

Keep length equal for all parts  
Work on math portion

## Section - I

Qno. 4

### a) Solid waste management

Solid waste management is the process of treating the municipal and industrial waste.

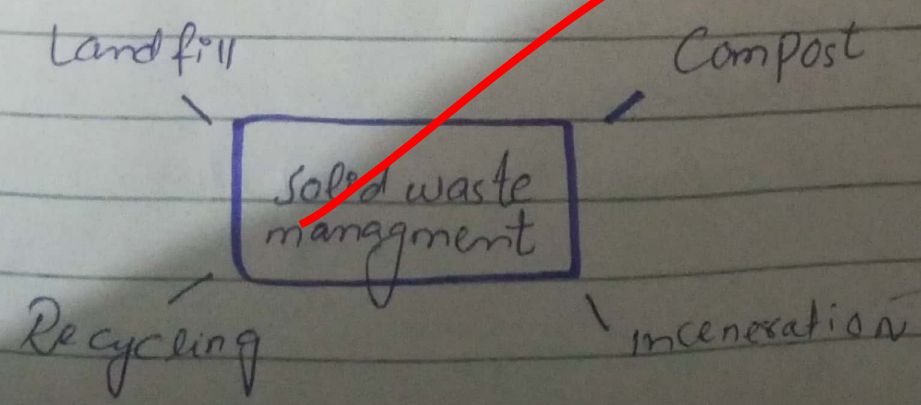
#### Kind of waste

- Municipal waste
- Industrial waste

#### → Examples

Re-cycling of plastic, glass etc.  
re-cycling of food items etc

#### → Methods



## • Landfill

In this process, the solid waste buried<sup>or</sup> under ground in non-residential area.

example:

management of municipal waste in non-residential areas

## • Incineration

The solid waste got treated at high temperature. The waste treated on **1200°C** and above. Then the treated waste would re-use or re-shape.

## • Re-cycling

In this method the wasted item got re-cycled.

example:

Plastic recycling etc

## Compost

In this method the food items which are not in use are re-treated. By the method of decomposition the waste get treated and then reuse after shaping.

example,

fertilizers, pesticides

So, the solid waste management is the process that enables people to avoid mess and make productive use of it.

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## b) Human Heart blood circulation

The blood in human body is being pumped by the heart. Heart in human body is an functional organ

which is responsible for the blood circulation in the body

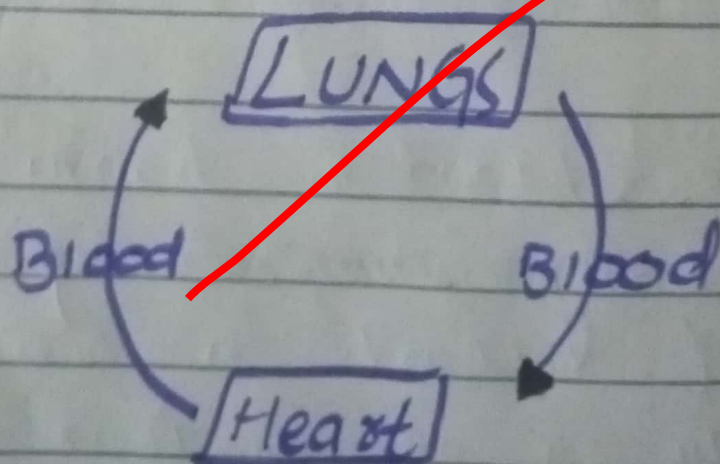
Circulated blood includes:

- 1) Oxygenated blood
- 2) de-oxygenated blood

Double blood circulation system

Heart often called as the double blood circulation system.

As the blood coming from lungs comes to the left ventricle of heart and then passing through the right ventricle, it again moves in to lungs.



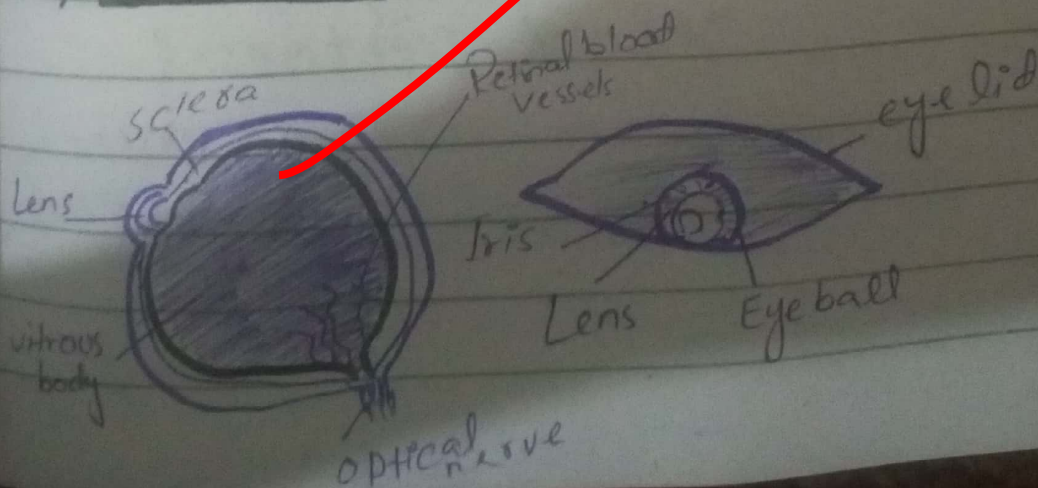
In a nutshell, heart pumps the blood through out the body that keeps our body in working. According to the International health institute of Cardiology; heart is a key organ of a human body that regulates the blood to keep the body function.

c) ANS

## → Human Eye Structure & function

Eye is an basic organ of the human body

→ Structure:



## Function

- ① It regulates sensory visions to the body
- ② It enables brain to sense images. As brain does not have sense to recognize the image

## → Major parts of Eye

- Iris
- Sclera
- Retina
- vitreous body
- Eye ball
- Lens
- Optical nerves

## Myopia

Myopia is an eye disease  
It is "short-sightedness"  
eye disease. In this a person  
is unable to see the close objects

# Hypermetropia

H is also an eye disease  
eg a long-sightedness. In  
this a person is unable  
to see the distance objects

Both long and short sightness  
can be Cured.

## Treatment of Myopia

H can be cured by a  
balance diet. The Spectacles  
are also use for the treatment.

## → Treatment of hypermetropia

Hypermetropia is cured by  
the medical treatment if  
the patient does not get recovered.

d) write uses:

### i) Microwave

- Microwaves are used in electrical appliances.
- It is used in Radio-transmission.

### ii) Ultraviolet

- ultraviolet radiations are used in X-Rays.
- It is also used in Reactors (Nuclear) & in Ultrasound.

### iii) X-Rays

- X-rays are used in hospital to detect bone fractures.



Page: 5  
(1)

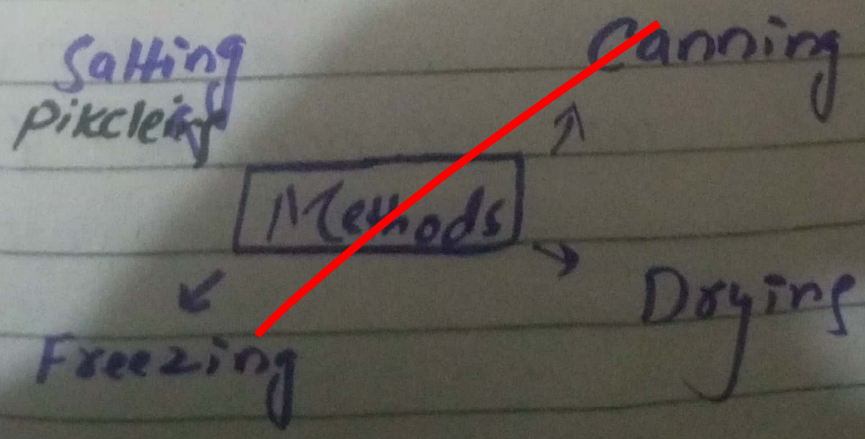
# Food Preservation

Food preservation is a method of preserving food items.

## Benefits

- 1) It increases the sustainability of food
- 2) It maintains the nutritional value of food for a long time
- 3) It help to keep food in stock e.g. Seasonal fruits / vegetables

## Methods of food preservation



## • Salting the food item (Pickling)

It is an old method of preserving food in which salt is applied on food in order to preserve food for a long time.

## • Freezing

The food items especially (Meat products) are frozen in this process.

## • Canning

It is the process in which the food items are put into the jars or canisters to prevent food from contamination.

## Drying

It is the process in which the food items get dried to preserve for long time including fruits or meat etc.  
example: peach, grapes etc.

In a nutshell food items can be preserved for a long duration through the preservation methods.

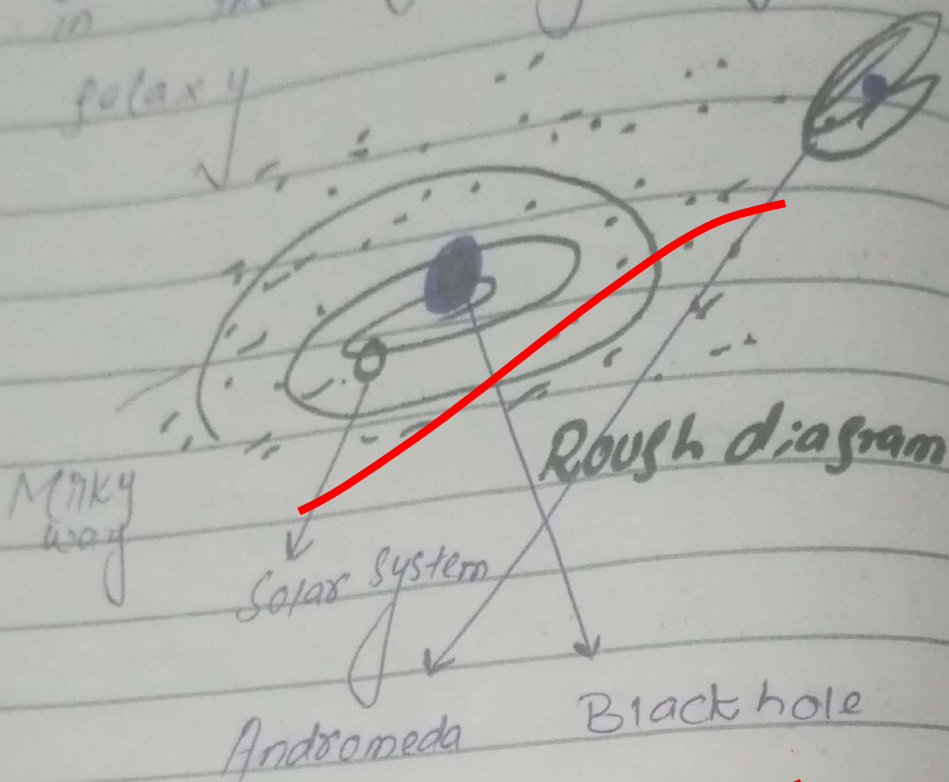
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## b) Milky way

Milky way is an "spiral galaxy" in the space. It is located in space.

Solar system

Our Solar System is located  
in the Milky Way  
galaxy

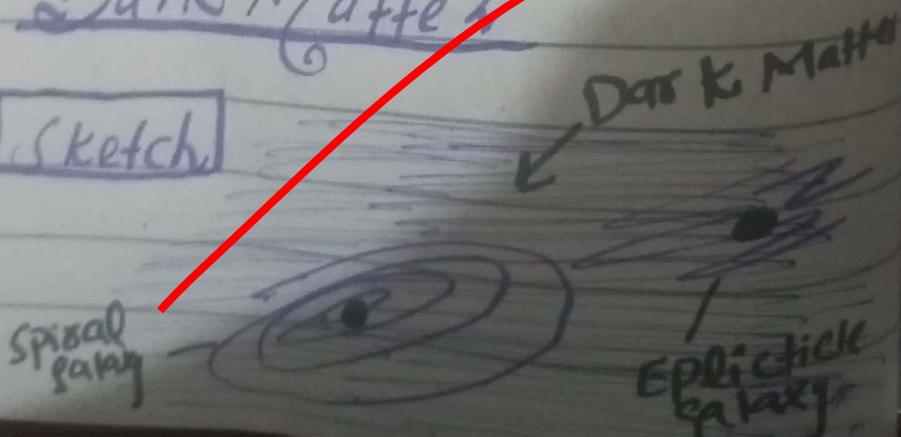


## Nearest galaxy to Milky Way

'Andromeda' is the  
nearest galaxy to the  
Milky Way

## Dark Matter

Sketch



The empty space in the universe is called as the "dark matter" as per scientists information.

It contains the strong gravitational pull.

### Parts of galaxies

- includes
- Planets
- Stars
- dark matter
- Black hole
- Dwarf Planets
- Nebula
- anti-dark matter
- Comet & asteroids

### e) Solar Eclipses

#### Defination

It occurs when moon obstructs the sunlight coming to the earth

### Lunar Eclipses

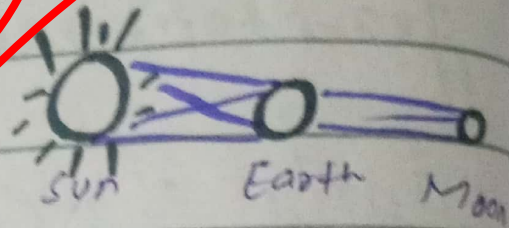
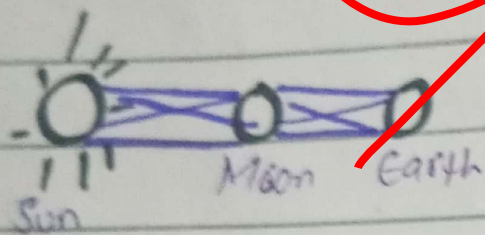
Occurs when earth obstructs light of moon coming from sun

## Duration

It occurs for  
5-7 minutes  
maximum

It happens  
for 7 hours  
approx.

## Diagram



## d). Nuclear Fission

Nuclear reaction based  
on "Uranium" in order to  
produce energy.

## Nuclear Fusion

Nuclear fusion reaction  
is for the purpose of  
producing energy in mass  
amount.

In this process different atoms of nuclei react to form an element.

Both of the reaction are carried out to produce the "massive energy".

( Section - II )

Q no 8, Ans

a) find out correct word

i) ~~THRSI~~

TRISH

~~ii GNDERA~~

GENDAR

~~iii) HIODALY~~

HOLIDAY

~~iv) SCHAMOT~~

v) ONLNDO

b) find the missing no:

4) 4, 16, 36, 64, ?, 244

7.

i) 30, 29, 27, ?, 20, 15

23

ii) 1, 7, 15, 25, ?, 51

37

iii) 0, 2, 6, 12, 20, 30, ?

42

iv) 48, 24, 72, 35, 108, ?

84