Environment & Ecology

Unit-1 (Environment)

Environment :→

the term environment means surrounding in which the organism. the term environment derived from Greek word, that means "covered from all sides".
envior

Environmental study :-

the brief description of environment is called enviromental study.

Environment create fabourable condition for the existence and development of living organism.

types of environment :-

Environment can be classified into two eat parts -

a) Natural environment
b) Man-made environment (Anthropogenic environment)

a) Natural environment :-

The environment that comes into existence without interference of man is called natural environment it operates through self regulating mechanism called Homoeostatic environment.

Date..............

b) Man-Made environment :→

The environment which has been modify by human activites is called man made environment.

Human modify the environment according to their own needs and ways without taking into account its consequences.

Components of Environment :→

The environment is classified into two components-

1.) Biotic components (living)
2.) Abiotic components (non-living)

1.) Biotic components :→

It is composed of all living components. like- plants, animals, human, microorganism.

Biotic components also classified into three catogory.

i) Producers or Autotrophs
ii) Consumers
iii) Decomposers.

i) Producers or Autotrophs –

Producers are also called Autotrophs Auto means Self and trophs means feeder that means Self feeder.

Ex→ plants make there own food by the process of Photosynthesis.

ii) Consumers :–

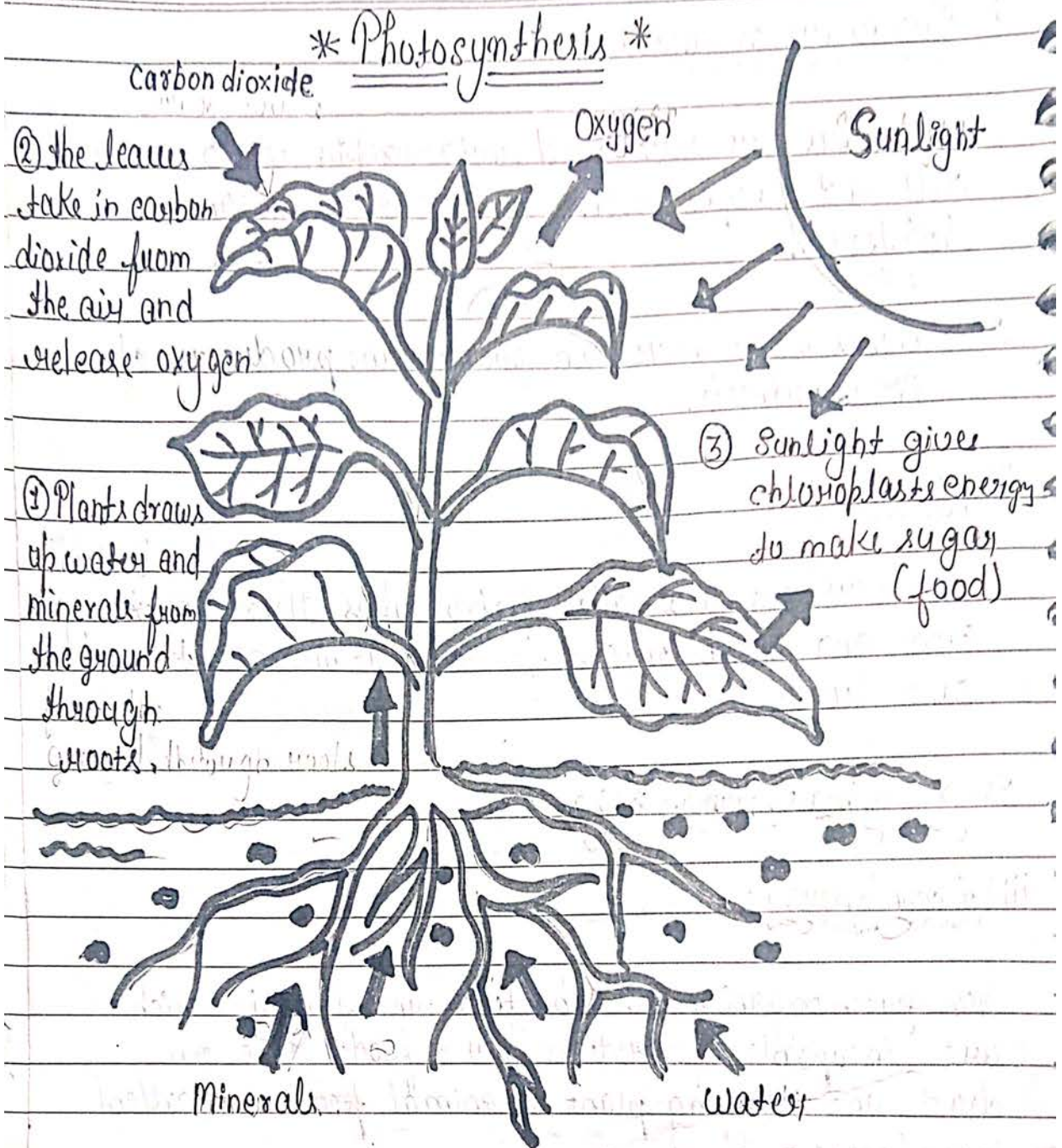Consumers are also called Hetrotrophs Hetro means Other and trophs means feeder that means other feeder.

Ex→ Animals, Human Being.

iii) Decomposers :–

Non-green organism like-bacteria and fungai which are incapable of produces there food. live on dead and dieying plant or animal part are called decomposers.

2.) Abiotic components :–

It is composed of external physical factors like- temperature, ~~Humidity~~ water, minerals and Gases.

Date...............

* Photosynthesis *

Carbon dioxide

Oxygen

Sunlight

② the leaves take in carbon dioxide from the air and release oxygen

① Plants draws up water and minerals from the ground through roots,

③ Sunlight gives chloroplasts energy to make sugar (food)

Minerals

water

(PHOTOSYNTHESIS)

Photosynthesis is a process used by plants and another organism to convert light energy into chemical energy that, through cellular respiration, can later be released to fuel the organism activities. Some of this chemical energy stored.
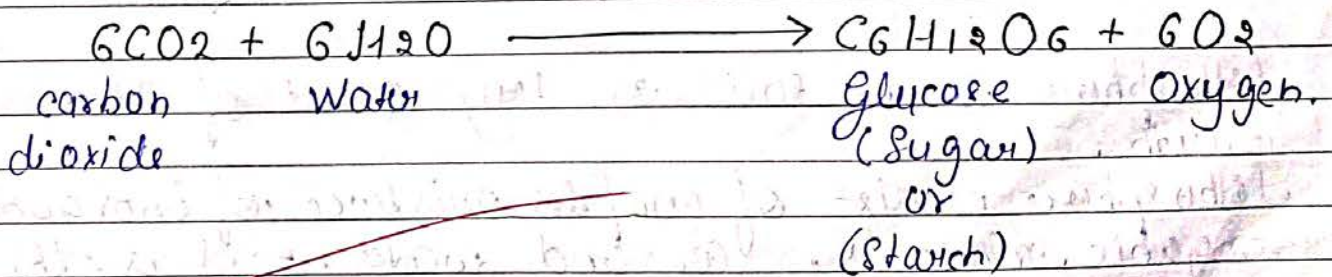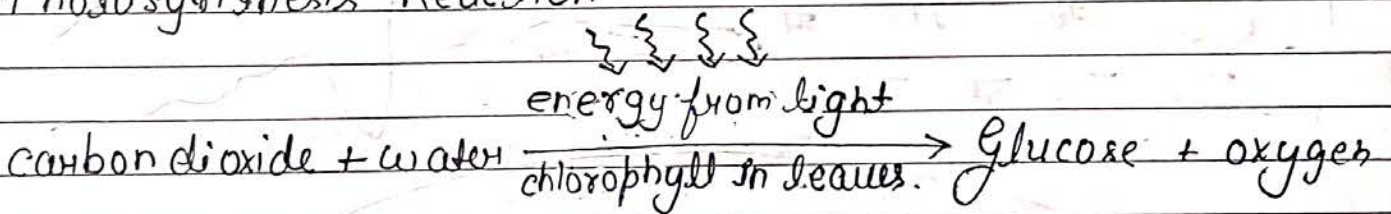
carbohydrate molecule such as sugar and starches. which are synthesized from carbon dioxide and water.

Photosynthesis word come from Greek word. photo (phōs) means "light" and synthesis means "putting togeter" that means light putting togeter.

Most plants algae and cyanobacteria perform photosynthesis; such organisms are called photoautotrophs.

Photosynthesis is largely responsible for producing and maintainging the oxygen content of the earth's atmosphere, and supplies most of the energy necessary for life on earth.
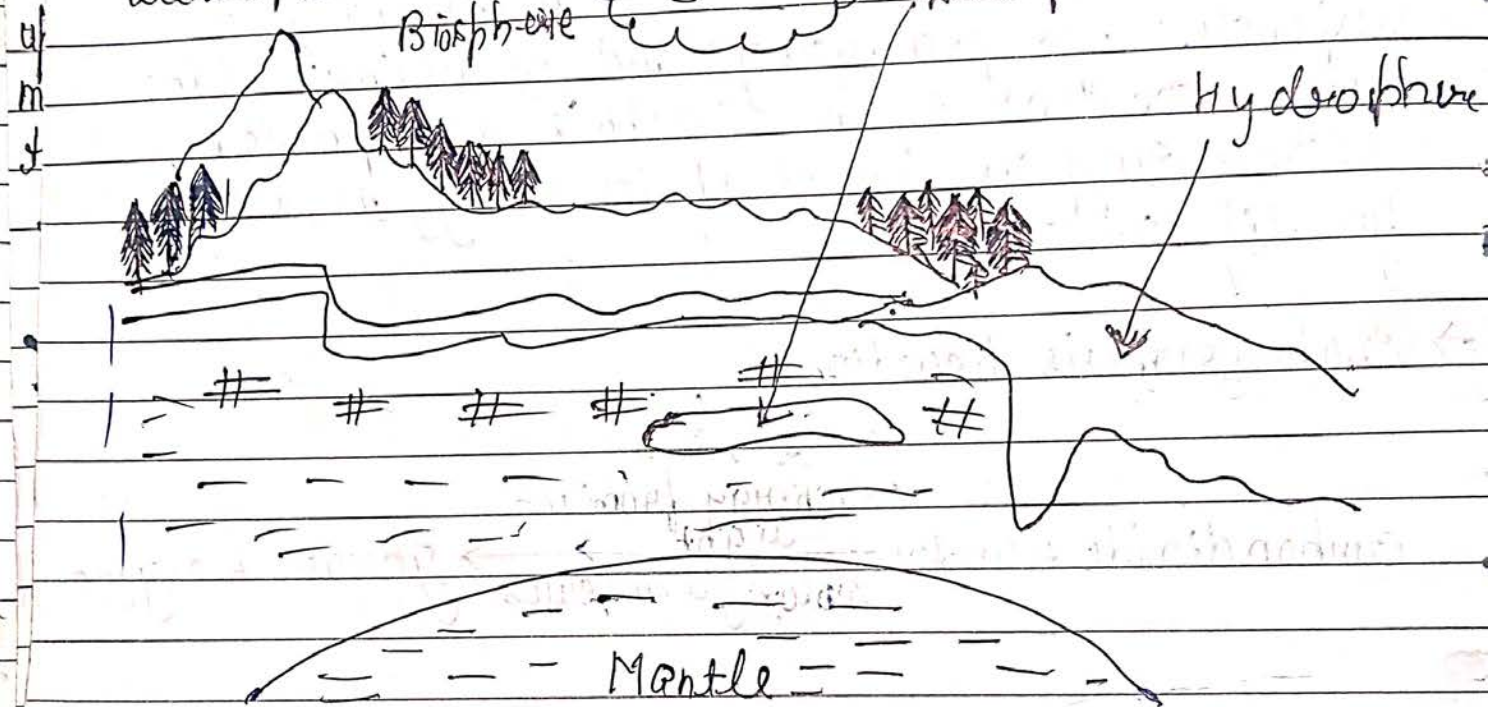
→ Photosynthesis Reaction —

$$\text{carbon dioxide} + \text{water} \xrightarrow[\text{chlorophyll in leaves}]{\text{energy from light}} \text{Glucose} + \text{oxygen}$$

$$6CO_2 + 6H_2O \longrightarrow C_6H_{12}O_6 + 6O_2$$

carbon   water   Glucose   oxygen.
dioxide   (sugar)
                               or
                         (starch)

Date.............

* Segments of environment:-

② the environment consist of four segments-

1.) lithosphere
2.) hydrosphere.
3.) Biosphere.
4.) Atmosphere.

① 1.) lithosphere:→

lithosphere is the solid or dry crust of the earth.

lithosphere consist of complex mixture of inorganic organic, minerals, air and water. soil is the store & home of minerals conserve of soil producers of crops, home of wild life.

2.) Hydrosphere :-

the water mantle of earth crust present in oceans, sea, lakes, ponds, rivers, ground etc. earth is called blue planet because of 80% it's surface covered by water.
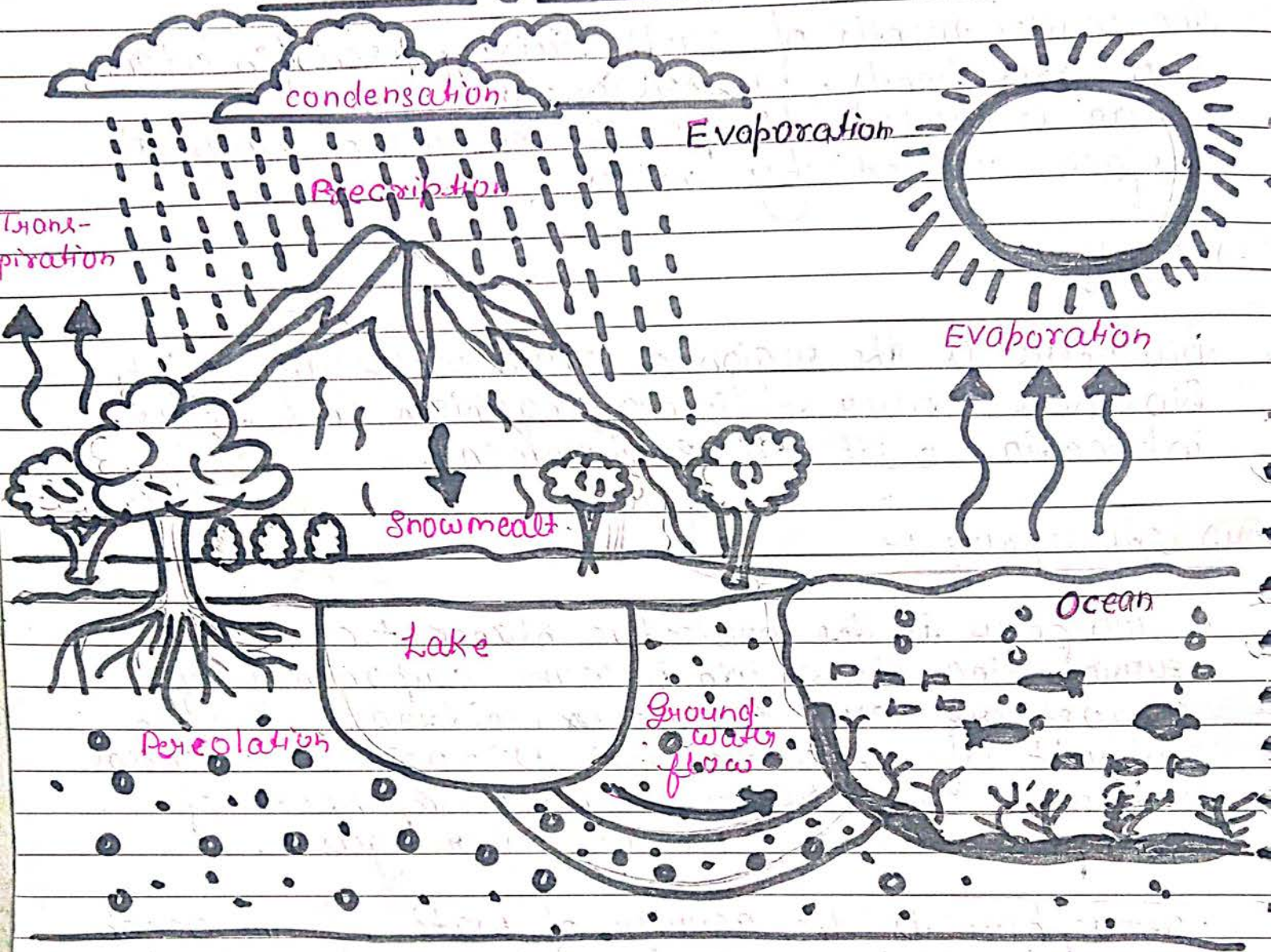
8.) Biosphere :-

Biosphere is the region of earth where life exist. Biosphere cover the living organism and there interaction with the environment.

u.) Atmosphere :-

Atmosphere is the protective blancket of gases. surrounding the earth measure components of atmosphere are oxygen , nitrogen, oxygen support life on earth and Nitrogen is essential neutrant for plants minor components of atmosphere are CO_2, and other gases.

Atmosphere is the carrier of water from ocean to land by a cycle known as hydro-logical cycle or water cycle.

Date...............

* Water Cycle or hydrologic cycle *

condensation

Evaporation

Precription

Trans-piration

Evaporation

Evaporation

Snowmealt

Ocean

Lake

Ground water flow

Pereolation

The water cycle, also known as the hydrologic cycle or the hydrological cycle, is a biogeochemical cycle that describes the continyou movement of water on, above and below the surface of the earth. the mass of water on earth remaine fairly constant over time but the pertitioning

Date...............

of the water into the major reservoirs of ice, fresh water, saline water (salt water) and atmospheric water is variable depending on a wide range of climate variables. the water moves from one reservoir to another, such as from river to ocean, or from the ocean to the atmosphere, by the physical processes of evaporation, transpiration, condensation, precipitation, infiltration, surface runoff, and subsurface flow. In doing so, the water goes through different forms; liquid, solid (ice) and vapour. the ocean plays a key role in the water cycle as it is the source of 86% of global evaporation.

✱ Structure of atmosphere :-

The structure of atmosphere is divided into four zone/parts/layer.

1) troposphere
2.) Strato sphere
3) Mesosphere.
4.) thermosphere.

Average temperature
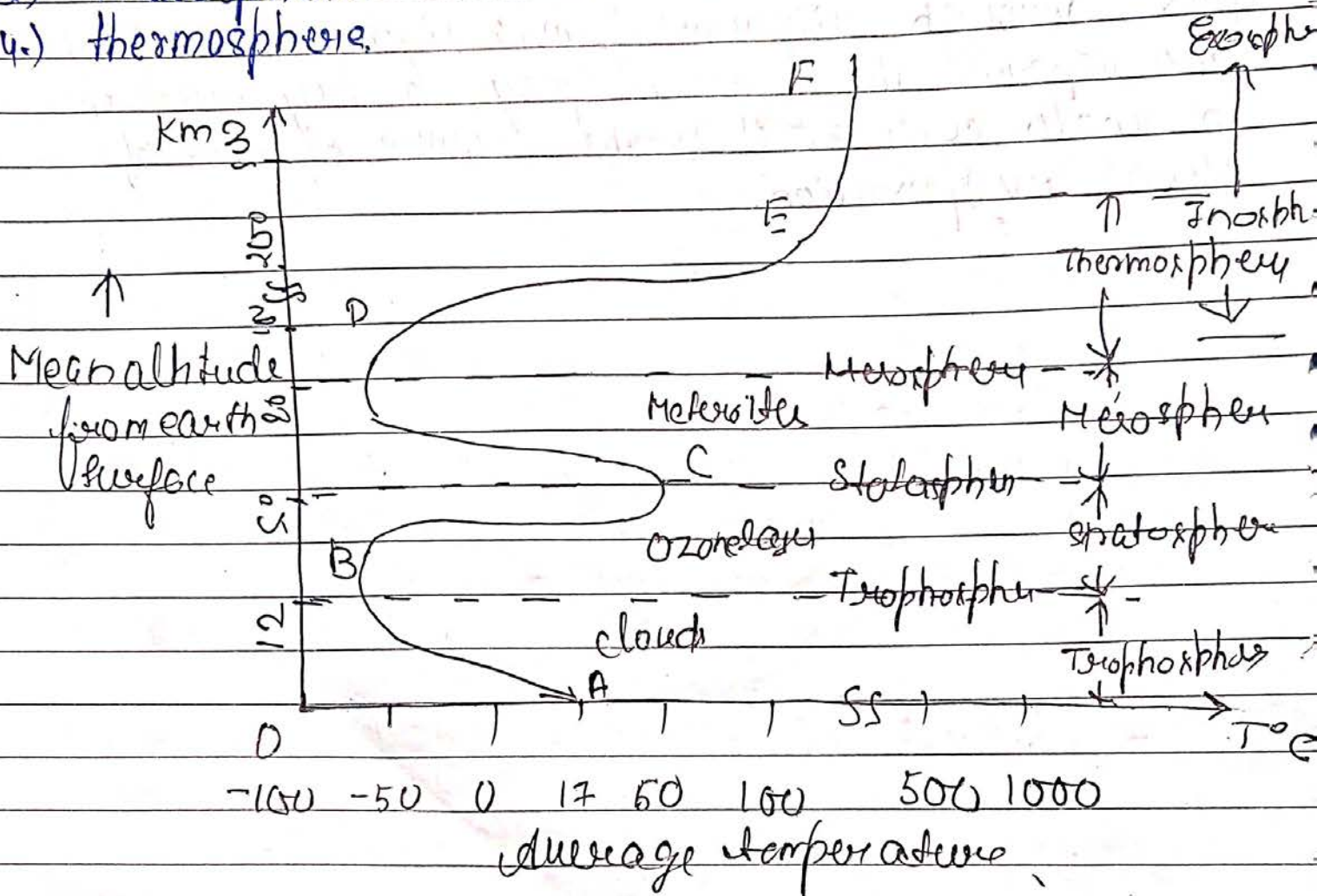
1) Troposphere :→

It is most ~~densed~~ dense and contains about 75% of total atmospheric mass

Average altetude of 12 km from earth surfae.

2) Stratosphere :→

Main activity in this zone is absorption of a ultroviolet radiation by ozone. It's average altetude of 50KM from earth surface.

3.) PVes th thermosphere :-

Main activity in this region is the high kinetic energy of gas molecules. It is average altitude of ~~earth to 80 km~~ 400km from earth surface.

4.) Mesosphere :→

Main activity in this region is burning of meterio meteorites. It's average altitute of 80 km from earth surface.

* Composition of Atmosphere :-

Our atmosphere comprises of many gases and water vapour it is called Air.

78%
Nitrogen

20.9%
Oxygen

carbon di oxide
0.03.%

other gases
>0.17%

Argon
>0.90%
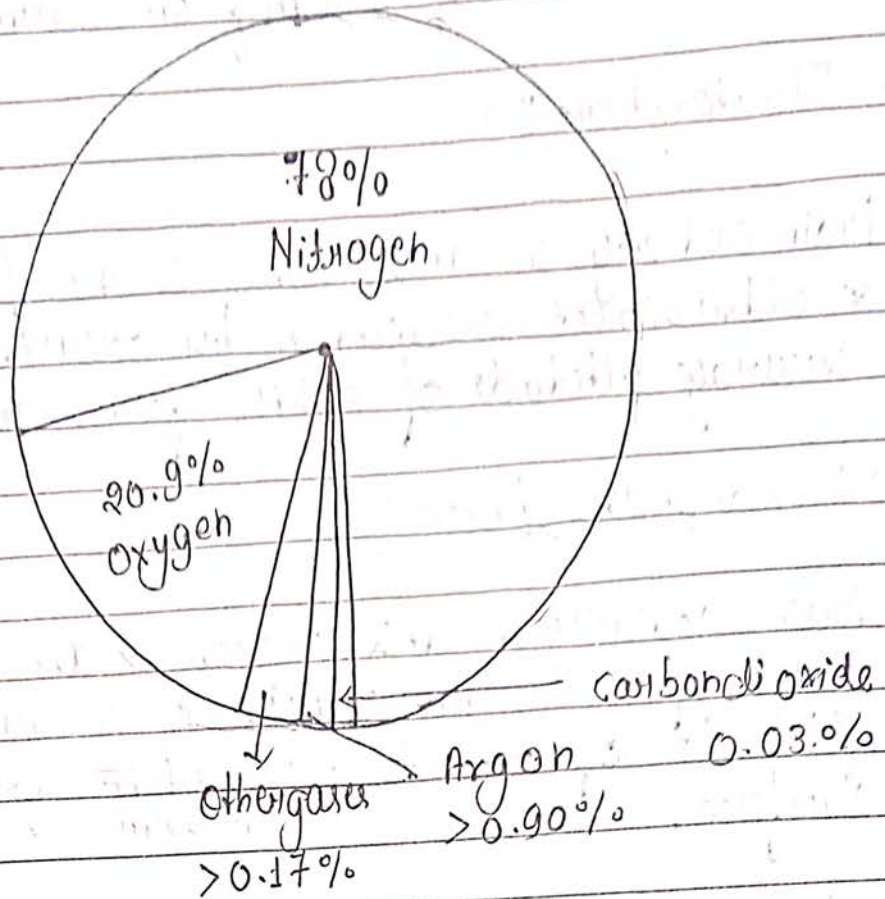
- The atmosphere is made up of different type gases, water vapour and dust particle.
- The composition of the atmosphere of the not static and it changes according to the time and place.

— Permanent gases of the Atmosphere —

Constituent	Percentage by Volume	Concentration (PPM)
Nitrogen (N_2)	78.084%	780,840
Oxygen (O_2)	20.946%	209,460
Argon (Ar)	0.934%	9,340
Carbon dioxide (CO_2)	0.036%	360
Neon (Ne)	0.00182%	18.2

Date..............

Helium (He)	0.000524	5.24
Krypton (Kr)	0.000114	1.14
Hydrogen (H₂)	0.00005	0.5

- The atmosphere is mixture of different types of gases.
- Nitrogen and oxygen are the two main gases in the atmosphere is made and 99 % of the atmosphere is made up of these two gases.
- other gases like argon, carbon dioxide, neon, helium, hydrogen, etc. from the remaining part of the atmosphere.
- The position of the gases changes in the higher layers of the atmosphere in such a way that oxygen will be almost negligible quantity at the heights of 120 km
- Similarly, carbon dioxide (and water vapour) is found only up to 90km from the surface of the earth.

Ecosystem

the term ecosystem describe both the living and non living components of an area. that Intreact with each other.

" The term ecosystem was given by _Authur Jonsely_ in 1935. "

← Types of Ecosystem ⇒

- Natural Ecosystem
  - Terrestrial
    - grassland Desert Forest
  - Aquatic
    - Freshwater
      - Running (Lotic)
        - Rivers, canal - Waterfalls
      - Standing (lentic)
        - Ocean lakes, pond.
    - Marinewater
- Artificial Ecosystem

Date.............

1.) Natural eco-system :-

These eco-system that occur naturaly and can survive without any interimention from human beings-

Natural eco-system devided into two parts-

(A) Terristial eco-system -
(B) Aquatic eco-system -

(A) Teristial eco-system :-

Terristial eco-system are of three types - forest, desert and Grassland.

(a.) forest eco-system :-

the forest cover a big area on earth they are of different types - some forest are densec, some are have too many wild animals, some have tall truss, Some have shrubs.

Depending on the climatic condition, rainfall, temperature and other factors there are several kind of forest - eco-system.

(i) tropical - rain - forest - eco - system
(ii) tropical - seasonal - forest - eco - system
(iii) Temperature - forest - eco - system
(iv) Boreal - forest - eco - system .

Date...............

(i) tropical-rain-forest-eco-system :→

Such forest are located in central america, congo-river basin of africa, where the rainfall is high these forest have following features.

(i) Broad leaf and tall plants
(ii) warm and humit climate
(iii) high divercity of trees speaixe.

(ii) tropical-seasonal-forest-eco-system:→

Such forest are located in planes of africa, south east asia, Australlia and some part of india. where the rainfall is seasonal. then forest have following features

(i) dry and wet season alternate each other.
(ii) warm climate.

(iii) Temperature forest-eco-system:→

Such forest are found in asia and USA, north central europe. average annual temperature is not more tha 20°.

(i) Dominance of hard wood trees which are suitable for quality furniture and bulding purpose.

(iv) Boreal- forest - eco- system:→

Such forest are found across east-west Band of North europe, north - asia and north america. these forest have following features.

(i) cold climate due to high altitudes and high latitudes.
(ii) Dominated by conifers which are important source for making paper pulp and lumber.

(b) Desert eco- system :-

Desert refers to an area in which the rain fall is negligible. In them the days are hot and the night are cold. these desert have following features —

(i) climate is generally dry
(ii) there is scanty of water.
(iii) scanty flowra and fona.

(c) Grassland eco- system :-

Based on the type of major vegitation, Grass land eco- syeem is a terristial type- eco- system. the rainfall is usually seasonal and temperature are moderate then eco - syedm have following features.

(i) Climate is neither too dry nor too moist.

(ii) Vegitation is of flowering plants, shorts & tall grasses.

(B) Aquatic Eco-system :-

An Aquatic eco-system is an eco-system formed by surrounding a body of water aquatic eco-system contain community of organism that are dependent on each other and on their environment.
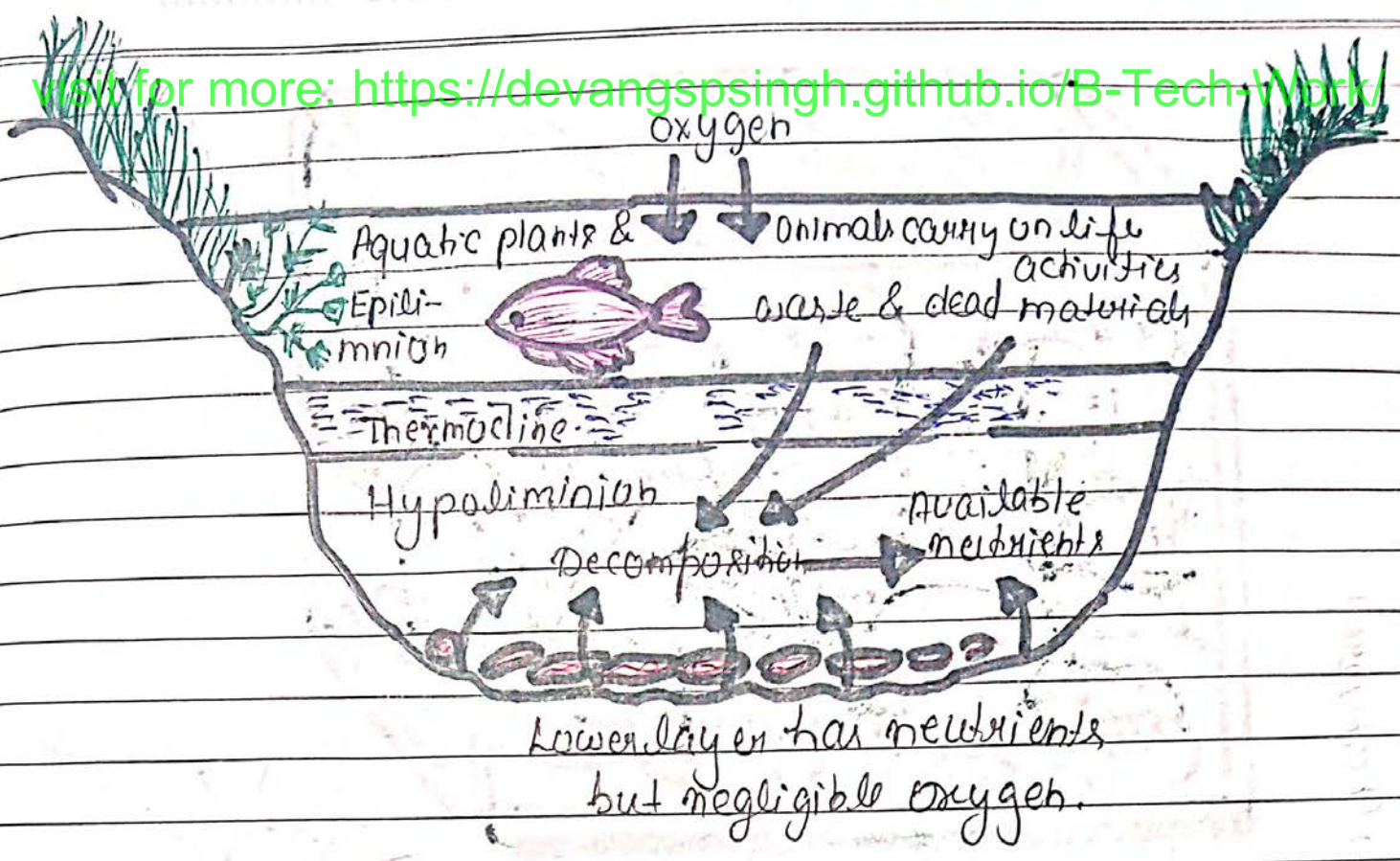
they are clasuified into two catagories -

(a) fresh water, (b) Marine water.

(a) fresh water :→

(i) lake eco-system :-

A lake is a stationary fresh water Aquatic eco-system the water in lake comes from rain, snow melting ice and streams. It depend depth varies from 395m (1300 feet) below sea level.

oxygen

Aquatic plants & animals carry on life activities

Epili-mnion

waste & dead material

Thermocline

Hypoliminion

Decomposition

Available neutrients

Lower layer has neutrients but negligible oxygen.

(ii) Pond - eco- system :-

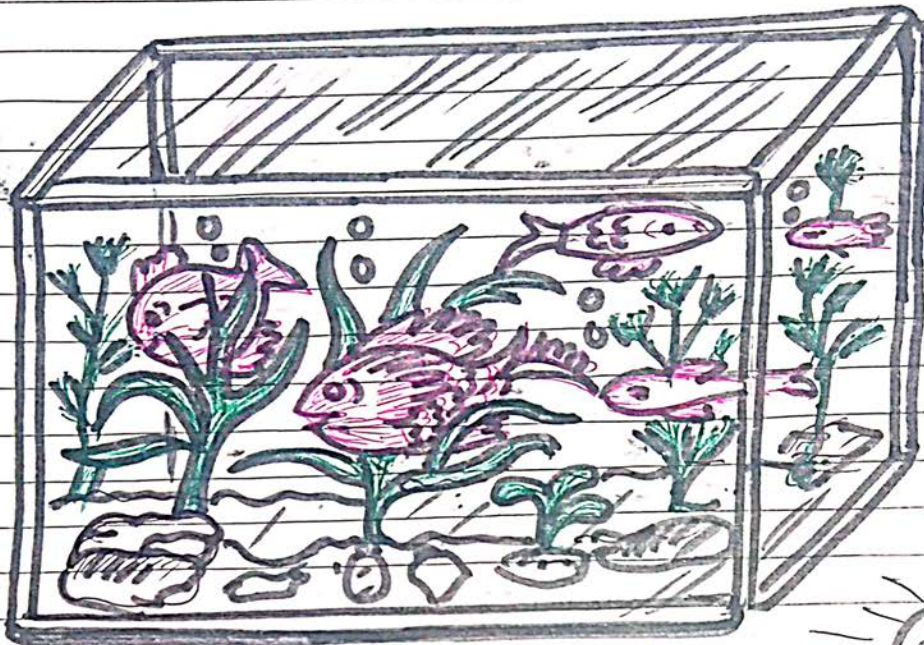A pond is a stationary fresh water aquatic eco-system. It may be a natural pond or mane made pond.

A pond eco-system is a community of organism that live in a pond.

An Aquarium an example of artificial ponds

Biotic and Abiotic elements are found in pond.

NOTE:- Aquarium is a Glass container in which filled with water.

Date...............

Producers
Macrophytes (rooted)   Phytoplanktons

SUN

Consumer.

Primary consumer (herbivores)

benthos

abiotic components

Tertiary Consumer
(carnivores)

water

mud.

Ecosystem of natural pond.

Decomposers

Date...............
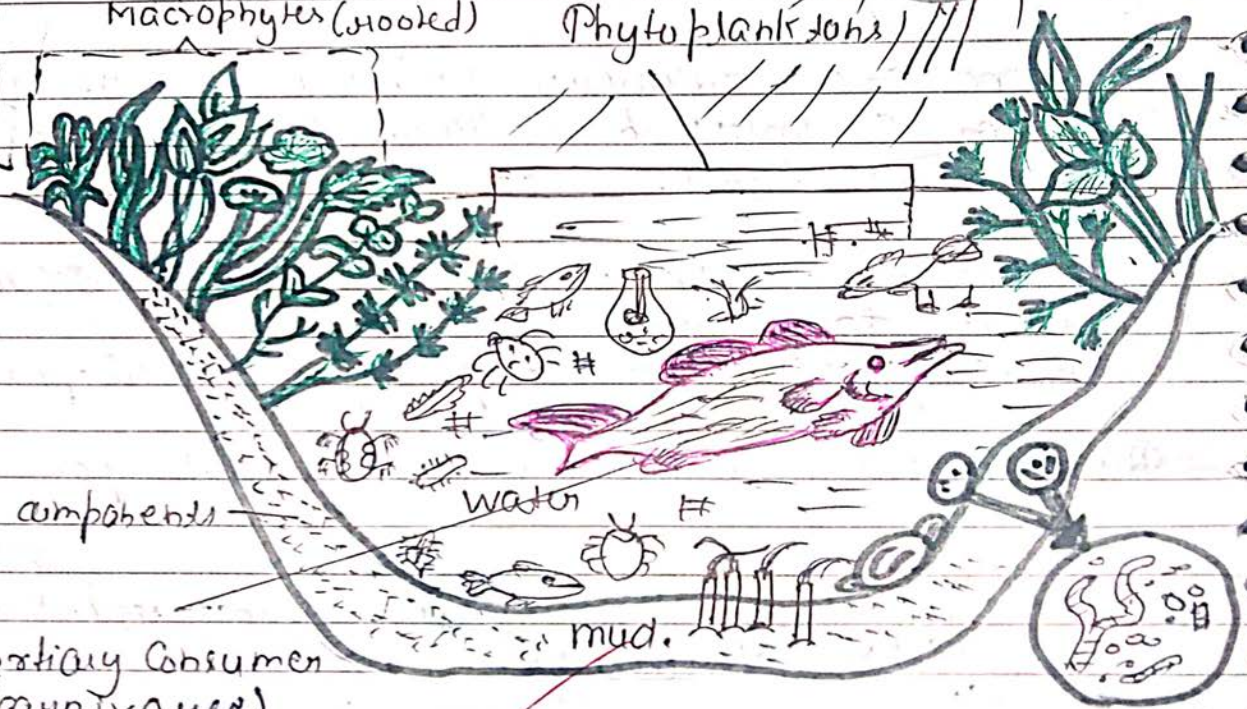
(iii) River eco-system :-

Rivers are the best example of fresh water flowing. aquatic eco-system.

They play an important role in transporting the materials from cross-countryland to the sea (Ocean) there are two types of rivers.

(a) perennial river   (b) Non-perennial river.

a.) perennial river :→

The perennial rivers are the rivers that continue to flow through out the year.

Ex → Ganga, yamna, Brahputra, Kaveri.

(b) non-pernnial river :→

Seasonal rivers that flow during rainy season only.

Ex → mahanadi, Krishna, Narmada.

(iv) Ocean-eco-system :→

An Ocean is a huge hole of salty water that extand our almost an infinite large area. @ It covers about 70% of the earth surface

Date..............

There are five ocean on the earth.

(a) Pacific ocean
(b) Atlantic ocean
(c) Indian ocean
(d) Arcatic ocean
(e) Antarctic ocean

* **Structure of eco-system :-**
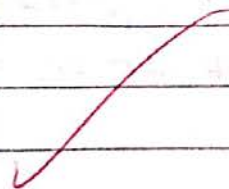
An eco-system is composed of two mature major components.
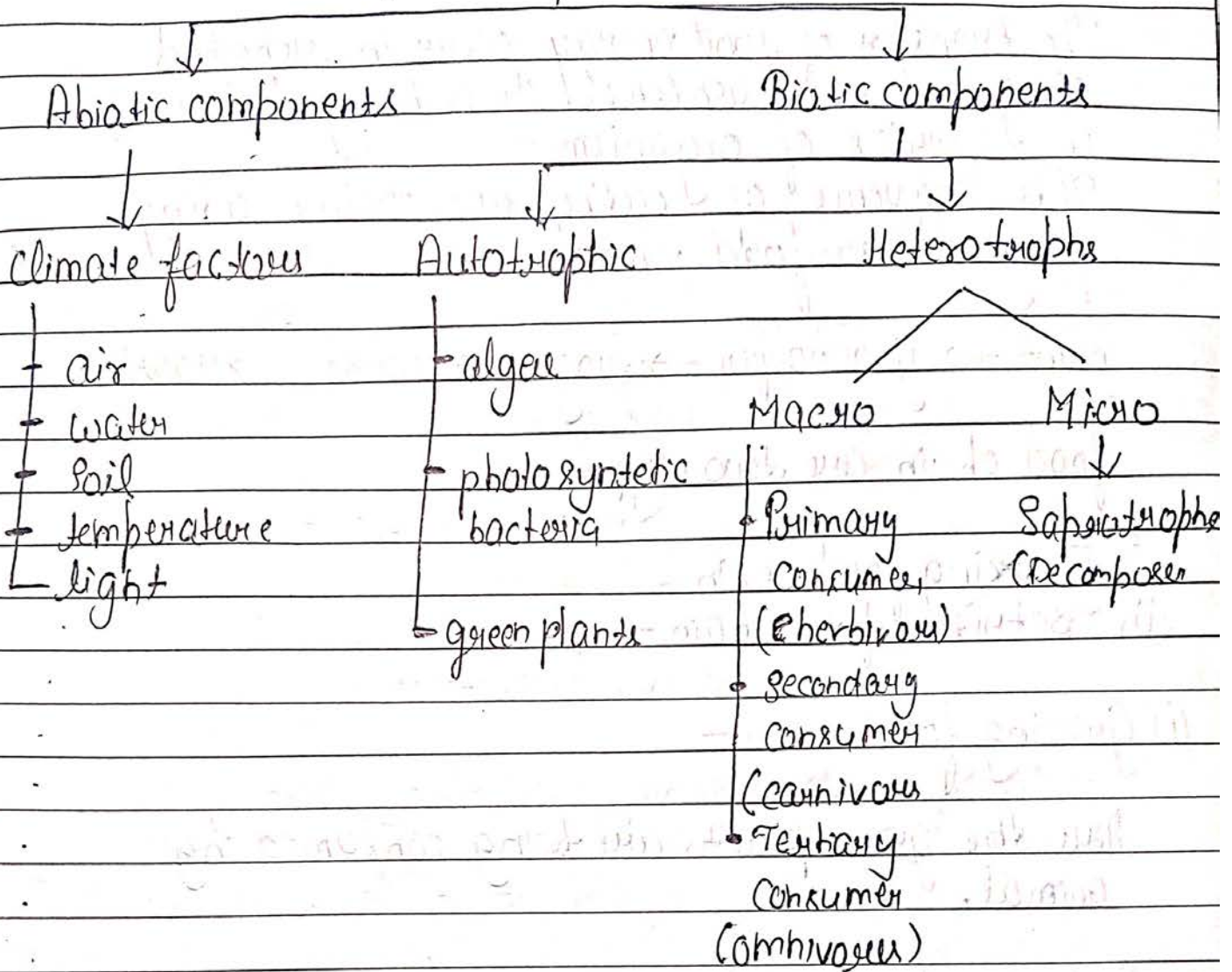
A) biotic components   B) Abiotic components

The study of structure of an eco-system two knowing the following details-

(i) The quantity of non-living organism and there distribution in an eco-system.
(ii) condition of existense of living organism such as temperature, Imunity, light air, soil, water etc.

Date :

Structure of eco-system

Structure of eco-system branches into:

Abiotic components and **Biotic components**

Abiotic components →
- **climate factors**
  - air
  - water
  - soil
  - temperature
  - light

Biotic components →
- **Autotrophic**
  - algae
  - photo syntetic bacteria
  - green plants

- **Heterotrophs**
  - **Macro**
    - Primary consumer (Eherbivory)
    - secondary consumer (carnivous)
    - Tertiary consumer (omhivores)
  - **Micro**
    - Saprotrophs (Decomposer)

★ functions of eco-system :-

(i) to monifature food
(ii) flow of energy
(iii) It contrual the material cycle.

Date:.................

(FOOD CHAIN)

The transfer of food energy occur in repeted stage in which, It is being eaten by a series of organism.
This sequence of eating and being eating turmed as food chain.

plant ⟶ grasshopper ⟶ frog ⟶ smake ⟶ Hawk

food chain are two types -

(i) Grazing food chain -
(ii) Betritus food chain -
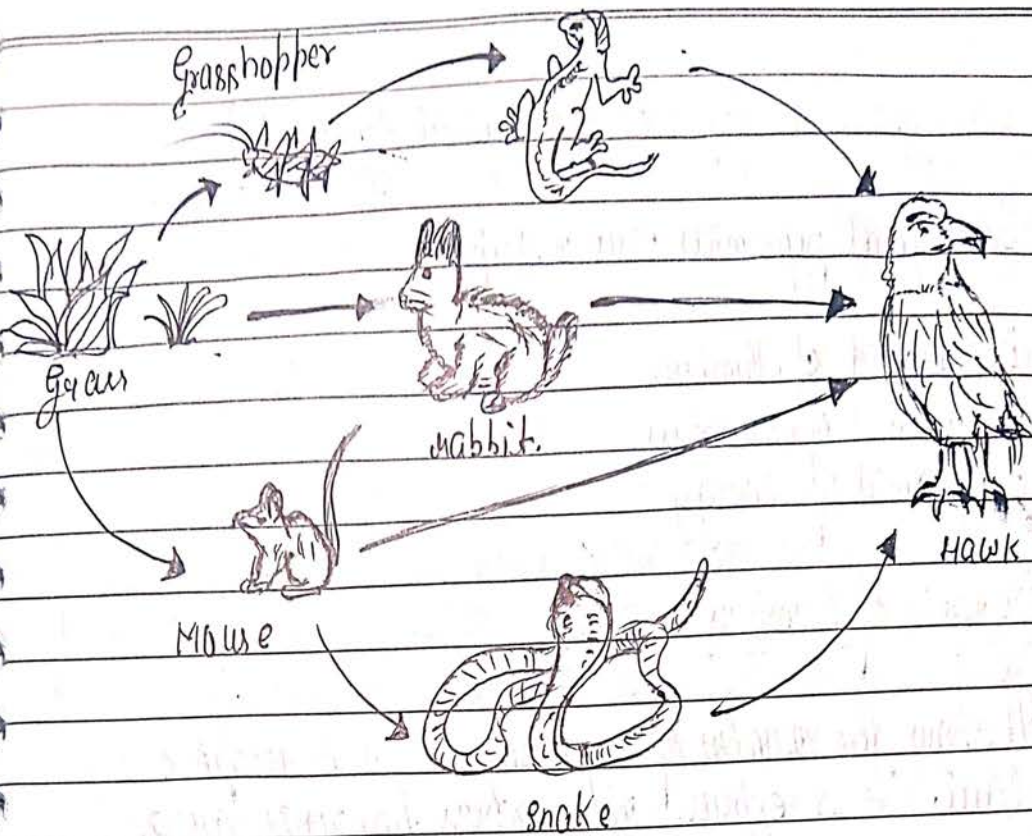
(i) Grazing food chain -

Here the green plants are being consumed by animal.

(ii) Betritus food -chain -

The dead organism matter is being consumed by bacteria etc.

(FOOD WEB)

Food chain are interconnected through different types of organism. this inter connection is called a food web.

Grasshopper

Lizard

Grass

Rabbit

Hawk

Mouse

Snake

(Ecological Pyramids)

An ecological pyramids is graphical representation showing the relationship between different organism in an ecosystem. It show the flow of energy at different trophic levels in eco-system.

Tertiary
consumer

Secondary
consumer

Primary
consumer

Producer
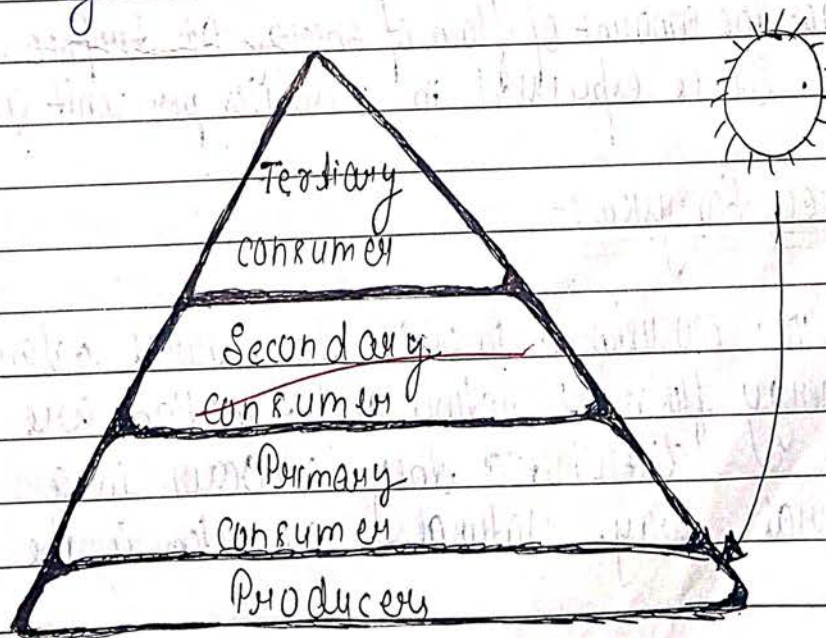
(Types of Ecological Pyramids)

Ecological pyramids are 3 types –

① Pyramid of Numbers
② Pyramid of Biomass
③ Pyramid of energy

(1) Pyramid of Numbers:-

It show the number of organism at each trophic level. It is expres in numbers per unit area.

(2) Pyramid of Biomass:-

It show the total weight of total amount of living matter. It is expres in gram per unit area.

(3) Pyramid of energy:-

It show the amount of flow of energy at trophic level. It is expressed in calories per unit area.

* Balanced Ecosystem:-

A balance ecosystem is in which the natural balance of energy flow, structure and function are not distributed they occur in a natural way. Natural ecosystem is the

under natural condition without any external inter interference.

★ Effect of Human Activity:-

→ Food:- To keep a body alive, the process of metabolism occurs continuosly in the cells. In this process the consumed raw - material from food. is called nutrition. Nutrition is obtained from different kind of foods. Food is a combination of various, energatic substance such as given below-

(i) Carbohydrate - which are organic energy producer.
(ii) Protin - which are organic body builders.
(iii) Fat - which are organic fuel substance.
(iv) Vitamin - which are organic metabolic regulators.
(v) Minirals - which are inorganic metabolic regulators.
(vi) Water - which is inorganic metabolic regulators.
(vii) Nuclic acid - which are organic heridity substances.

→ Food Security :-

Food Security refers to the availbbility of food and once's easy excess to eat it. there are too kinds of in-sufficiency

1.) Under nourishment
2.) Malonourishment.

Date...............

1) Undernourishment :->

Undernourishment lack of sufficient calories in available food.
        Effects of undernourist food on human beings are the following.

(i) less energy in the body for doing any kind of work.
(ii) Body Becomes week and fall sick.
(iii) An adult may look like an old man.

(2) Malnourishment :-> depending on the degree of under nourishment children may suffer with one or more of the following problems.

(i) Slow body growth
(ii) mantly retarded.
(iii) illness such as anaemia, goiter, thyroide etc.
(iv) Abnormalityies like - weekness, ~~decolouration~~ decolouration of hair.

2) Malnourishment :->

Malnourishment is the lack of specific components of food, such as proteins, vitamine or essential chemical elements. Some of the major problems of malnourishment are -

(i) Kwashiorkor -> leck of sufficient protein in diet.

(ii) Anaemia → lack of iron.

→ Shelter Security :-

A basic structure or building that cover or provide protection is called shelter.

Causes of homelessness :-

(i) Natural desaster
(ii) Unemployment
(iii) force eviction.
(iv) prison release and reentry into socity.

Problem face by homeless people :-

Homeless people face many problems beyond the lack of a safe and suitable home, they forced many faced many social disadvantage and reduce access to private and public services such as —

(i) Discrimination (भेदभाव)
(ii) Reduce access to health care
(iii) Increased risk of suffering from violence and abuse

* Economic Security and anunemploynment :-

By economic Security we mean regular in flow-of money, Accumulation of walth and avalibility of resources. which Keep us wealth generation.

The economic Security may be expressed in term of courancy, wealth raw. material etc.

A strong economic security to an individual, A society or a nation. mix them confident, optimistice (आशावादी) and of prosperious in thinking.

* Accesment of the economic strength of a country :-

the economic Activities and growth of a nation can be measured in a number of ways.

(i) Gross domestic product (G.D.P.)
(ii) Exchange rates of it's own coorency with the foreign corency.
(iii) Intrest rate
(iv) National ~~Debate~~ Debt.
(v) Rate of inflation. (मंहगाई दर)
(vi)

* Unemploynment :-
xxx xxx x x

Unemployment is a measure · hindrance (बाधा) in the development of a country.

→ Effect of unemployment :-

(i) loss there self confedence

(ii) Suffer from metal strains, depression, Psychological anxiety. e.g.

(iii) Generaly handy Kept of hawing a home, health care etc.

(iv) unemployment person are unable to earn livelyhood livelihood, do not haw money to meet there financial obligation. (बाध्य)

* **Social Security :-**

Society is a group of individuals. It assimilates young and old people, healthy and desable people. man and women etc, each of the these require social regu security for safe and peaceful living.

Social Security means protection against in secure condition. examples of different segments of society and there insecure condition are of the following.

Date...............

Segments of Society	Type of insecure condition
1.) Poor people	1.) poverty
2.) Old age people	2.) inability of work
3.) Widow women	3.) Social abuse and economic
4.) Working women	4.) social abuse
5.) unemployment youth	5.) work and earning.

~~Unemployment youth~~ :-

6.) Destitude woman	6) Social abuse and economic
7) Montly retarted people	7.) Neglagible work ability
8.) Marriaggeable girl's	8.) social abuse and maintance.
9.) Orphan children	9.) care, education and health.
10.) Disabled people	10.) Constraint work ability

Social Security to these people is generally being provided by means of social welfare services such as given below -

(1) Social In (life) Insurance.

(i) children insurance plan
(ii) Retirment pansion plan.
(iii) Group insurance plan.
(iv) Disability insaurance.

2.) Providing Basic Amenities Such as -

(i) Shelter
(ii) food
(iii) Education
(iv) clothing
(v) Medical care.

3.) Catoegorical (Universal) Benifits such as -

(i) public pension
(ii) old age pension
(iii) Widow pension.

* Family wellfare program :- A social seg security
                                                    measure.

caring for the wellfare of familier, their women, children and other members is an essential task. A good health and better education is also necessary for their wellfare. In this regard, many wellfare program are being implimented by variow agencies.

→ Aims and object :-

It aims at improving the quality of life and serving the following objects. Hence, It advocates follow -

(i) Two children per family.
(ii) Good health to each one.
(iii) Child Survival
(iv) literacy and education to all

* Agriculture :→

Agriculture is one of the oldest profession in the world. It is also the largest sector. livlihood of majority of people in the world is agriculture dependent. There have broad changes in a enviornment also, which are of the following nature,

→1) local change →

(m) the change that take place at the side of farming are called local changes. the nature of such changes are

(i) Erosion of soil.
(ii) fart-ferdilizer and pesticide mixed sediments
(iii) mixed & pollutes the near by water bodies.
(iii) Fisheries are destroyed due to polluted toxic sediments.

→ 2) **Regional changes** →

(i) When the changes extend over large area beyond local surrounding, it is refered as regional changes. The effects of regional changes are —

(i) Pollution at a larger scale.
(ii) Alternation in fertility of soil.
(iii) Desertification, land converted into Desert.
(iv) Increa(l)-sing ~~bet~~ deforestation

→ 3) **Global changes** →

Such changes occur across the Globe on the entire earth. The nature of changes are as follows —

(i) change in climate
(ii) changes in chemical cycles — such as — oxygen cycle, CO_2, NO_2 — cycles.

*4) Changes cause by overgrazing

Continue overgrazing reduces inputs of soil organic matter because less plant bioman is available as litter, which in turn, reduces soil organic matter, nutrients, and biotic activity. This leads to deteroirated soil-structure, which increases the potential for erosion and reduces water-holding capacity of soil.

(Industry)

The industries are backbone of economy development and prosperity of a country. and it's people, yet It is the cause of measure concern for enviormental batt Deterioration. agriculture are responsible for the following consequences.

1.) They pollute air, water and soil. Because acid
2.) They cause acid rain.
3.) They cause climate changes.
4.) They cause adveres desease and ill effects.

* Mining :-

Minerals in use-able form are obtain after mining and many stages of processing. there have considerable effect of environment and it's air, water, land, biological species.

→ Effects on air →

1.) Emission of dust, suspended particles and gases cause air pollution.
2.)

→ Effects on water →

1.) Surface water is polluted due to release of harmfull trace elements.

→ Effects on soil →

(1) fertility of Soil is lost.
(2) quality of Soil degrades..
(3) Soil gets toxic.

→ Effects on Vegetation →

(1) Growth of vegetation is adversing restected due to trace elements.
(2) Deforestation causes loss of floraa and founa.

→ Effects on biological species →

(1) The spicies are killed due toxicity of water.
en of soil.
(2) Stability of ecosystem is effected.

→ Social Impact of large scale mining

1.) for construction of houses, the forest are demolished.
2.) Peace and rutine of people living in nearby locality.
3.) The wild life in Surrounding areas may be on-dangered.
4.) Increased Urbanization will result inhanced polution of water, soil etc.
5.) Air pollution will also increase due to dust, dirt form then account of construction activity.

Transportation

With increasing industrialization and organization the transportation activities have also increased many folds. by transportation activities are meant

(i) Transport infrastructure such as construction of road. National highway, state highway, city road, village road.

(ii) Transport auto vehicle such as cars, buses, trucks, motorcycles and other heavy vehicle.

(iii) Marine transportation such as those ship and submarine etc.

→ Effects Marine transportation →

Pollution is a global problem. some marine pollution problem are local in nature, but many have global implication.

→ Effects of marine pollution →

Main effects of marine pollution are of the following -

(i) It destroy the oceans food sources.

(ii) It cause react to flora and fauna.

(iii) sea fishes, animals, birds and other living organism are killed by oil seepage.

(iv) It destroyed the marine life and disturbed the marine ecosystem.

Date..............

→ Sources of marine pollution →

following are measures sources of marine pollution.

(i) Oil spilling
(ii) water disposal.

→ Causes of marine pollution →
leaked
(1) wricked oil tankers and ship.
(2) Industrial waste throwng throw river into the sea.
(3) Oil from some man keepage
(4) Natural decay of marine plants and animal life.

→ Environmental Impact Assessment :-

Enviromental Impact assesment is a tool used to assess the significient effects of a project or development proposal on the enviorment impact assesment sure that project decision makers think about the likely effect on enviorment at the earliest possible time and aim to avoid reduce or those effect.

→ History of EIA :-
                    The environmental impact assessment comes from section 102(2) of the national environmental policy act (NEPA), 1969 (USA).

→ EIA Legal prowision:→

In India EIA was makes mendatory 1994 under the enviroment protection. act of 1986 with the following for objectives.

1.) Predict environmental impact of projects.
2.) Find ways and means to reduce adverse impact.
3.) Save the project to suit local enviorment.
4.) Pervent the prediction and option to the decision making.

→ EIA Procedure:→

The EIA process in India consist the following phases.

1.) Project Proposal →

The project proposal shall include all relevent infor-mation available including a land in order to move the next stage.

2.) Screening →

Identification of of significant impact, identification of public intrust and values.

3.) Scoping →

The public can contribute local knowledge and

Date..............

values to the prediction, evaluation and mitigation.

4.) Baseline data →

Baseline data describe the exiting environmental status of identify study area.

5) Assensment :—

Improvement in quality and acceptability of EIA report.

6.) EIA Report : →

Public contribute to evaluation of quality and accepting of report.

7) Monitoring :→

Public evaluate impact that occur and Support project environmental management process.

*) Sustainable development :-
Sustainable development is define as meeting the needs of the present without compromising the ability of future generation to meet their own needs.
The necessary condition for achieving sustainable development.

Date...............

(i) **Social equity :-**

there should be an equilibrium condition in the society among the same generation with in and b/w two different generation an should handover a safe, Healthy environment to our future generation.

(ii) **eco-nomical equity :-**

The technology should address to the problem of the developing countries producing drought (सूखा). This type of Technological development will support. the economic growth of the poor countries.

(iii) **ecological security :-**

If any development process protect our biodiversity, decrease the rate of soil erosion and increase the forest cover area, that brings the ecological security.

* **Objectives of sustainable development :-**

(i) It should protect our biodiversity
(ii) It should prevent soil erison
(iii) It should increase forest cover
(iv) It should bring behifits to all
(v) It should reduce waste generation.