

Section #1

Question 2

Q. Differentiate Between climate and Environment:-
Climate:-

Environment:-

"Environment is a surrounding in which we living organisms lives."

Environment every thing surrounding us it may be artificial world and natural.

Air Pollution :-

Air pollution or atmospheric pollution. When air gases contain gases, dust or ~~air~~ is called polluted air.

Causes of Air pollution in Pakistan:-

1) Human Activity:-

Fuel burning, fossil fuel for transportation, electricity generates and aircraft is the main cause of air pollution in Pakistan. Lahore cities is ranks among the worst city of world.

2) Deforestation:-

Human cut the forest to fulfill their needs. It also major cause of air pollution in Pakistan. Mostly, Backward area of Pakistan

the trees for ~~the~~ the fire, it ^{also} generate smoke in the air. So human activity is responsible for deforestation.

Urbanization:

When people moves from rural to urban area. then the population of urban cities increases. So people starts the cutting the trees. ~~Deforestation~~ By deforestation carbon monoxide belased in air and cause a air pollution

Rapid industrialization:-

Rapid industrialization is the one main cause of air pollution.

for examples thermal industries release SO_2 , NO_x and CO_2 in the air. Similarly, steels and fertilizer industries releases the gases into the air. Every industries releases the worst gases in the atmosphere which disturb our natural environment.

Eruption of wildfire.

In Pakistan due to wildfire the climate temperature has been changed. Due to these wildfire heat, CO_2 and Ash emits into the atmosphere and disturb the balance of ecosystem.

b) Write a note on vitamins and their role in human body.

Vitamins:-

Vitamins are organic substance that only found in living organism. The body cannot manufacture vitamins. They must be supplied by diet or supplements.

It is essential for normal function of body.

Types:-

There are two types of vitamins.

- 1) fat-soluble vitamins
- 2) water-soluble vitamins

Fat-soluble vitamins.

Fat-soluble vitamins include

A, D, E and K

Water soluble vitamins

includes vitamins B and C.

Our body only store fat soluble vitamins.

Fat-soluble vitamins

Vitamins - A

Vitamin - A is also known as Retinol, this name is given b/c of participant in the function of retina of eye.

It is essential for growth, vision

and nerve of eye.

They also help in immune system and growth in reproduction.

Sources:-

Vitamin A-

Animal source of vitamin A are liver, eggs and oil. etc

Plant sources of vitamin A are sweet, potatoes, carrot etc.

Deficiency:-

Deficiency of vitamin A creates a vision problems and night blindness.

It also affected human growth.

Vitamins D:-

Vitamins D is a fat-soluble vitamins. It is essential bones and teeth.

The major function of vitamins D to maintain blood level in body.

Sources:-

Sources of vitamin D are mushrooms, vegetable and sunshine.

Vitamin K.

It is essential for blood clotting and bone healing. The source of vitamin K is vegetable.

Vitamin E;

Vitamin E is essential for healthy skin.

Hair and slow down the process of aging.

The main source of vitamin E are

dried fruit and milk

Water Soluble vitamins:-

Vitamin B :-

Vitamin B have vitamins B₁, B₂, B₃, B₄

B₅, B₆, B₇, B₉, B₁₂.

The Vitamin B complex is required for immune system's reproduction and growth of hairs and skin.

Source.

The source of vitamins B are fish, milk oranges, fruit, nuts etc.

Deficiency :-

The deficiency of vitamin creates different problem like skin diseases, cheilias and Beri-Beri

Vitamin C :-

It is also water soluble vitamin.

It is required for growth and repair of body tissue. Vitamin C is essential for healing the wound and repairing the bones.

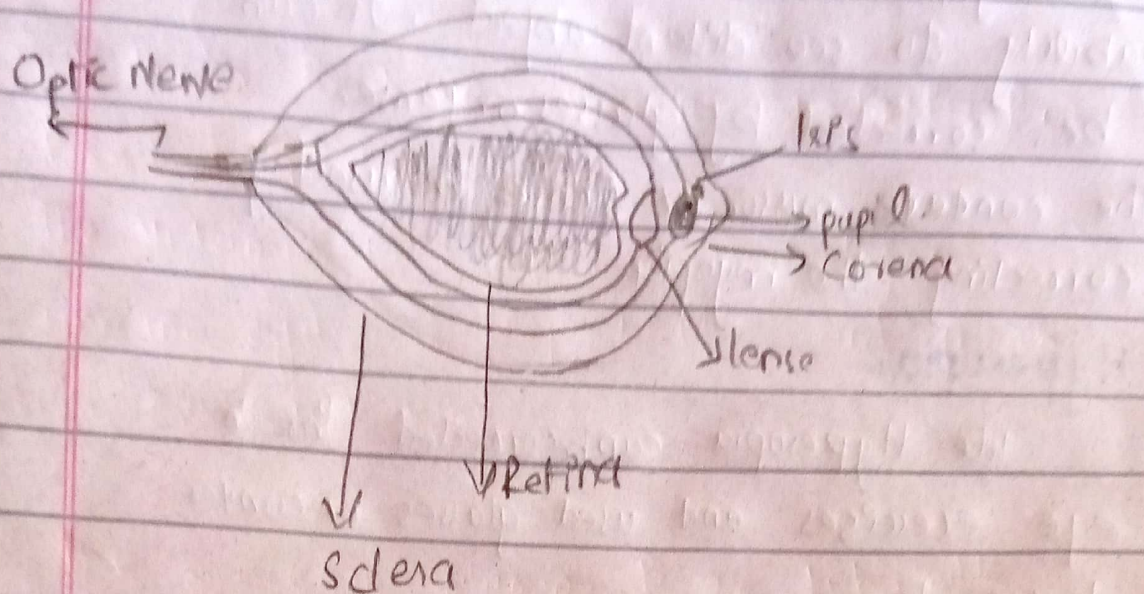
Source:-

Sources of vitamin C are tomatoes, strawberries and cabbage etc.

Deficiency:- Vitamin C deficiency in body

called scurvy. Scurvy is diseases related
to bleeding from gums.

Structure of eye:-



Eye is the sensory organ it gives sensory information in the form of vision image.

The eye of structure contains different part.

Cornea: It is the outer most layer of eye it protect the pupil.

Pupil: It is the small hole from where light enters into the eye.

Iris: It is the pigmented muscle of eye.

Lenses: It focus light on retina.

Sclera:- It is outer, white zone layer of eye.

Retina: It is the inner most layer of eye where light converts the image with the help of photoreceptors.

Optic Nerve. Optic nerve transfer the image towards brain and Brain recognize the image

Vision problems-

Myopia:-

Myopia is a vision. In which inability to see distant object. It can be corrected by glasses or lens.

The concave mirror or lens is used for correcting the myopia.

Hyperopia:-

Hyperopia can be corrected through eye exercises and used glasses or convex lens.

Part #B

Discuss the different units of cells.

CELL:-

The word cell is derived from cellula. Cell is the structural and functional unit of living organism.

There are following different units of cell
Endoplasmic Reticulum.

There are two types of endoplasmic reticulum

* Rough ER: Rough ER on which ribosomes are attached and involved in synthesis of Protein

Smooth ER. are without ribosome. They are involved in lipids, and detoxification.

of harmful drugs.

Ribosomes:-

They are small tiny about 20nm in diameter.

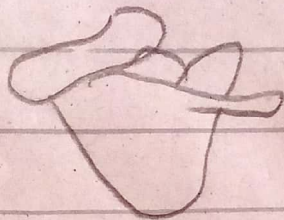
In 1955 plate discovered this.

There are two types of Ribosomes present in human body.

Ribosome 70s and Ribosomes 80s.

* Ribosome 70s are present in Prokaryotes

* Ribosome 80s are present in Eukaryotes



Ribosomes

Golgi Apparatus:-

Golgi Apparatus was discovered by Camillo Golgi in 1898.

It consists of membrane-bound sacs called cisternae.

Proteins which synthesis on RER transferred to Golgi apparatus where it is converted into finished products.

Mitochondria:-

It is known as power house of the cell.

They are different in different cells. It

is responsible for all aerobic respiration.

It contains a large number of enzymes which are responsible for aerobic respiration.

As a result of aerobic respiration

the energy is extracted from organic food
and transferred to rich compound
adenosine - Triphosphate and this energy
is transferred to cell.
