

## Part II

### Section I

## Question

04

(a)

### Hepatitis

is a dangerous disease affecting the liver in human body. The severe type of hepatitis results in disfunctioning of the liver.

There are various types of hepatitis

- Hepatitis A → most severe
- Hepatitis C → Normal
- Hepatitis B → Normal

WHO has declared <sup>hepatitis</sup> the most dangerous disease affecting humans.

## Causes of Hepatitis

Various causes are

responsible for this

- Dirty water
- Improper cleanliness
- Ineffective and improper diet
- Transfer from affected person
- the usage of the things of a affected person
- Infection in liver

## Symptoms of Hepatitis

- Fever
- Fatigue
- Yellowish eyes → jaundish
- Backbone pain
- Muscle pain

## Prevention of Hepatitis

The most severe

types of Hepatitis need vaccines.

However, minor can be treated with

Change in diet

- Vaccines
- Cleanliness of diet
- Drinking safe water
- Eating balanced diet.

(b)

Food preservation

is a process of preserving food for a longer period of time in order to consume in future.

Methods of food preservation

• Salting

Salt is added to food and it kills bacteria in food. The killing of bacteria preserves food for a longer period.

## • Canning and Bottling

The food is added into bottles and cans. It remains preserved until the seal opening of bottles.

## • Aseptic processing

This method is useful for preserving milk. By this process, milk remain preserved for many years.

## • Freezing

In this method, the food is h. frozen in a cold temperature. The frozen food remain preserved.

## • Burying

In this method, food is buried. This method kills bacteria and preserves food for a longer period.

(C)

## Fertilizers and their types

### Fertilizers

are organic and non-metallic nutrients that are added to soil for increasing the productivity of crops. These are essential for increasing crop productivity.

### Types of Fertilizers

There 16 essential fertilizers but most essential among all of them are

Potassium

Ammonium Nitrate

Sulfur

### Hazards of Fertilizers

- These eradicate soil productivity
- increase soil acidity
- affect humans: affecting kidney and liver.

## Benefits of fertilizers

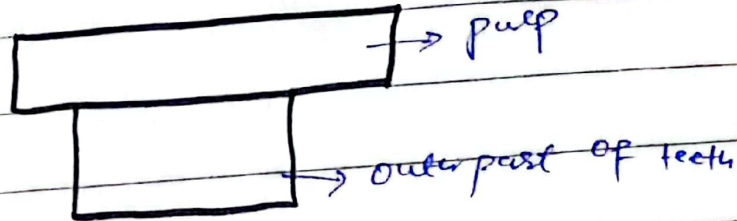
- increase the productivity of crops
- Remove the diseases of crops
- Most common fertilizers are
  - Urea

(D)

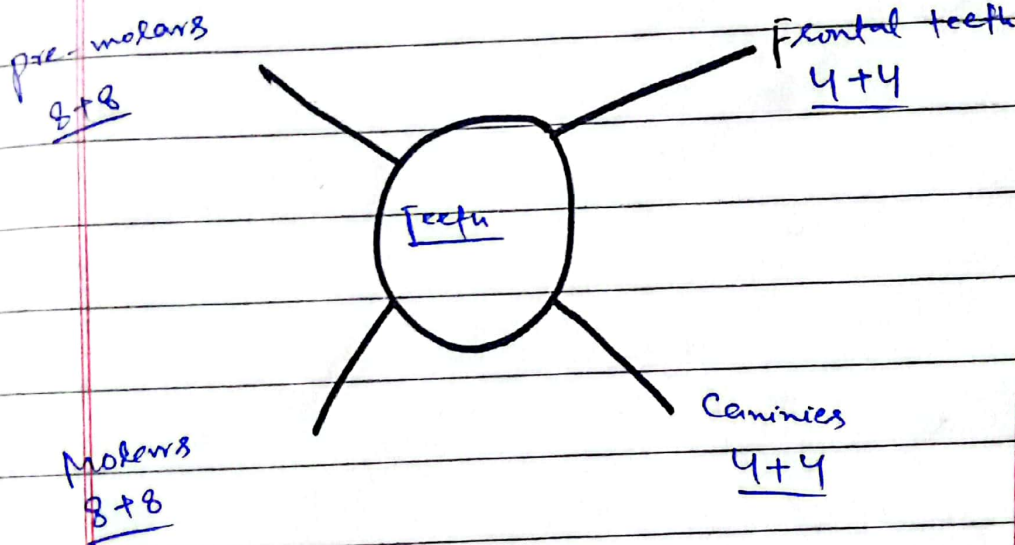
## Human tooth

are essential part of human body. It assists in breaking down the larger food particles into smaller absorbable particles. Moreover, apart from tearing of food, the facial shape depends very much on teeth.

## Anatomy of human teeth



## Types of teeth



The teeth are consisted of two phases. The child lost his milk teeth in the age of seven years. The real and strong teeth grow.

# Question

03

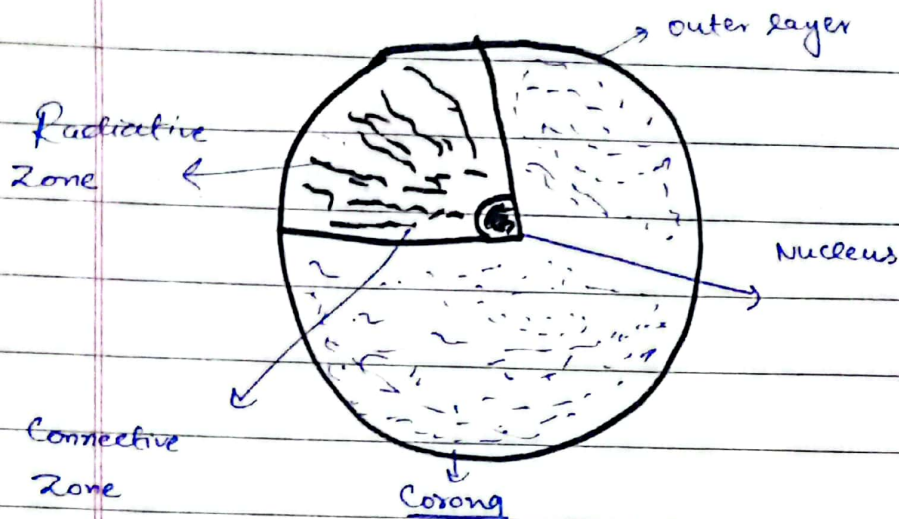
(A)

Sun

is a hot ball of fire. It provides light which is essential for the survival of humans and other living beings on Earth. It rotates around our galaxy named Milky way galaxy. It completes its rotation in 265mm years.



## Structure of Sun



### Corona

It is the last layer of Sun. It is visible from Earth.

### Radiative zone

It radiates energy towards Earth. This zone is known for its radiation.

### Convective zone

It also produces energy. It takes different process than radiative zone.

## Nucleus

It includes the inner fuel for managing Sun. The end of fuel in Sun will turn it into a cold star.

(C)

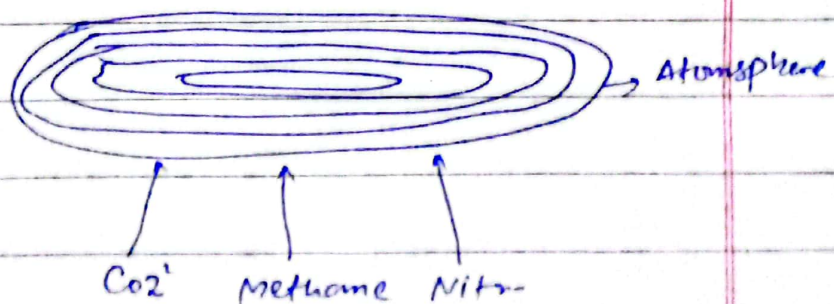
## Environmental pollution

is a pollution which pollutes our environment. It is also called atmospheric pollution. The addition of following pollutants results in environmental pollutants.

- Carbon dioxide

- Methane

- Nitrogen



## Harmful effects of environmental pollution

- On Humans:

it creates respiratory diseases such as Asthma and lung cancer

- On Plants:

it creates diseases such as dwarfism: stunted growth of plant and yellowish leaves of plants

- On Aquatic life:

it kills many aquatic animals by affecting biodiversity

- pollutes environment: creates smog and polluted air.

## Ways to curb environmental pollution

- Afforestation: renewal of plants
- using public transport for mitigating pollutants
- Controlling rising population
- Restricting use of pollutants emitting appliances
- Implementing International treaties such as Paris climate agreement
- Utilizing AI for carbon sequestration

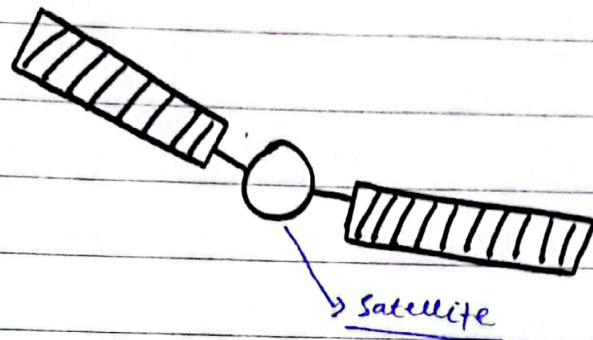
(D)

## Wireless Communication

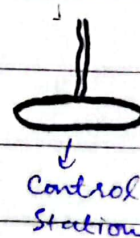
It refers to the modern method of communicating without using wire. The fiber optic cable, has minimized the role of wire communication. The connectivity

of Smartphones is a prominent example of wireless communication. The military also uses wireless communication.

### Working of a Geo Satellite



**User**



### Different Satellites

- Communication Satellites
- Navigation Satellites

### Working

The satellites are sent to atmosphere for facilitating communication purposes. These satellites are connected with the control station

Control station at the Earth. Moreover they provide data to users with the help of its connection with Control Station.

(B)

### Tsunami

is a natural disaster. Its severe kind can cause intense damage to infrastructure and humans.

Pacific ocean is known for the occurrence of tsunamis. It basically refers to fast pace air that can affect humans on massive scale.

### Causes

Change in the motion of air pressure results in bringing tsunamis. The low temperature and high temperature air collides and this result in tsunamis.

### Recent

Myanmar Tsunami

Florida Tsunami: Tsunami has occurred in Florida USA.

## Section II

### Question

#### OF

(A)

IQ. and E.Q

IQ

Refers to Intelligence Quotient. It is measure of the intelligence of a person. It point out how intelligent a person is solving problems and creating new ideas.

E.Q

Emotional Quotient is commonly abbreviated as E.Q. It points out the emotional control and emotional attachment of a person to something. It describes the emotional control of a person on something.