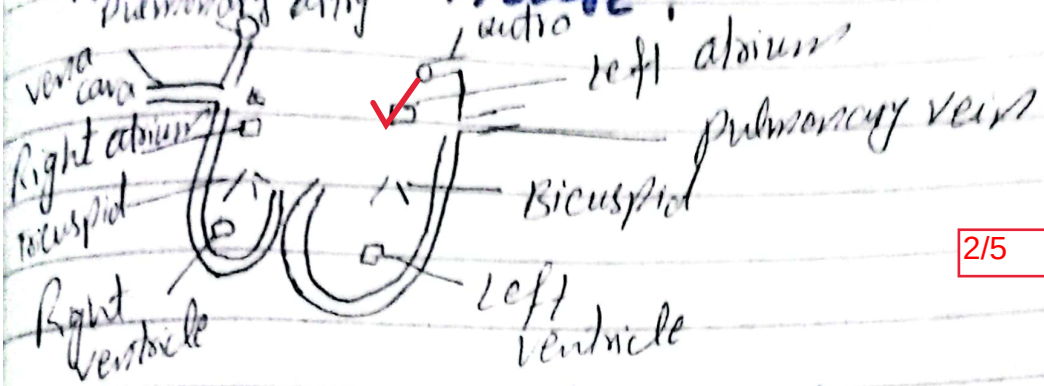
NAME: WAJIHA SADAF

Test: GSA (2)

Q No 1: (a) Explain the working of human heart.

Human Heart:



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Function of Heart:

When deoxygenated blood enters through vena cava it passes through right atrium, tricuspid and then right ventricle. After right ventricle blood moves to pulmonary artry and then to lungs for oxygination of blood. After oxygination of blood, oxygenated blood passes through pulmonary vein and then after passing left atrium and left ventricle, the oxygenated blood through aorta moves to the whole body for the supply of oxygenated blood. The aortic arch is divided into three:

i) Head / Neck
ii) Arms and Shoulders
iii) Lower body

(b) How do we see? Explain

Human Eye:

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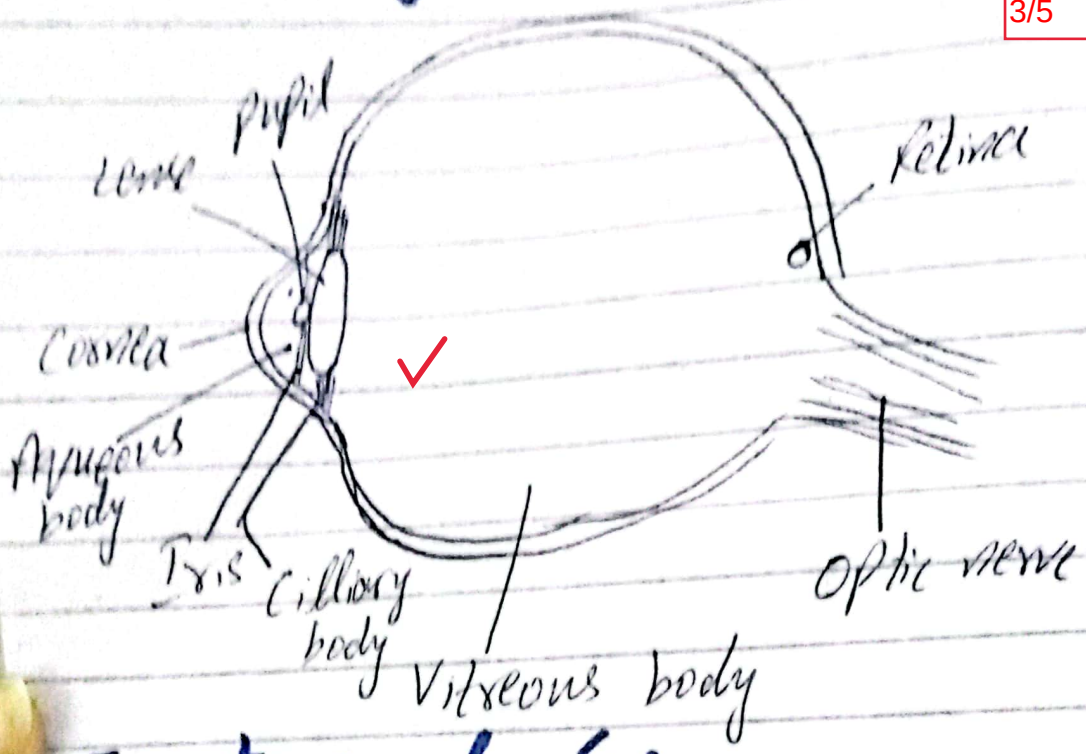

Function of Eye:

When light enters through cornea it placed direct image on retina. When light placed on retina, two types of cells rodes and cons become active. Rodes help to form image in dim light while cones is responsible for 60 three primary colors red, green and blue. After that image passes through optic nerve to reach brain. Rodes and cons changed image to electric signals then they these signals reached to brain through optic nerve. Brain translate nerve impulses and form image. In this way we would be able to see.

c) Why biofuels are important? How they can be produced.

Biofuels:

Biofuels are alternative forms of petrol, diseal and gas. They are formed by fats animal fats, seeds, oily plants, sugar rich resources, animal dung and plants waste. There are three types of biofuels:

(i) Bio diesel
(ii) Bio Ethanol
(iii) Bio gas

Importance of Biofuels:

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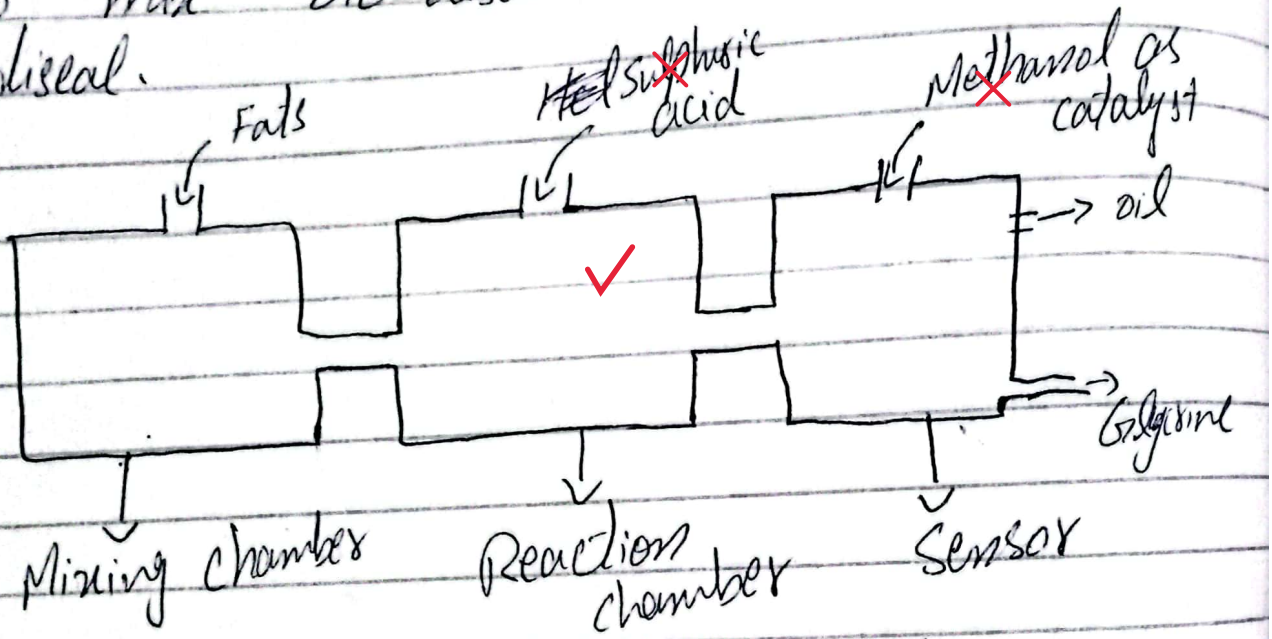
Biofuels are important because they are environmental friendly. They emit less carbon resultantly environment would be free from carbon and green house gases. Similarly, by the usage of biofuels, there is less environmental pollution and would be helpful in combating global warming and climate change. Moreover biofuels are less costly.

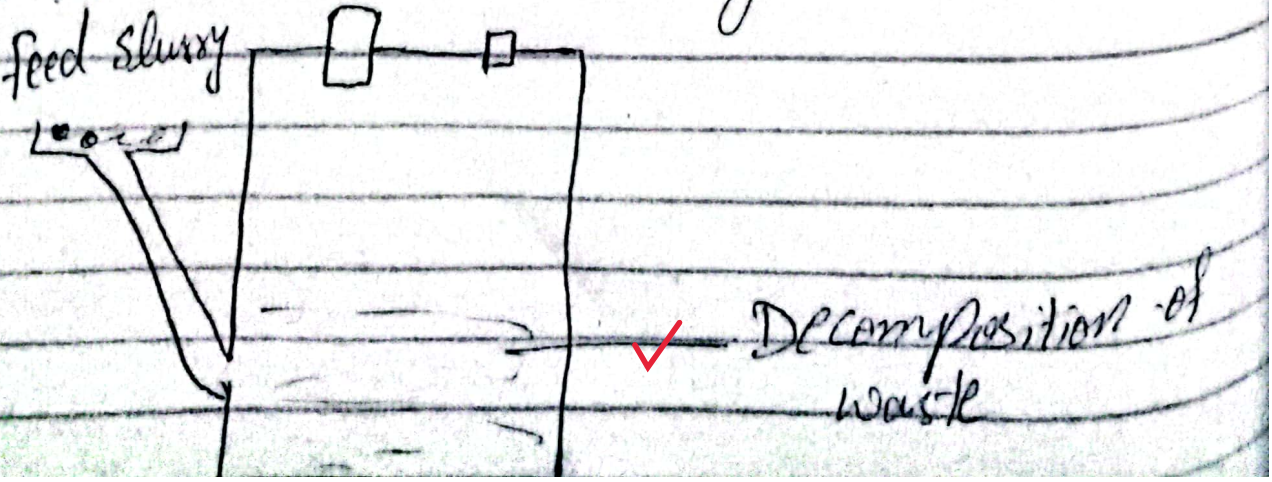
Production of Biofuels:

The production of bio-diseal contains huge chambers. The waste materials, animal fats and fatty seeds or plants pour in the mixing chamber. The mixing chamber is attached with reaction chamber through pipe. In the

reaction chambes sulphuric acid is added for extraction of ~~fat~~ oil from fat. The reaction chambes attached with another chambes ~~reactor~~ as ~~separater~~ in which sensors are placed and methanol as catalyst added in order to mix bio-diseal with standard diseal.



The biogas is prepared in digestor (a huge chambes) in which waste and animal dung is placed, for some time. After that decomposition occurse and gas produce which can be used as alternative of methane gas.



(d) Differentiate between animal, Plant and microorganism cell.

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Animal cell	Plant cell
1:- Centriol is part of animal cell	1- In plant cell, centriol is not present
2:- In animal cell, cell membrain is present	2- In plant cell both cell membrain and cell wall existed
3: Animal cells has no plastides	3- plant cells has plastides : Chloroplast, Chromoplast and Leucoplast
4: Animal cell has small vacuole and scattered in cytoplasm	4- plant cell has large vacuole and remain in the centre.
5:- In animal cell nucleus is in the centre	5:- In plant cell nucleus is not in the centre of cell.

Q No2 (A): Why increasing level of SO_2 and NO is threat? Explain.

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Sulpher Dioxide:

SO_2 is dangerous to environment. It create acid rain which is harmful for crops and soil. SO_2 is produced from industrial combustion and transportation. According to an estimate 89.2% SO_2 is produced from industrial compusion while 3.9% SO_2 is produced from transportation. It is also emitted by occurance of natural disasters.

Oxides of Nitrogen:

The oxides of Nitrogen are threatening for our atmosphere as creating atmospheric pollution. The oxides of nitrogen destroy festility of land. Similarly the oxides of nitrogen, when combined with Sulphur dioxide create acid rain which has negative impacts for crops, land and animals. The 35% nitrogen oxides produced from Industrial combustion and 43% from transportation. Moreover oxides of nitrogen are produced from burning of fossil fuels.

b- Explain the significance of GHE and explain the enhanced GHE.

c- What is remote sensing? Why it is important in environmental science?

Remote Sensing:

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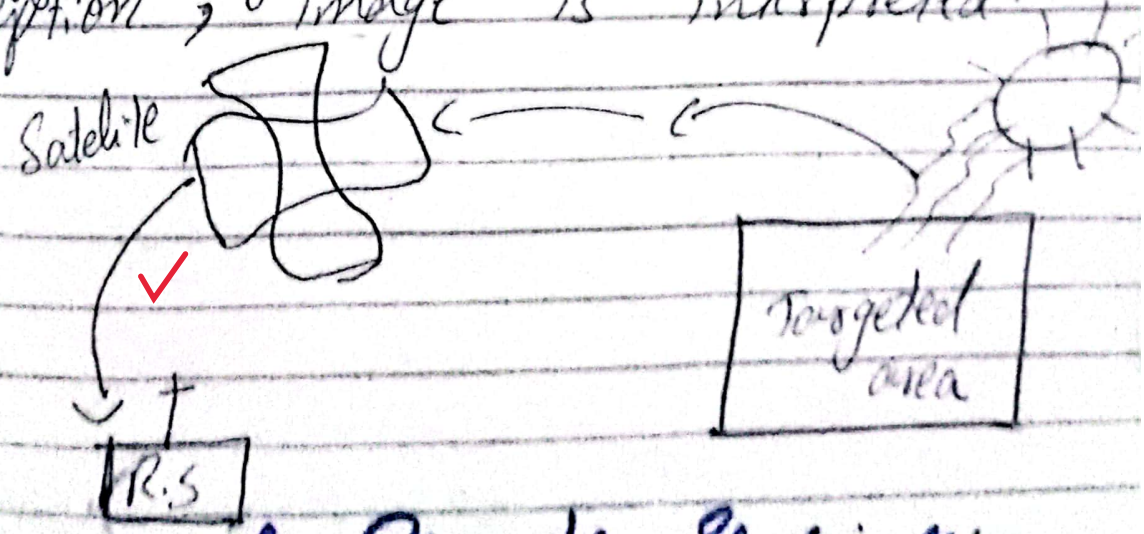
Remote Sensing is a process to gather information from any targeted area by the usage of sensors. For the conduction of remote sensing process, source of energy (Sun) is necessary. The interaction of radiation with atmosphere and interaction of radiation with target area occured. After that recording start by sensors from reflected energy. Through the transmission and reception, image is interpreted.



Usage of Remote Sensing:

1:- It is used for monitoring.
2. It helps in identifying industrial location and environmental policy
3. It is useful in diseases

management
4:- It is also helpful in urban management
5:- It is useful to find locations of mountain glaciers.

d- Liver is the chief chemist of the body. Explain.

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Liver:

Liver is a human organ. It is a metabolic organ. It contains many functions like synthesis of proteins and biochemicals necessary for digestion and growth. It contains bile pigment which do not have enzyme. The bile pigment has green color. The absence of bile pigment create Jaundice. It's weight is 1.5 kg, having reddish brown color. Liver act as both the organ and gland in human body.