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Exercise

Q1. The kidneys in human beings are apart of the system for -
a) nutrition.
b) Respiration.
c) excretion (Ans)
d) transportation.

Q2. The xylem in plants are responsible for -
a) transport of water (Ans).
b) transport of food.
c) transport of amino acids
d) transport of oxygen.

Q3. The autotropic Mode of nutrition requires
a) CO_2 and Water
b) chlorophyll
c) Sunlight.
d) all of the above. (Ans).

Q4. The breakdown of pyruvate to give carbon dioxide, water & energy takes plaee in.
a) cytoplasm.
b) Mitochondria. (Ans).
c) chloroplast
d) nucleus.

Q5. How are fats digested in our bodies? where does this process take place?

A) Digestion of fat takes place in the small Intestine. Fat reaches the small Intestine in the form of large globules. The liver releases bile juice which emulsifies the fat. i.e., it breaks down the large globules into smaller globules.
The digest of fat takes place in Small Intestines.

Q6. What is the role of saliva in the digestion of food?

A ⇒ Saliva contains a digestive enzyme called salivary amylase, which converts carbohydrates into the maltose sugars. It cleans the mout cavity and it moistens & lubricates food which again in swallowing.

Q7. What are the necessary conditions for autotropic nutrition and what are its by-products?

A ⇒ i) Autotropic nutrition takes place through the process of photosynthesis. Carbon dioxide, water, chlorophyll, pigment, & sunlight are the necessary conditions required for autotrapic nutrition.

ii) Carbohydrates & O_2 are the by-products.

Q8. What are the differences between aerobic & anaerobic nutrition & what are its by-products?

A ⇒

Anaerobic :-

Glucose breaks down into ethyl alchohol, CO_2 and energy.

Aerobic :-

Glucose breaks down into CO_2 & water.

The byproducts of aerobic respiration are 38 atp of energy. CO_2 and water & water while of anaerobic Respiration is ethanol. and 2atp of energy.

Q9. How are the Alveoli designed to Maximise the exchange of gas-

Ans ⇒ The alveoli are thin-walled & richly supplied with a network of blood vessels to facilitate the exchange of gases between blood & the air-filled in Alveoli. They have a balloon-like structure that provides Maximum Surface area for exchange of gases.

Q10. What would be the consequences of a deficiency of haemoglobin in our bodies?

Ans ⇒ The deficiency of haemoglobin in the blood can affect the oxygen supplying capacity of blood because Haemoglobin is the respiratory pigment that transports oxygen to body cells for cellular Respiration & deficiency of O_2 in body cells can lead to Anaemia.