

Q. NO. 1

(A)

Hepatitis

According to WHO, Hepatitis refers to inflammation of the liver. It is caused by the infectious viruses, unprotected sex, lack of sanitation, rotten food and water. ALSO, with direct contact with infected individuals, or paint areal spray.

Symptoms

- (1) Fever
- (2) weakness and fatigue
- (3) Joint pain
- (4) Abdominal pain and appetite
- (5) Black urine
- (6) Yellowing of skin

Types of hepatitis

The following are the most prominent types of hepatitis:

Hepatitis A

It exists in faeces of individuals caused by rotten food, water and lack of sanitation.

Hepatitis B

It exists in blood and fluids of

Individuals. It is caused by direct contact with the impacted person ~~so~~ through unprotected sex and contact with used needles, toothbrush or nail cutters.

Hepatitis (C)

It is the combination variants A and B which is one of the most dangerous types. It is caused by rotten foods, lack of sanitations, unprotected sex so on and so forth.

General prevention

- (1) Fresh food and water must be taken rather than rotten rations.
- (2) one make sure before using paint sprays, the complete protection
- (3) Awareness should be promoted about protected sex with the mutual impacted individual among the masses.
- (4) Doctors make sure using new needle for every patient
- (5) Hand washing should be followed before dinner or eatings
- (6) Impacted persons should go for hepatitis A, B and C vaccination.
- (7) Impacted persons must be isolated in the health care and social sectors from the others

(B)

COP 28

COP 28 conference took place in ~~november~~ november 2023. The conference took place in UAE under the UN Framework Convention for Climate Change. COP 28 has pushed numerous proposals which are the followings:

(1) Loss and Damage Funds:

under the supervision of WB, loss and damage fund announced for the developing countries impacted by climate change. According to Reuters, 700 million US dollars announced with cooperation of Germany and UAE.

(2) Stocktake process:

Stocktake process refers to the 2 years plan that aims to check the mitigation and implementation of COP 28 agendas.

(3) Maintaining the emission and global temperature

Maintaining the global temperature below 2.0.c to 1.5.c. The parties under the UN Framework Convention decided to sustain the global temperature and emission.

4. Shifting into renewable energy:

The parties for the first time in the history decided to shift into renewable energy such as nuclear energy, solar energy, wind and hydro plants. This was one of the outcomes of the conference.

(c)

Water Pollution

According to International Water Council (IWC), water pollution refers to physical and chemical change in the quality of water. The change which makes water unsuitable for desired use.

Types and Causes

There are two main types like industrial waste and biological change. Similarly, the same are the causes of water pollution.

1. Industrial waste:

Industrial waste such oil spilling in the sea, heavy metals, industrial wasted materials make the water polluted. Addition of industrial wasted chemicals, CO₂ and nitrogen spoils the quality of water.

2. Biological change:

Bacterial change or organisms death in the water damages the quality of the water. Therefore, bacterial organism spoils the pureness of the water.

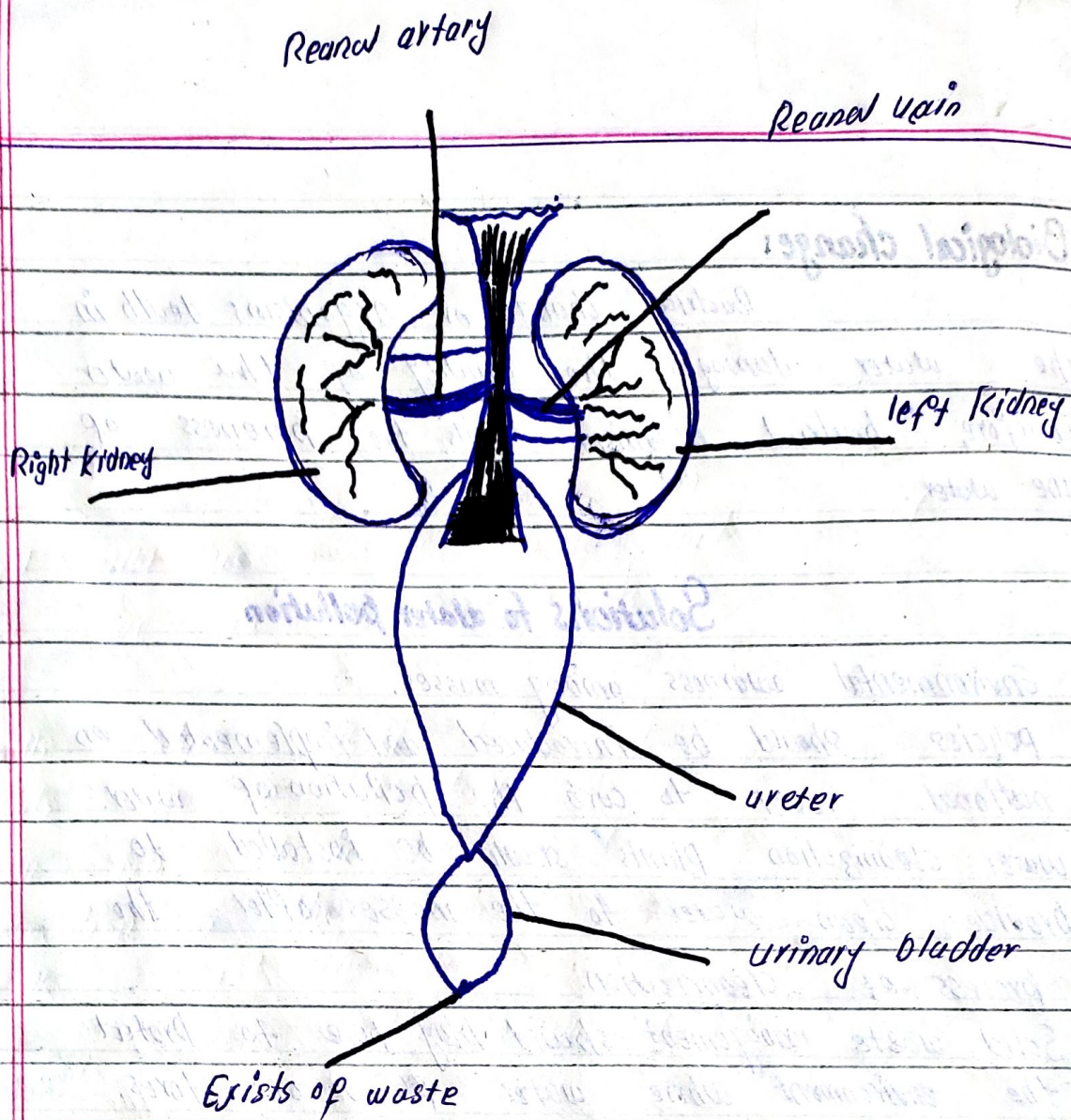
Solutions to water pollution

1. Environmental awareness among masses
2. policies should be introduced and implemented on national level to curb the pollution of water.
3. water cleanization plants should be installed to provide clean water to the masses after the process of cleanization.
4. Solid waste management should play role to protect the environment where water flows or stores.
5. Industrial waste should be banned spilling the waste into the water.

(0)

Kidney

The main job of the kidney is to remove waste from the blood and clean the blood for the body. Kidney cleans blood before transforming blood to the body.



Structure of Kidney

Functions of Kidney

1. Blood cleanization, uncleaned blood enters from renal vein and kidney cleans it. later, transfers the clean blood through right kidney's renal artery to the body.
2. Removal of waste, kidneys play a key role to remove waste. The waste is being removed through ureter, urinary storage and exit way.

Q. No. 2

(A)

According to **UNODR** Green house refers to the region of gasses in thvomasphere. These gasses play tremendous roles in the exists of the world.

Importance of Green House effect

1. Green House ~~gases~~ protect the earth from the radiation of the sur. ~~VU~~ is the radiation of the sun which can harm the temperature of the earth. Also, ~~VU~~ radiation can cause skin diseases, diseases in plants and animals. Moreover, the ~~VU~~ can cause cancer and other dangerous diseases as well. Therefore, the only protector is the Green House effect to reduce the risks of UV radiations.
2. Green House effect also keeps the earth warmer. According to studies without the existence of Green House effect, the earth's existence would stop due to coldness. Thus, Green House effect keeps the earth warm to support life.

(B)

Cell as the basic unit of life

Cell is derived from the word *cella*. This is the basic unit of life due to numerous aspects.

1. Cells produce energy in the body.
2. Cells maintain the temperature of the body.
3. Cell repairs tissues and boost the tissues to function in the body.
4. Cells assist the proteins to further consumed.
5. Cells make the immune system strong.

These above are the most prominent functions which cells perform for the body. Therefore, cell is the basic unit of the body as well life.

(C)

Human Eye

Human eye is one the parts of human nervous systems. It is one of the sensory organs. The eye assist the humans to capture external environments. Moreover, the sensory organs further assist the humans to collect information externally.

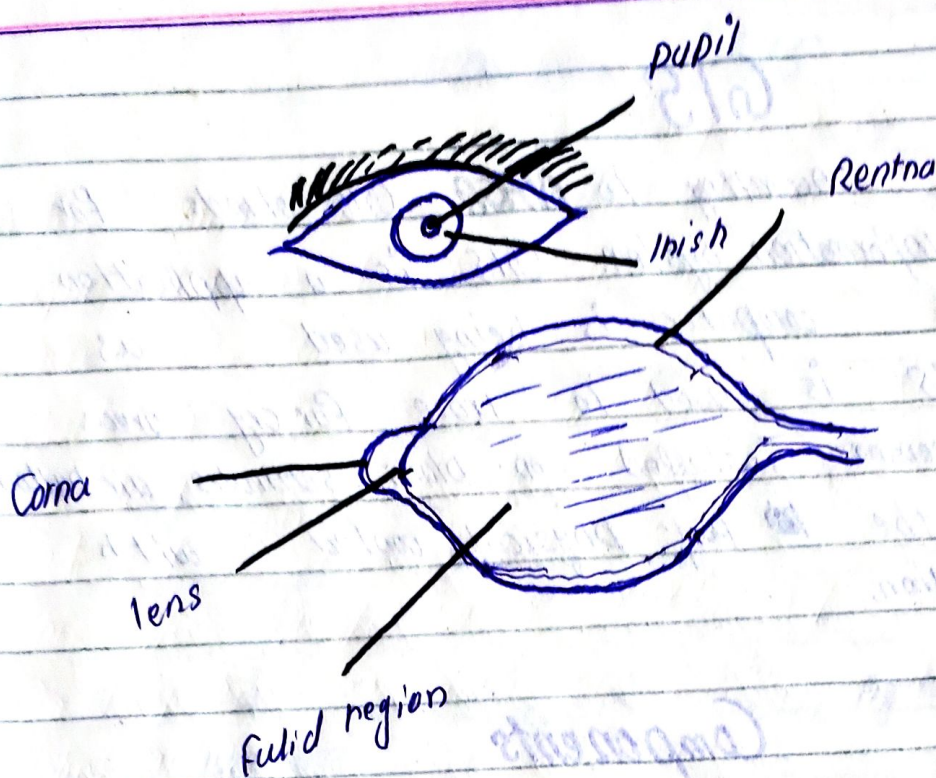


Figure 0.2 Structure of Human Eye

Functions of Human Eye

1. Collection of information from the external environment.
2. Visualising the environmental scenarios
3. Transformation of visualised information through nerve cells to mind
4. This plays role of a security guard between external environment and brain.

GIS

According to **NASA** GIS stands for Geographic Information System. GIS is an application in which computer is being used as a tool. GIS is used to trace far cry areas through sensors installed on planes, satellites, air balloon without the physical contact with the location.

Components

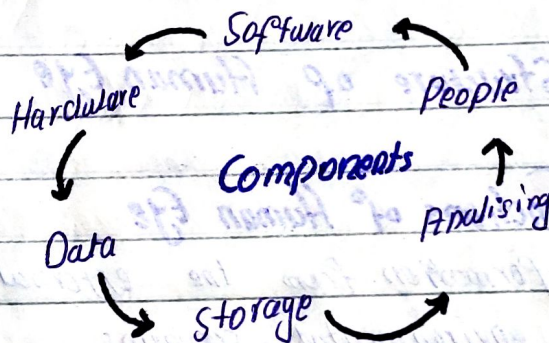


Figure 0.3 process and components involved in the GIS.

Hardware refers to computer to carry operation with the help of software. Computer which is being used by people stores the data in the computer for analysing. Thus, the components of GIS are the followings which have been ascribed in the figure 0.3.

Applications of GIS

GIS is being used in numerous sectors which can be understood from the given Figure 0.4.

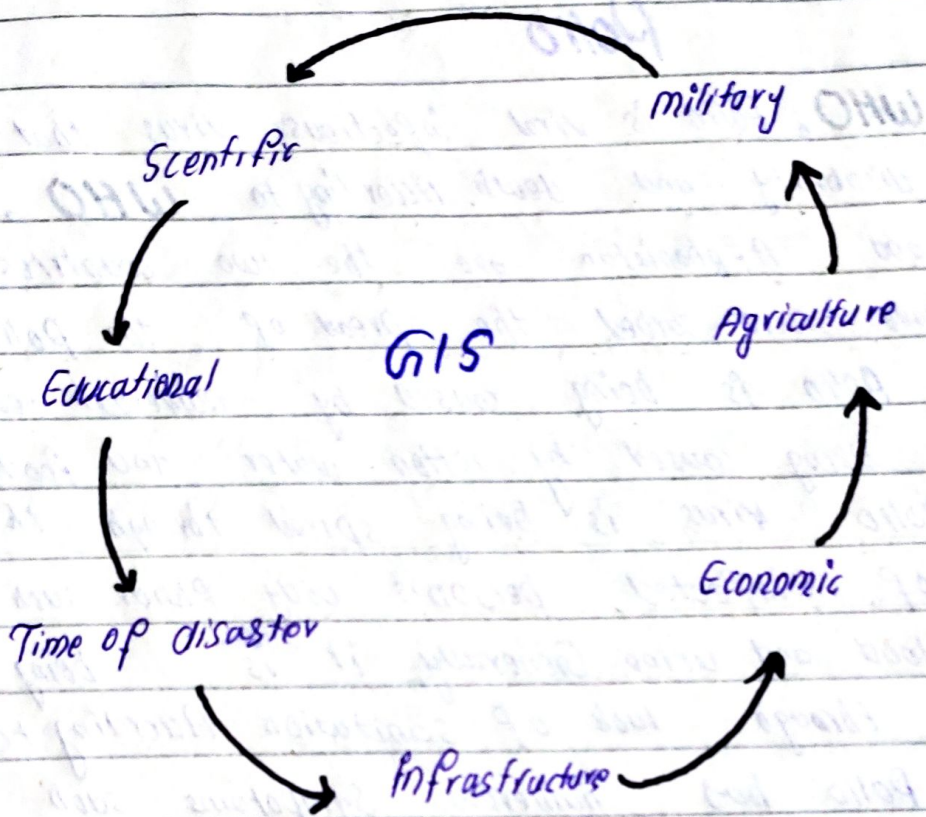


Figure: 0.4 Application of GIS in numerous sectors

Q. NO. 3

Polio

WHO, Polio is viral infectious virus that causes disability and death. According to **WHO**, Pakistan and Afghanistan are the two countries who have never curbed the spread of the Polio. Moreover, Polio is being caused by numerous reasons. It is being caused by rotten water and food. Also, Polio virus is being spread through the contact of infected person's body fluids such as saliva, blood and urine. Generally, it is being caused through lack of sanitation. According to doctors Polio has numerous symptoms such as fever, laziness, vomit, tiredness and weakness with joint pain. The virus can be curbed through several steps such as cleanliness, usage of fresh water and food. Moreover, vaccination such oral vaccines and public awareness can reduce the spread of Polio.

(B)

Biofuels

Biofuels refers to the waste of biologically plants, animals such as sunflowers, fat and animal waste. The biological wastage materials are processed to produce fuel known as biofuels.

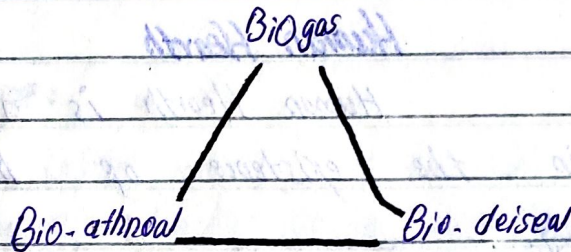


Figure 0.5 types of Biofuel

Production

It is being produced from Sugar Cane, Sunflower, dead plants, fat, rotten meat and animal waste.

Benefits

Biofuel is also known as renewable energy resource. It is climate friendly with no enormous impacts on the environment. Moreover, it is one of the cheapest fuels on the planet.

Application of Biofuels

It is being used as biogas for the household purposes to warm, cook and heat the nation such as egg, meat, tea etc. moreover, as a bio-diesel, it is being used in cars, bikes etc.

(c)

Human Heart

Human Heart is a pumping organ. It sustains the existence of human blood in the body.

Working of heart.

1. Sustains the existence of blood
2. Oxygenation and de-oxygenation of human blood
3. Maintenance of blood pressure
4. Transformation of blood to the human body
5. Pumping organ

Causes of heart attack

1. Transference in the genes of individuals from grand parents
2. High cholesterol can be the cause of the heart attack.

3. According health professionals smoking is one of the cause of heart attack.

4. Hyper depression contributes in the happening of heart attacks.

(0)

Effects of Global warming

Global warming refers to the increasing temperature of the earth. It poses numerous effects.

1. Climate change:

Global warming is one of the drivers of climate change. Climate change, according to **PMDA** as well **Reuters**, the floodings of 2022 killed 1700 people, brought us \$16 billion economic loss in Pakistan.

2. Heatwaves:

Global warming brings an extreme heatwave. According to **Health ministry of Pakistan** in Jun-July 2024 68 people died nationwide due to heatwave.

3. Effects ecosystem:

Global warming has not only impacted the animals but also plants damaged. According to **CNN 2024 Report** numerous animal died due to the extreme weather in Pakistan.

Measures

1. Plantation in the urban and rural areas to reduce the global warming in the world.
2. Reduction of CO₂ emission below 2.0 °C.
3. Co-operation of the nations to implement COP meetings.
4. Providing climate funds to countries impacted by the global warming to carry massive plantations and protective measures.
- 5.

~~Climate Change:~~

~~Resources:~~

~~Effect of global warming:~~