

transmit impulses in one direction only. The uni-direction transfer of impulse occurs as the chemicals are produced in one side of the neuron. From axon, the impulses travel across the synapse to the dendron of the other neuron.

How
17/7/21

Practice Worksheet-1

Case based questions

1. (a) How does lymph function as a middleman?

Ans Lymph acts as a "middle man" which transports oxygen, food materials, hormones, etc, to the body cells and brings carbon dioxide and other metabolic wastes from the body cells.

(b) What are lymphocytes and why do we need them?

Ans The lymphocytes are part of our immune system. It allow them to properly respond to foreign invaders in the body and eliminate them. By producing specific antibodies.

(c) With respect to composition how is blood different from lymph?

Ans * Blood is majorly composed of blood cells, which are RBC's and WBC's suspended in plasma.

* Lymph is majorly composed of interstitial fluid, i.e., the fluid that lies in the interstitial spaces of all body tissues.

(d) How does lymph help in fat absorption?

Ans The lymphatic system has tiny lacteals in the part of villi. Lacteals absorb fats and fat-soluble vitamins to form a milky white fluid called chyle.

2 (a) Why is excretion necessary in an organism?

Ans Excretion is the removal of waste materials arising from the body. It is necessary to eliminate wastes such as ~~carbon dioxide~~ ^{uric acid}, urea, etc. to avoid toxins.

b. Name any two latex which is used for human welfare.

Ans Ruber latex
Latex of sapota fruit.

c. How does transpiration occur?

Ans Transpiration is the process of loss of water through the stomata present on the leaves of plants and other aerial parts of the plant.

(d) What are secondary metabolites?

Ans Secondary metabolites can be alkaloids, latex, tannins etc.

Two marks questions.

1. Explain the significance of peristalsis in the process of digestion. Which organ is involved in it?

Ans Peristalsis is a series of wave like muscle contraction that move food through the digestive tract.

→ The organ involved in it is oesophagus (food pipe).

2. How does translocation take place in plants?

Ans. When food molecules enter the part of the phloem, called the sieve tube where they can be transported upward or downward to all the parts of plant including roots.

3. 'Breathing cycle is rhythmic while gases exchange is a continuous process' Justify

Ans. The breathing cycle involves inhalation and exhalation of air due to alternate expansion and contraction of thoracic cavity. Thus, it is a ~~xy~~ rhythmic process but exchange of gases is a continuous process as it takes place between its blood and each and every cell, by diffusion.

4. Which of the functional unit of kidney? Explain regulation of urine formation.

Ans. A ~~not~~ nephron is the functional unit of kidney. It regulate water and

soluble substances by filtering the blood, reabsorbing what is needed and excreting the rest as urine.

5) Leakage of blood from the vessels reduce pumping efficiency. How?

Ans Leakage of blood can be causing pumping efficiency because the blood will not reach to pump. So, pumping is not able to done.

Three marks question

1) How does blood.

(a) Transport gases - The blood takes O_2 from lungs to the cell of the body for metabolism & the CO_2 produced is carried back to lungs by blood.

(b) Regulate the body temperature:-

The blood produces heat by the blood and cools down by liquid part i.e. plasma.

2) Difference between photosynthesis & respiration.

Photosynthesis

→ Occurs only in plant and some photosynthetic bacteria.

→ Raw materials are CO_2 & water

→ Oxygen is liberated in this process and CO_2 is utilized.

Respiration

→ Occur in all living organisms.

→ Uses carbohydrates or organic substances and O_2

→ Oxygen is utilized and CO_2 is released

2. Helps in ~~blood~~ body defence - The blood contain blood platelets which heal the damaged part of the vessels and stops bleeding.

3. Explain nutrition in Amoeba.

Ans Nutrition in Amoeba

① → Amoeba is a unicellular animal, so it doesn't have a mouth for ingestion of food. Amoeba ingests the food by encircling it by forming pseudopodia. When the food is engulfed in the form of a bag ~~is~~ called food vacuole. This process is Ingestion

② Digestion:- In amoeba, several digestive enzymes react on the food present in the food vacuoles and break it down into simple and soluble molecules.

③ Absorption:- The digested food which were digested by digestive enzymes were absorbed in the cytoplasm by diffusion. While the undigested food remains in the food vacuole. Excess food is stored as form of glycogen and lipids.

④ Assimilation:- The absorbed food is used to obtain energy, growth and repair. This process of utilizing of absorbed food is called assimilation.

⑤ Egestion:- When the undigested food gets collected in the food vacuole, it is thrown out of the body by rupturing cell membrane. This process of removal of undigested food from the body is called egestion.

4. What is dark reaction? Where does it occur? Write its chemical reaction

Ans

Dark reaction is a light independent process in which sugar molecules to form the carbon dioxide & water molecules.

It occurs in the stroma of the chloroplast, where they utilize the

products of the light reaction

