

6. Life Processes

VERY SHORT-ANSWERS QUESTIONS:

Q1 : The glucose combines with oxygen in our body cells and provides energy. What is the special name of this reaction?

Ans : Cellular Respiration.

Q2 : Name the smallest blood vessels.

Ans: Capillaries.

Q3: What is the most important characteristic of living organism?

Ans: Molecular movement.

Q4: Name the enzyme present in saliva and its function?

Ans: The enzyme is salivary amylase which breaks down starch into sugar.

Q5: Which gland of stomach secretes gastric juice?

Ans: Gastric gland.

Q6: What are the three constituents of gastric juice and its constituents?

Ans: Hydrochloric acid , pepsin and mucous.

Q7: Name the energy currency of body.

Ans: ATP (adenosine try phosphate)

Q8: Why does trachea have rings of cartilage?

Ans: It ensures that air passage does not collapse.

Q9: What is the function of balloon like structure of lungs?

Ans: Explain mechanism of breathing.

Q10: Name the respiratory pigment of our blood? In which component is it present?

Ans: Haemoglobin. It is present in RBC.

Q11: Why respiratory pigment is required for transportation?

Ans: Because it has a very high affinity for oxygen.

Q12: What is the average surface of our lungs?

Ans: About 80 square meter.

Q13: What type of tissue is blood?

Ans: Blood is a connective tissue.

Q14: Name the three substances transported by blood?

Ans: Salts, Oxygen and Nitrogenous wastes.

Q15: What is the advantage of separation of oxygenated and deoxygenated blood in 4 chambered heart?

Ans: Such separation allows a highly efficient supply of oxygen to the body. Our heart have to pump two times once for lungs and next for the whole body.

Q16: Name the device that measures blood pressure? What is the normal blood pressure of human beings?

Ans: Sphygmomanometer. 80 mm of Hg - 120 mm of Hg.

Q17: Name the blood vessel where arteries and vein join?

Ans: capillaries.

Q18: Name the largest artery of the body.

Ans: Aorta.

Q19: Write the functions of Platelets.

Ans: It makes clot to stop bleeding.

Q 20: what is called the cup shaped structure which collect the urine from each nephron?

Ans: Bowman capsule.

Q 21: What is Bowman capsule? Write its function.

Ans: Bowman capsule is a cup shaped structure which ends the nephron tube that collects filters urine.

Q22: Name the technique which is used in artificial kidney.

Ans: Dialysis.

SHORT-ANSWERS QUESTIONS:

Q1: Why are viruses in the border of living and nonliving?

Ans: This is fact that viruses are in the border of living and nonliving. The out of body the viruses are nonliving and inside the body these are living.

Q2. Define life processes?

Ans: Those processes of the body which are necessary to prevent damage and break down and which together perform maintenance job are called life processes.

Q3. Define photosynthesis?

ANS: Photosynthesis is a process in which green plants make their own food in the presence of sunlight and chlorophyll using carbon dioxide and water to give oxygen and glucose.

Q4. Name the stored carbohydrate of plants and animals?

ANS:

plants - starch

Animals - glycogen.

Q5 : Name two enzymes which are secreted by exocrine part of pancreas.

Ans: The pancreas secretes pancreatic juice which contains enzymes like trypsin for digesting proteins and lipase for breaking down emulsified fats.

Q6:What happens to the energy released in respiration process?

ANS: The energy released during cellular respiration is immediately used to synthesis a molecule called ATP which is used to fuel all other activities in the cell.

Q7: What are the two factors on which diffusion of gases between plants and environment depends?

ANS: There are two factors on which diffusion of gases between plants and environment depends;

- (i) Environment condition and
- (ii) The requirements of plants.

Q8: Write a major difference between function of kidney and artificial kidney.

ANS: The kidney reabsorbs the urine products, but in artificial kidney, there is no re-absorption involved.

Q 9: Normally, in a healthy adult, the initial filtrate in the kidneys is about 180 L daily. However, the volume actually excreted is only a litre or two a day, Give reason.

Ans: Normally, in a healthy adult, the initial filtrate in the kidneys is about 180 L daily, but the the remaining filtrate is reabsorbed in the kidney tubules.

Q10: What is Artificial kidney (Hemo- dialysis)? Write its use.

Ans: An artificial kidney is a device to remove nitrogenous waste products from the blood through *dialysis*. It used in the patient with kidneys failure.

Q 11: Why is it necessary to separate oxygenated and deoxygenated blood in mammals and birds?

ANS: Mammals and birds need high energy. These need only oxygenated bloods. If oxygenated and deoxygenated blood mixed up it cause low in energy.

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