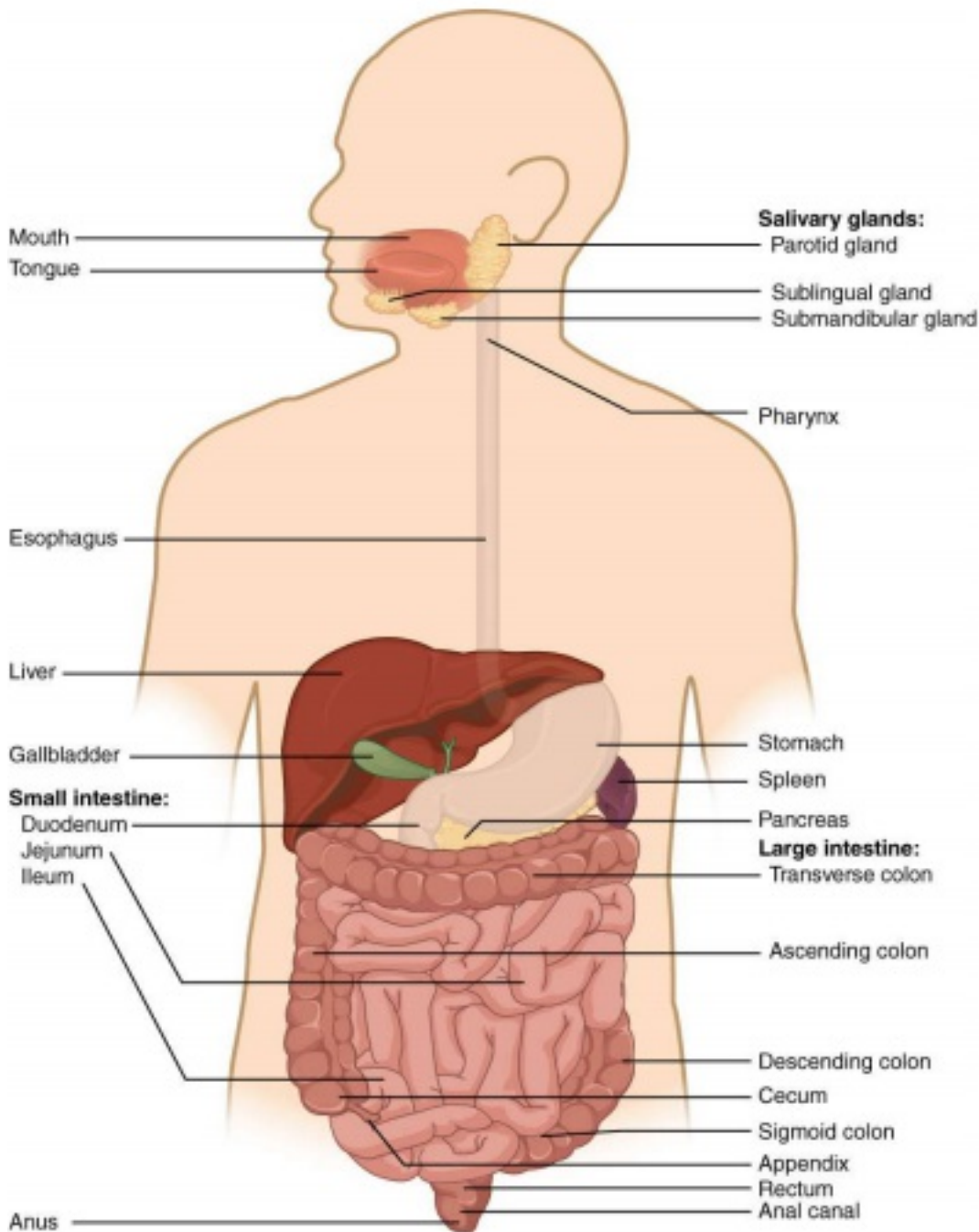
(i) Amoeba move with the help of pseudopodia (extension of cell membrane)

- (ii) Food vacule is formed
- (iii) Undigested food is thrown out.

- **Nutrition in Human Beings** : The human digestive system comprises of alimentary canal and associated digestive glands.

HUMAN DIGESTIVE SYSTEM





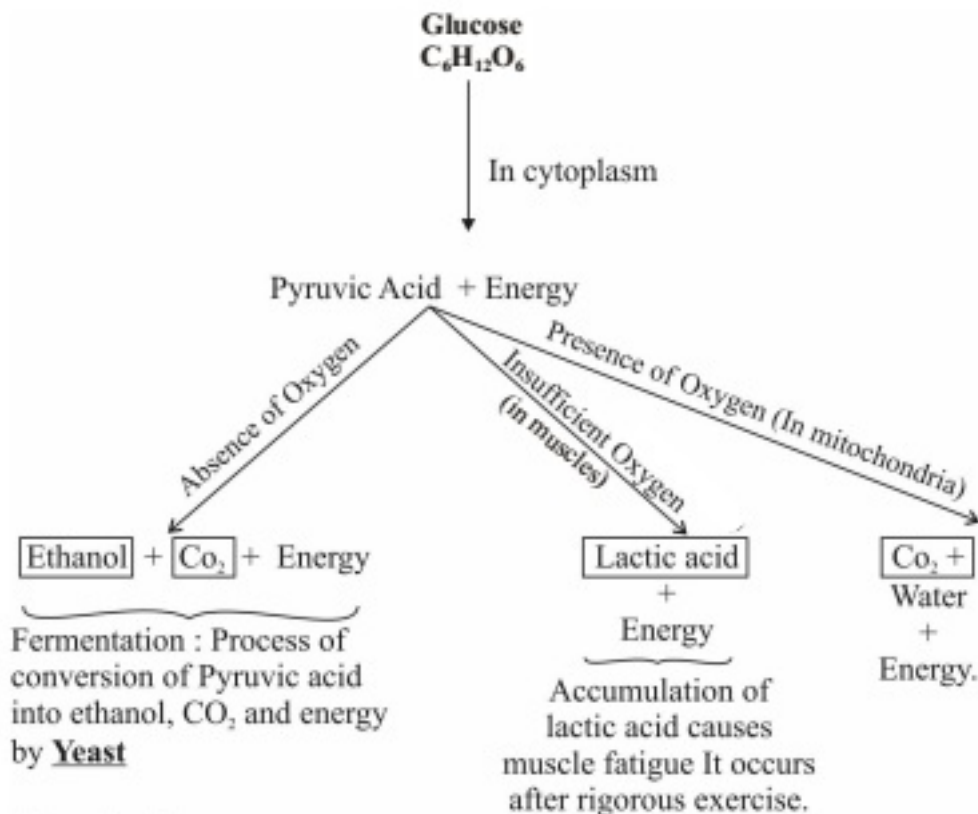
HUMAN DIGESTIVE SYSTEM: As shown in the flow chart, digestion begins from the mouth. In the mouth it is broken down by salivary amylase. The food moves to the stomach through the oesophagus which performs peristaltic movement. Enzymes and various digestion juices from liver, gall bladder and pancreas act on the chunks from the stomach in the small intestine. In the large intestine, the remaining nutrients are absorbed and the leftover is removed from the body through the rectum and anus.

Respiration

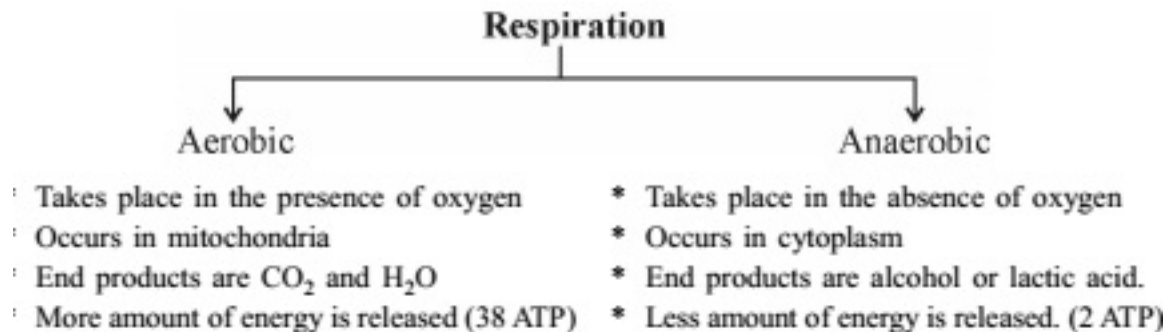
It is a process in living organisms involving the production of energy, typically with the intake of oxygen and the release of carbon dioxide from the oxidation of complex organic substances.

- (i) Gaseous exchange : Intake of oxygen from the atmosphere and release of carbondioxide.
- (ii) Breakdown of simple food in order to release energy inside the CellularRespiration

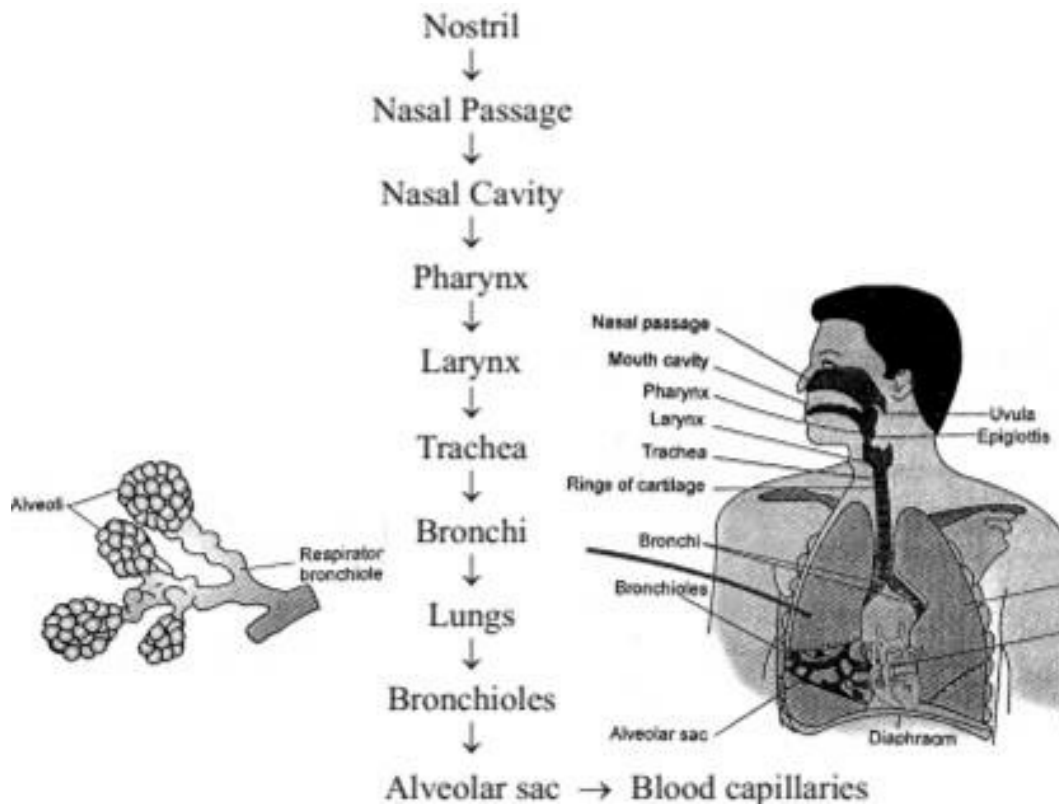
- **Breakdown of Glucose by various pathways**



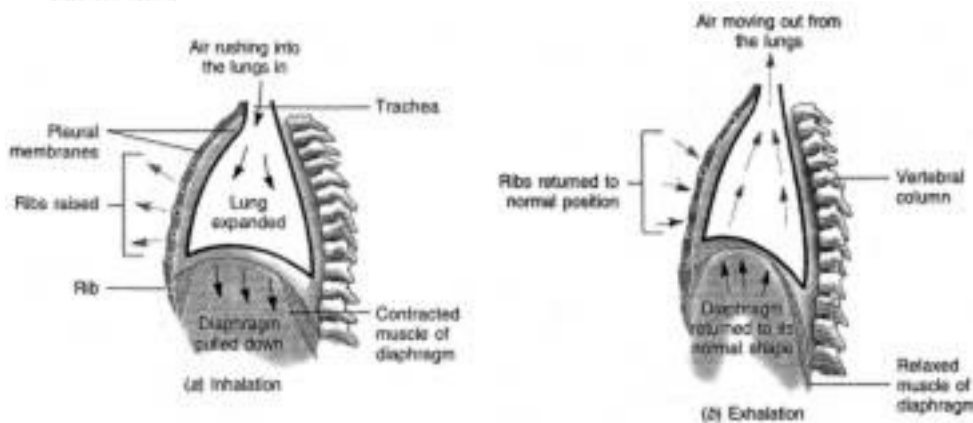
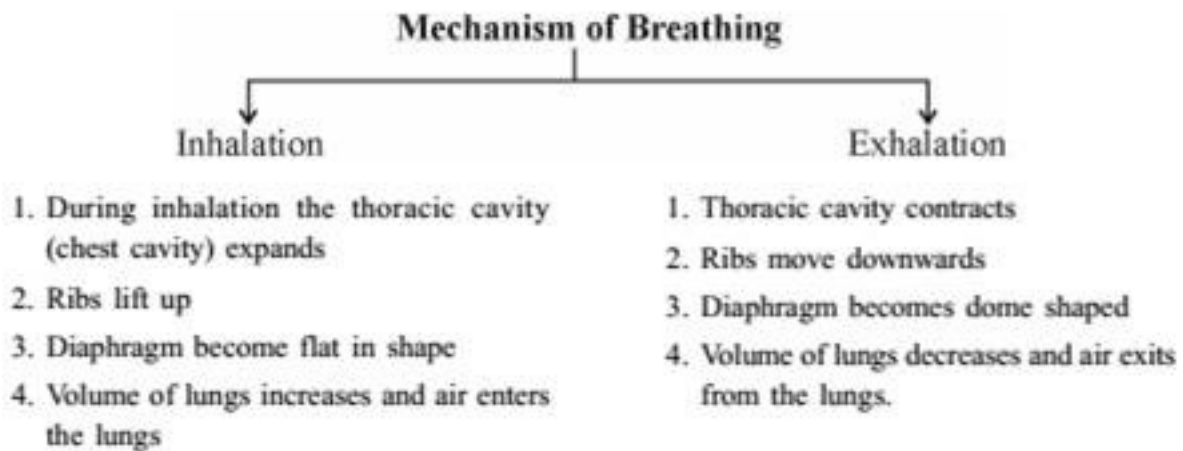
- **Respiration**



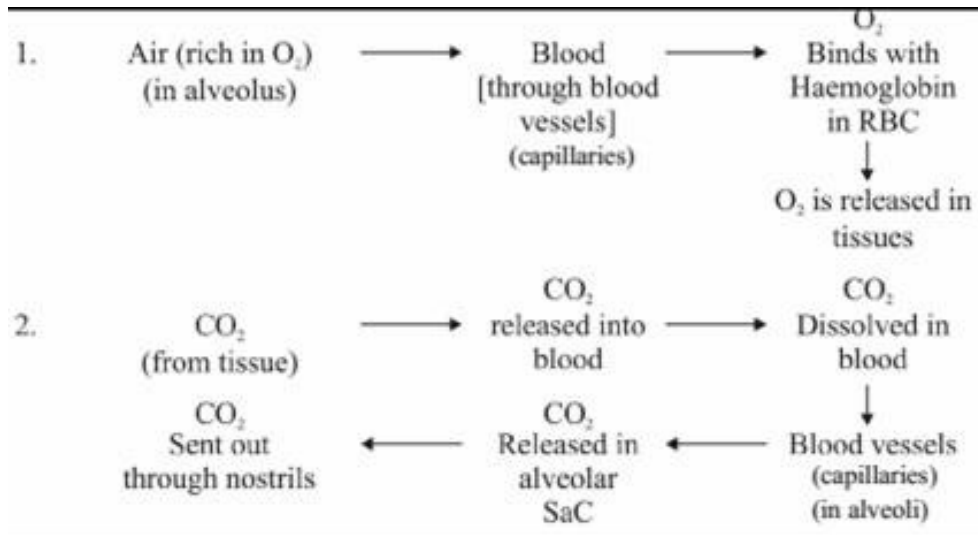
- **Human Respiratory System** : Passage of air through the respiratory system.



• **Mechanism of Breathing**



• **Exchange of Gases between alveolus, blood and tissues.**

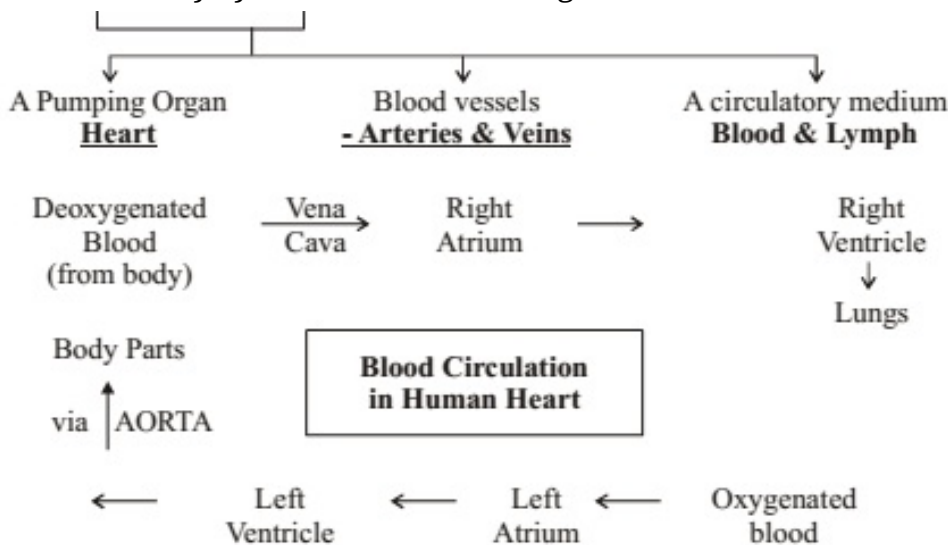


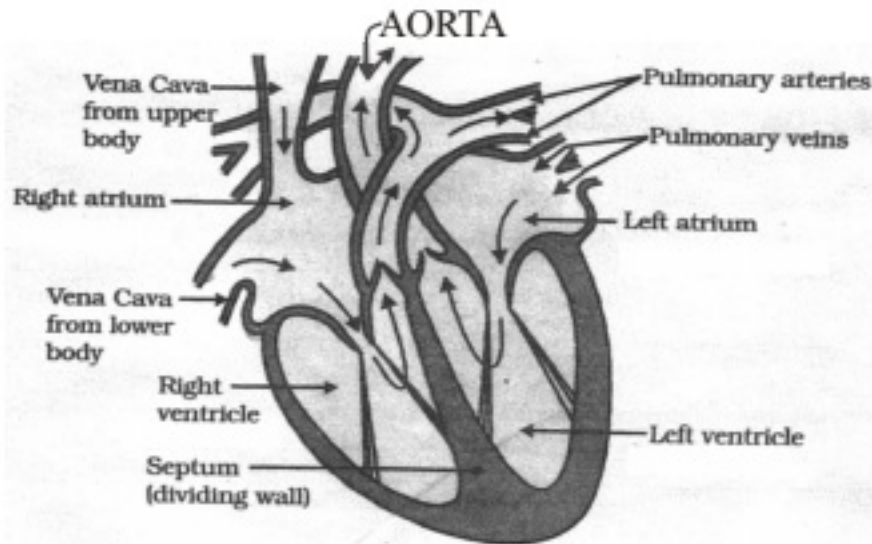
- **Terrestrial Organism** – use atmospheric oxygen for respiration
- **Aquatic Organisms** – use oxygen dissolved in water.
- **Respiration in Plants** : Respiration in plants is simpler than the respiration in animals. Gaseous exchange occur through

1. Stomata in leaves
2. Lenticels in stems
3. General surface of the roots.

Transportation

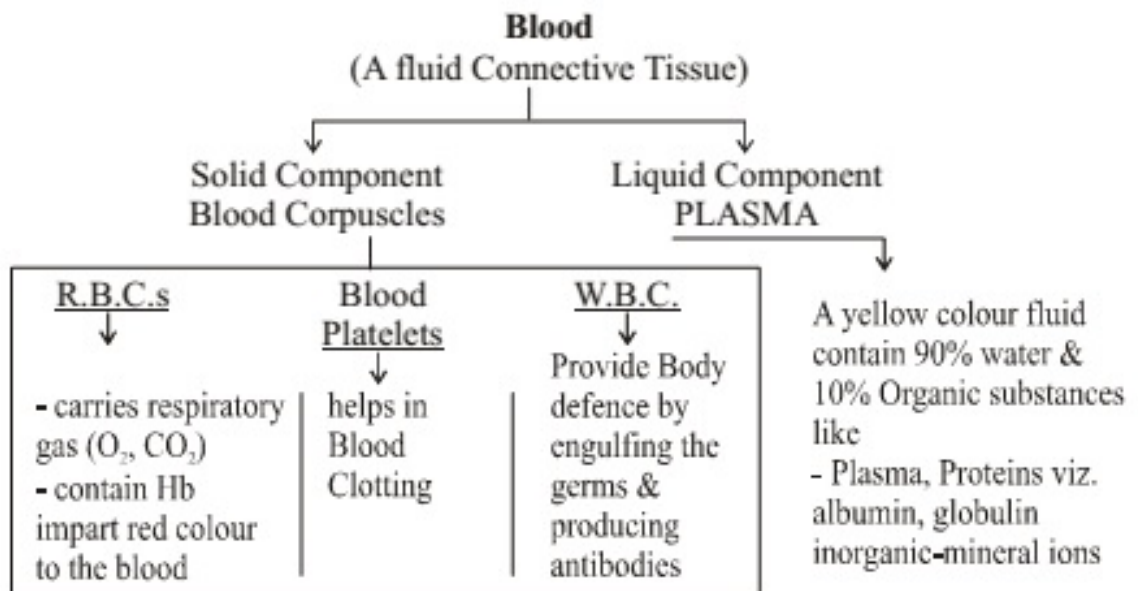
1. Human beings like other multicellular organism need regular supply of food, oxygen etc., This function is performed by circulatory system or Transport system.
2. The circulatory system in human beings consists of :



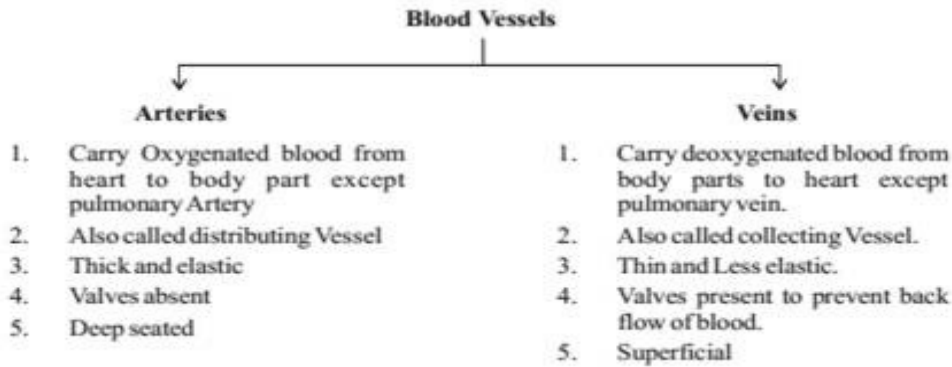


Section view of the Human Heart

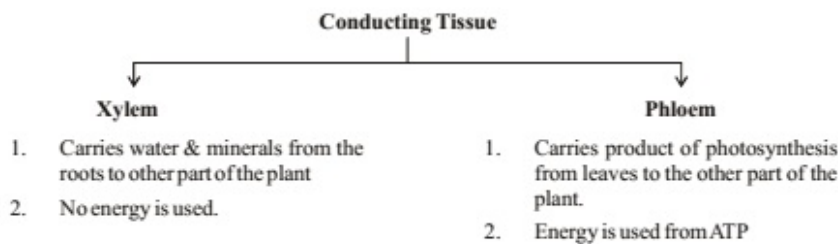
- **Double Circulation** : Blood travels twice through the heart in one complete cycle of the body.
 - **Pulmonary circulation** : blood moves from the heart to the lungs and back the heart.
 - **Systemic circulation** : blood moves from the heart to rest of the body and back to the heart.



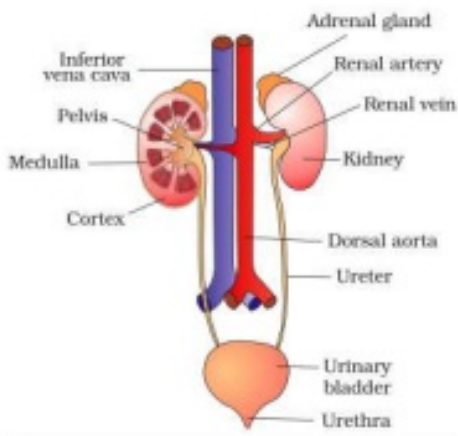
- **Lymph** - a yellowish fluid that escapes from the blood capillaries into the intercellular spaces. Lymph flows from the tissues to the heart assisting in transportation and destroying germs.



- **Transportation in Plants** : There are two main conducting tissues in a plant.
(a) Xylem (b) Phloem.



- Transpiration is the process by which plants lose water in the form of vapours.
- Role of Transpiration
 1. Absorption and upward movement of water and minerals by creating PULL.
 2. Helps in temperature regulation in Plant.
- **Translocation** : Transport of food from leaves (food factory) to different part of the plant is called Translocation.
- **Excretion in human beings** : The process of the removal of the harmful metabolic wastes from the body is called excretion. Excretory system of human beings includes :



1. A pair of kidney
2. A Urinary Bladder
3. A pair of Ureter

4. A Urethera

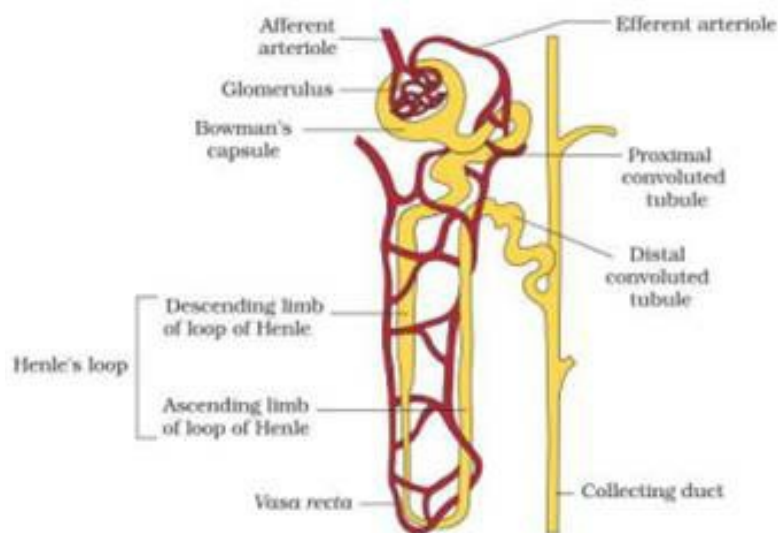
- **Process of Excretion**

Renal artery bring in blood containing waste substances to the kidneys.

Kidney filters blood.

Urine produced in the kidneys passes through the ureters into the urinary bladder where it is stored until it is released through the urethera.

- **Function of Kidney** : It is remove waste product from the blood i.e., urea which is produced in the liver.
- **Nephron** : Each kidney has a large number of filtration units called nephrons. Nephron is the structural and functional unit of Kidney.



Structure of Nephron

- **Mechanism of Urine Formation** : The Urine formation involves three steps:
- **Glomerular Filtration** : Blood is filtered from the glomerulus into Bowman Capsule of the nephron. This filtrate passes through the tubules of the nephron.
- **Tubular re-absorption** : Now, useful substances from the filtrate Like Na^+ , K^+ , glucose, amino acids etc. are reabsorbed by the capillaries surrounding the nephron into the blood.
- **Secretion** : Urea, extra water and salts are secreted into the tubule which open up into the collecting duct & then into the ureter.
- **Haemodialysis**: The process of purifying blood by an artificial kidney. It is meant for Kidney failure patient.

Excretion in Plants

1. Oxygen released during photosynthesis.
2. H_2O by transpiration
3. Wastes may be stored in leaves, bark etc. which fall off from the plant.
4. Waste products stored as gums, resin in old Xylem
5. Plants excrete some waste into the soil around them.

What you have learnt

- Movement of various types can be taken as an indication of life.
- The maintenance of life requires processes like nutrition, respiration, transport of materials within the body and excretion of waste products.
- Autotrophic nutrition involves the intake of simple inorganic materials from the environment and using an external energy source like the Sun to synthesis complex high-energy organic material.
- Heterotrophic nutrition involves the intake of complex material prepared by other organisms.
- In human beings, the food eaten is broken down by various steps along the alimentary canal and the digested food is absorbed in the small intestine to be sent to all cells in the body.
- During the process of respiration, complex organic compounds such as glucose are broken down to provide energy in the form of ATP. ATP is used to provide energy for other reactions in the cell.
- Respiration may be aerobic or anaerobic. Aerobic respiration makes more energy available to the organism.
- In human beings, the transport of materials such as oxygen, carbon dioxide, food and excretory products is a function of the circulatory system. The circulatory system consists of the heart, blood and blood vessels.
- In highly differentiated plants, transport of water, minerals, food and other materials is a function of the vascular tissue which consists of xylem and phloem.
- In human beings, excretory products in the form of soluble nitrogen compounds are removed by the nephrons in the kidneys.
- Plants use a variety of techniques to get rid of waste material. For example, waste material may be stored in the cell-vacuoles or as gum and resin, removed in the falling leaves, or excreted into the surrounding soil.

Holiday Homework.

Class-10.

Science.

1-Refer to the links of the videos I have shared related to transportation and circulation.

2-Read the notes of the chapter 'Life processes'.

3-Draw the labelled colourful diagrams

of the following:-

1. Digestive system

2. Respiratory system

3. Circulatory system

4. Excretory system. 4-Practicals

1.1,1.2,2.3,4.1,4.2,5.1,5.2,6.1,6.2,7

These are the practicals that you have to do it in lab manual.

(Aim, apparatus,procedure,observation,conclusion,and diagram)only write these. 5- Go through the video of chapter electricity.

Dear students download byjus app and try to solve questions of that.This will help your learning skill and understanding.For june month byjus are not demanding any charges. All the videos and notes pdf are shared below

Holiday homework

Class X - Social science

Map Activity:

- 1) On physical map of India, locate and label ___ Major Soil Types (Text Book, Geo Lesson 1)
- 2) On an outline map of India , mark and label the following:
 - a) The place where National Congress session was held in September 1920
 - b) The Place where National Congress session was held in December 1920
 - c) The Place where National Congress session was held in 1927
 - d) The Place where National Congress session was held in 1929
- 3) On an outline map of India , mark and label the important centers of National Movement:
 - a) Movement of Indigo planters.
 - b) Peasant Satyagraha movement organized by Mahatma Gandhi.
 - c) Satyagraha movement by cotton mill workers.
 - d) Place where Jallianwala Bagh Massacre took place.
 - e) The place where Salt law was broken by Mahatma Gandhi
 - f) Place where violence took during Non-Cooperation movement.

GEOGRAPHY LESSON -1

1. Define the following terms:
 - a. Net sown area
 - b. Fallow land
 - c. Gullies
 - d. Sheet Erosion
 - e. Soil Erosion
 - f. Bad land
2. Which soil is more suitable for crop like Cashew Nut? Name the states where this type of soil is found.
3. Which soil is also known as Regur Soil?
4. Write two differences between Bangar and Khadar.
5. What is land Degradation? Explain any our reasons responsible for it.
6. What is Soil Erosion? Explain any two human activities that lead to soil Erosion.
7. Explain land use pattern in India. Why has the land under forest not increased much since 1960-61
8. What steps can be taken to prevent Soil Erosion in hilly areas.
9. Show the process of soil formation with the help of **Soil Profile.** (Text Book, Fig 1.6)
10. Draw a pie diagram showing **land under important Relief Features.** (Text Book, Fig 1.3)

Table. 1: Indian Soils with Percentage of Coverage.

Type	Features (formation, composition)	Distribution	Predominant Crops
Alluvial Soil pH range: 6.5-8.4	Khaddar- light in color, more siliceous. Bhaggar- the older alluvium is composed of lime nodules and has clayey composition. It is dark in color.	Ganga and Brahmaputra river valleys; Plains of Uttar Pradesh, Uttaranchal, Punjab, Haryana , West Bengal and Bihar.	Rice, Wheat, Sugarcane, oilseeds
Desert Soil pH range: 7.6-8.4	Contain a high percentage of soluble salts but are poor in organic matter; rich enough in phosphate though poor in nitrogen	Rajasthan, Northern Gujarat and southern Punjab	Wheat, grams, melon, bajra (with irrigation)
Black Soil pH range: 6.5-8.4	The soils are derived from basalts of Deccan trap. They derive their name from their black color which may be owing to presence of titanium, iron. Consist of calcium and magnesium carbonates; high quantities of iron, aluminum, lime and magnesia.	Maharashtra and Malwa plateaus, Kathiawar peninsula, Telengana and Rayalasema region of Andhra and northern part of Karnataka	Cotton , millets(include jowar ,Bajra and ragi), tobacco, sugarcane
Red Soil pH range: below 5.5-7.5	Mainly formed due to decomposition of ancient crystalline rocks like granites and gneisses and from rock type rich in minerals such as iron and magnesium. Siliceous and aluminous in nature. Clay fraction of the red soils generally consists of Kaolinitic minerals.	Eastern parts Deccan plateau, southern states of Kerala , Tamil Nadu and Karnataka and Chota Nagpur plateau (Jharkhand)	Wheat, Rice , Cotton , Sugarcane, pulses
Grey and Brown pH range: 7.6- above 8.5		Semi- arid tract of Rajasthan and Gujarat	Cotton, oilseeds
Laterite Soil pH range: below 5.5	Composed mainly of hydrated oxides of iron and aluminum; loss of silica from the soil profile	Assam hills, hill of summits of Kerala and Karnataka and eastern Ghats region of Orissa	Coffee, rubber, cashew nut, tapioca
Mountain soil pH range: 5.0-6.5		Coniferous forest belt of Jammu and Kashmir, Himachal Pradesh, Uttaranchal and Sikkim	Fruit, tea

Soil is the thin top layer on the earth's crust comprising rock particles mixed with organic matter. The science that deals with the study of soil is called Soil Science or Pedology (Pedos means earth) or Edaphology (Edaphos means soil). Pedogenesis is the natural process of soil

IMPORTANT NOTES:

- 1) Do all given assignments in your Notebook.
- 2) Map work should be pasted in Notebook.
- 3) Marks will be awarded for Holiday homework.

-----STAY SAFE, ENJOY HOLIDAYS-----

ग्रीष्मावकाश कार्य

कक्षा-10

- १:-कवि सूरदास जी की जीवनी चित्र सहित लिखिए।
- २:- वाच्य की परिभाषा और उसके भेद उदाहरण सहित लिखिए।
- ३:-कोरोना से बचाव के लिए लोगों को जागरूक करते हुए एक विज्ञापन तैयार कीजिए।
- ४-'नेताजी का चश्मा' पाठ का सार अपने शब्दों में लिखिए।

नोट:-समस्त कार्य हिंदी की कार्य पुस्तिका में करना है।

MATHEMATICS
CLASS X
HOLIDAY HOMEWORK

Do the following questions in your Maths copy.

I.

Q1. Find the zeroes of the polynomial $p(x) = x^2 + 5x + 6$. [Answer : - 3 , - 2]

Q2. If α, β are the zeroes of the polynomial $p(x) = 4x^2 + 4x - 1$, then find the value of $\frac{1}{\alpha} + \frac{1}{\beta}$.
[Answer : 4]

Q3. If two zeroes of the polynomial $x^3 - 4x^2 - 3x + 12$ are $\sqrt{3}$ and $-\sqrt{3}$, then find its third zero.
[Answer : 4]

Q4. If α and β are zeroes of the polynomial $3x^2 - 2x - 7$, then find the value of $\frac{\alpha}{\beta} + \frac{\beta}{\alpha}$.
[Answer : $\frac{-46}{21}$]

Q5. Obtain all the zeroes of $x^4 + x^3 - 16x^2 - 4x + 48$, if two of its zeroes are 2 and -4. [Answer : 3 , - 2]

Q6. The product of zeroes of the polynomial $ax^2 - 6x - 6$ is 4, find the value of 'a'. [Answer : $a = \frac{-3}{2}$]

Q7. Find the value of 'k' for which the pair of linear equations : $4x + 6y - 1 = 0$ and $2x + ky - 7 = 0$ represents parallel lines. [Answer : $k = 3$]

Q8. Solve by Elimination method :

$$x - 4y = 13$$

$$3x + 2y = -3$$

[Answer : $x = 1 ; y = -3$]

Q9. Solve $\frac{2}{x} + \frac{3}{y} = 13$

$$\frac{5}{x} + \frac{4}{y} = -2, \quad x, y \neq 0$$

[Answer : $x = \frac{1}{2}, y = \frac{1}{3}$]

Q10. Solve graphically the equations :

$$x - y + 1 = 0 \text{ and } 3x + 2y - 12 = 0.$$

Shade the region bounded by these lines and the x-axis.

Do Ex. 2.4 (optional) Q : 2, 3 and 4.

Do Ex. 3.7 (optional) Q : 3, 4, 5 and 7.

II.

ACTIVITY

1. Pair of Linear Equations in two variables.
2. Pythagoras Theorem (Activity- 9)

Do the above two activities in Maths Practical Note Book

III.

PROJECT

Make a project on the topic “ The Importance of Geometry in Real Life “

OR

Write about five Indian Mathematicians (Atleast 6 / 8 pages required including their pictures , contributions etc.)

Do it in a Scrap Book.

Revise all the work which you have done till now.

CLASS X (INFORMATION TECHNOLOGY-402)

HOLIDAYS HOMEWORK (2020-21)

PRACTICAL FILE WORK

- **WORD PROCESSOR**

- o Create your Class Timetable in Landscape orientation.
- o Take any poem from your English Book. Format the Poem with different formatting options available in Word Processing.
- o Make a poster on online classes.

-
- o Make your own resume (Bio-Data) using Tab settings.

Bring hard copy as well as soft copy of the same.

- **SPREADSHEET**

- o Create your Class Online result in the Excel sheet.

Bring hard copy as well as soft copy of the same.

- **DIGITAL PRESENTATION**

- o R.no.(1-10) Tours and Travel
- o R.No. (11-20) Pollution
- o R.no. (21-30) Save Water
- o R.no(31-45) Delhi Metro

- Make at least 10-12 slides.

- Use the concept of Animation, Custom Animation, Slide Transition, insert images, Word Art etc.

Bring Soft copy of your presentation in your Pen Drive or CD .