

QUESTION NO : 2

(PART NO: A)

Plant cell

Plant cells are rectangular / square in shape.

Plant cells have nucleus on one side of the cell.

Plant cell has cell wall and cell membrane.

Plant cell has chloroplast for photosynthesis.

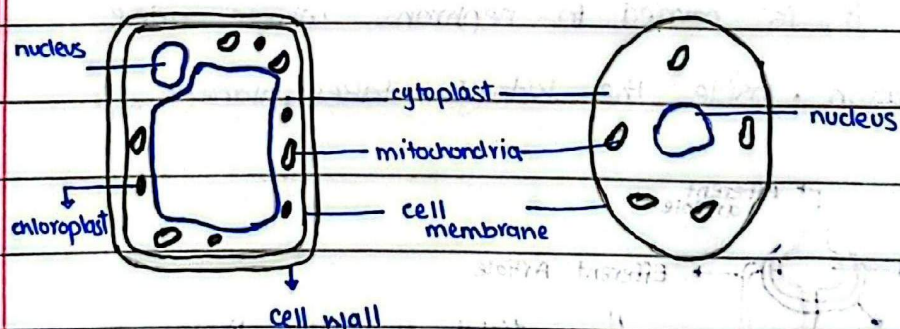
Animal cell

Animal cells are round in shape.

Animal cells have nucleus in middle / center of the cell.

Animal cell only has cell membrane.

Animal cell does not have chloroplast.



Plant Cell

Animal Cell

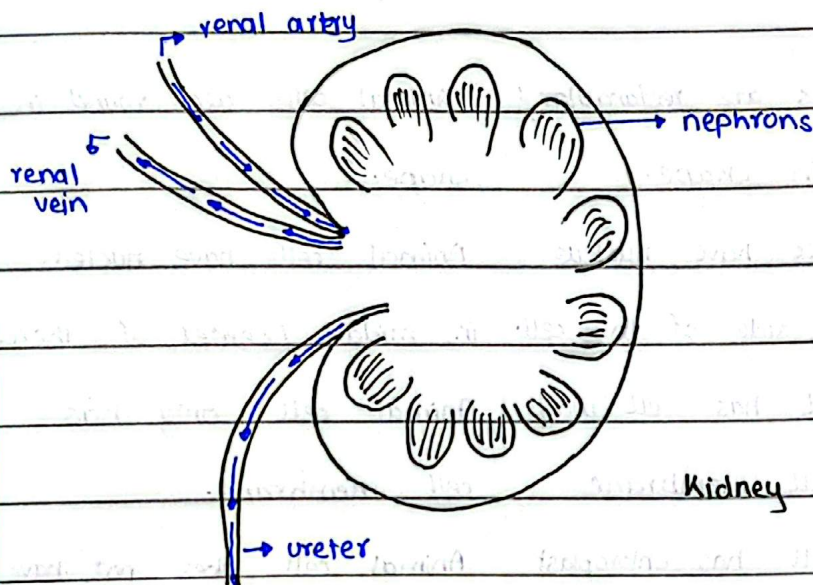
(PART NO: B)

Urine Formation :-

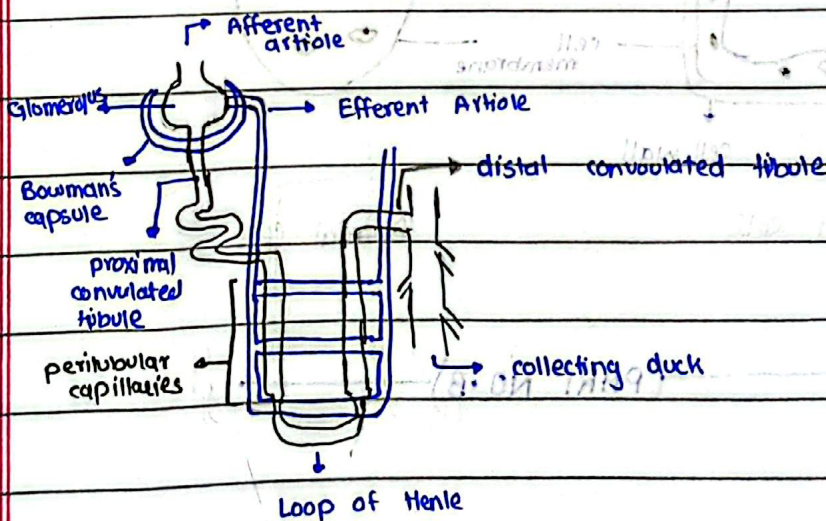
Urine formation takes place in kidney

of human body. : ON WATERBURY

First the waste is carried to kidney through renal artery.



Then it is carried to nephrons where urine formation, inside the kidney, takes place.



Blood enters nephron through afferent arteriole into Glomerulus. In glomerulus absorption of nutrients takes place with help of capillaries. The remaining moves to proximal convoluted tubule. From there, peritubular capillaries re-absorb nutrients: water, salt and minerals.

Remaining waste is collected in collecting duct. Waste is called urine which is carried out from kidneys via ureters.

(PART NO. C)

Disaster Risk Management :-

Disaster risk management is a systematic process through which risks associated with disaster is reduced and mitigated by timely response and preparedness.

Weakness in DRM of Pakistan :-

Following are the weaknesses in DRM of Pakistan :

- 1) Weak local governance
- 2) Poor resource allocation
- 3) Disparity in disaster management facility within Pakistan.

4) Less effort in controlling climate-induced disasters.

(PART NO. D)

• Ceramics :-

Ceramics are inorganic, non-metallic solids made by heating raw materials at high temperature. They are hard and resistant to heat and chemicals.

There are two types of ceramics :-

- 1) Traditional ceramics which are made from natural materials like clay and silica to make bricks, tiles, pottery etc.
- 2) Advanced ceramics which are made from pure or synthetic materials with special properties like silicon carbide etc.

Applications of Ceramics :-

Ceramics are used in ;

- 1) Bricks, tiles, cement used for construction
- 2) Electrical insulators
- 3) Kitchen ware and table ware (crochery)

X

X

QUESTION NO. 3

(PART NO. A)

Hepatitis :-

It is a disease which causes inflammation of the liver. caused mainly by viral infection.

Symptoms of hepatitis include jaundice, fatigue and liver damage.

Hepatitis is caused by consumption of food, blood or unsafe injection.

It can be treated by vaccination and maintaining good hygiene.

(PART NO. B)

Solar System :-

Solar System is the part of milky way galaxy. It consists one sun and eight planets.

Planets revolve around sun and sun keeps these planets in their orbits through gravitational force.

Sun is in the center of solar system. All 8 planets revolve in their orbits and have

different number of moons.

Among all eight planets, only Earth is capable of facilitating life.

The names of planets are:

1) Mercury

2) Venus

3) Earth

4) Mars

5) Jupiter

6) Saturn

7) Uranus

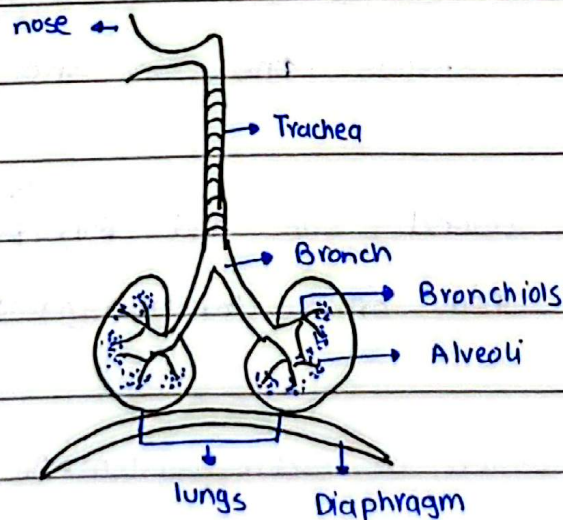
8) Neptune

(PART NO. C)

Gaseous Exchange in Human Body :-

Gaseous exchange in human body takes place through lungs.

The air that enters through nose by inhalation travels through trachea.



Trachea contains C-shaped cartilages to facilitate the air flow through bronch into lungs.

Then air travels to bronchioles which increases the surface area for air.

Finally air reaches alveoli where gaseous exchange takes place.

Diaphragm is dome-shaped muscle which helps lungs in process of exhalation.

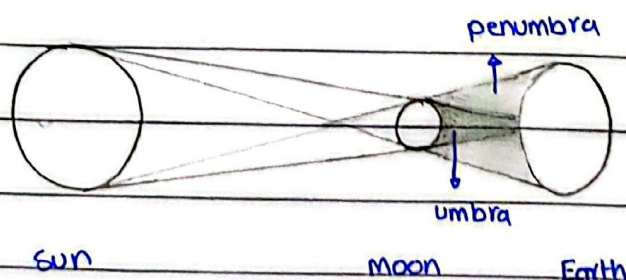
(PART NO. D)

Solar Eclipse :-

Solar Eclipse is when Moon comes in front of Sun, blocking the light to reach Earth.

It takes place on new moon.

There are ~~two~~ solar eclipse can be complete : umbra or partial solar eclipse : penumbra.



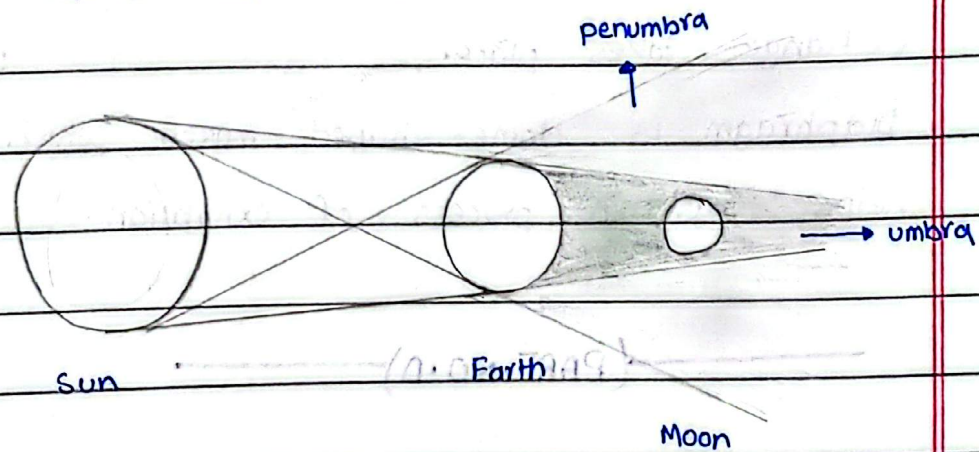
Solar Eclipse

Lunar Eclipse:

Lunar eclipse is when Earth is between the Sun and the Moon.

This takes place on full moon.

Lunar eclipse can be complete: umbra
or partial: penumbra.



Lunar Eclipse:

