



# **BIOLOGY**

## **BOOKS - MBD**

### **LIFE PROCCESS (NUTRIENT, RESPIRATION, TRANSPIRATION AND EXCERPTION**

**Example**

1. What criteria do we use to decide whether something is alive?



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2. What are outside raw materials used by living organism?



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3. What are the differences between autotrophic and heterotrophic nutrition?



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4. Where do the plants get each of raw materials required for photosynthesis ?



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5. What is the role of acid in our stomach?



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**6. What is the function of digestive enzymes?**



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**7. How is small intestine designed to absorb digested food?**



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**8.** What advantage over an aquatic organism does a terrestrial organism have with regard to obtaining oxygen for respiration?



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**9.** What are the ways in which glucose is oxidised to provide energy in various organisms?



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**10.** How is oxygen and  $CO_2$  Transported in human beings?



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**11.** How are lungs designed in human beings to maximise the area for exchange of gases?



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**12.** What are the components of the transport system in human beings? what are the functions of these components?



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**13.** Why is it necessary to separate oxygenated and deoxygenated blood in mammals and birds?



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**14.** What are the components of transport system in highly organised plants?



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**15.** How are water and minerals transported in plants?



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**16.** How is food transported in plants?







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**17.** Describe the structure and functioning of nephron



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**18.** How does urine formation occur in human?



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**19.** What are the methods used by plants to get rid of excretory products?



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**20.** How is the amount of urine produced regulated?



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21. The kidneys in human beings are a part of the system for

A. nutrition

B. respiration

C. excretion

D. transportation

**Answer:**



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22. The xylem in plants are responsible for:

- A. transport of water
- B. transport of food
- C. transport of amino acids
- D. transport of oxygen

**Answer:**



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23. The autotrophic mode of nutrition requires:

A.  $CO_2$  and water

B. chlorophyll

C. sunlight

D. all of the above

**Answer:**



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24. The breakdown of pyruvate to give  $CO_2$  water and energy takes place in

A. cytoplasm

B. mitochondria

C. chloroplast

D. nucleus

**Answer:**



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**25.** How are fats digested in our bodies? Where does the process take place?



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**26.** What is the role of saliva in the digestion of food?



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27. What are the necessary conditions for autotrophic nutrition and what are its byproducts?



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28. What are the differences between aerobic respiration and anaerobic respiration? Name some organisms that are anaerobic mode of respiration?



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**29.** How are alveoli designed to maximise the exchange of gases?



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**30.** Describe double circulation in human beings. Why is it necessary?



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**31.** What are the differences between the transport of materials in xylem and phloem?



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**32.** What are the kinds of heterotrophic organisms of the basis of nutrition?



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**33.** What is photosynthesis? describe the significance of photo-synthesis



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**34.** Which organelle is responsible for photosynthesis ? describe the role of chlorophyll



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**35.** Discuss the steps of light reaction and dark reaction?



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**36.** Explain process of nutrition in amoeba?



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**37.** Difference between the following: autotrophic and heterotrophic

nutrition



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**38.** Difference between the following:  
herbivore and carnivore



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**39.** Describe the human alimentary canal with help of a suitable diagram.



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**40.** Describe the human alimentary canal with help of a suitable diagram.



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**41.** Describe the process of degestion of food in man



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**42.** Name the constituents of blood and state the functions of each.



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**43.** State the functions of blood.



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**44.** Describe the structure of human heart.



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**45.** Describe the structure of human heart.



**Watch Video Solution**

**46.** Draw a sectional view of the human heart and label on it, aorta, right ventricle and pulmonary veins



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**47.** Explain respiratory system of human



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**48.** Describe the mechanism of breathing in human beings?



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**49.** Draw a well labelled diagram of human excretory system.



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50. Describe the structure of human urinary system



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51. What are life processes?



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**52.** What is nutrition? briefly explain the two major kinds of nutrition



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**53.** Define autotrophic nutrition?



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**54.** Write a note on saprophytic nutrition.



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**55.** Explain the two main steps of photosynthesis



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**56.** Give a brief account of factors affecting the process of photosynthesis



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**57.** What are stomata? explain role in respiration?



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**58.** How respiration takes place in roots of plants?



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**59.** Demonstrate with experiment that  $O_2$  is evolved during photosynthesis?



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**60.** To demonstrate that photosynthesis take place in the presence of chlorophyll



**Watch Video Solution**

**61.** To demonstrate that  $CO_2$  necessary for photosynthesis



**Watch Video Solution**

**62.** Demonstrate with experiment that light is essential for photosynthesis



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**63.** How is respiration different from breathing?



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**64.** List three differences between respiration in plants and respiration animals.



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**65.** What is the function of epiglottis?





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**66.** Why is food necessary for living organisms?



[Watch Video Solution](#)

**67.** Explain the mechanism of breathing in human



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**68.** What is the effect of strenuous exercise on rate breathing and why?



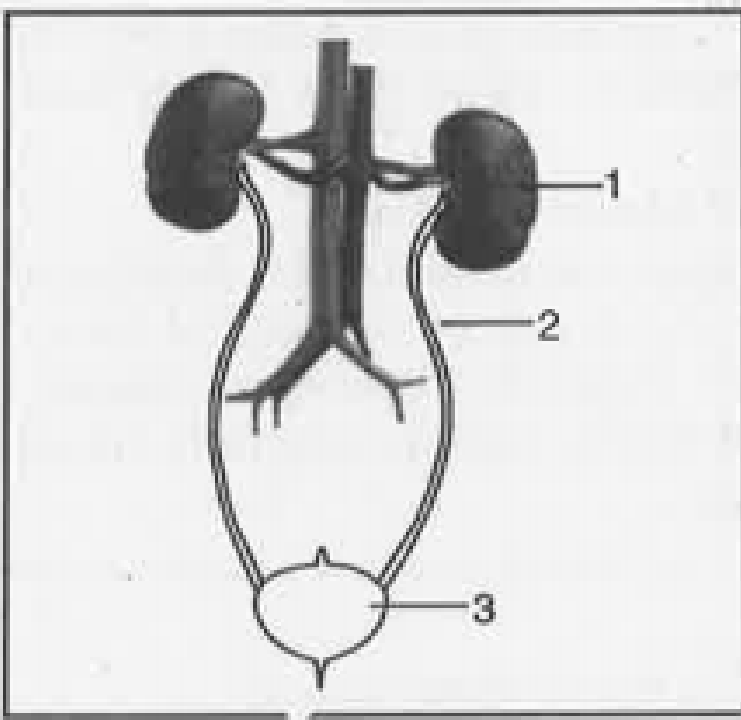
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**69.** Give an outline of calvin-benson cycle



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**70.** Label the parts of human excretory system?



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**71. Describe the role of intestinal juice?**



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**72.** Explain absorption of food in the small intestine.



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**73.** State the functions of stomach and large intestine



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**74.** Differentiate the following: respiration and photosynthesis.



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**75.** What is fermentation? How is it important?



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**76.** Explain respiratory system of human



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**77.** What are the different modes of respiration in animals?



**Watch Video Solution**

**78.** Differentiate between respiration and combustion



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**79.** What are parasitic nutrition?



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**80.** Differentiate between light reaction and dark reaction in photosynthesis



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**81.** What are the functions of liver?



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**82.** Differentiate between saprophytic and parasitic nutrition?



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**83.** Discuss the fate of food in the oral cavity of man?



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**84.** What is a digestive gland? Name the various digestive glands of man and their secretions?



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**85.** Write the enzymes of the pancreatic juice, the substrates they digest and the products of their digestive action?



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**86.** What is meant by photosynthesis? What are the basic requirements for the process of photosynthesis?



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**87.** What are the different ways in which glucose is oxidized to provide energy in various organisms?



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**88.** Explain how exchange of materials takes place between blood and tissues



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**89.** Out inhalation-exhalation cycle.



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**90.** Leaves of a healthy potted plant are coated with vaseline to block the stomata will this

plant remain healthy for long? state three reasons to support your answer



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**91.** What are stomata and lenticels?



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**92.** Briefly explain Breathing, external respiration exchange of gases and tissue respiration



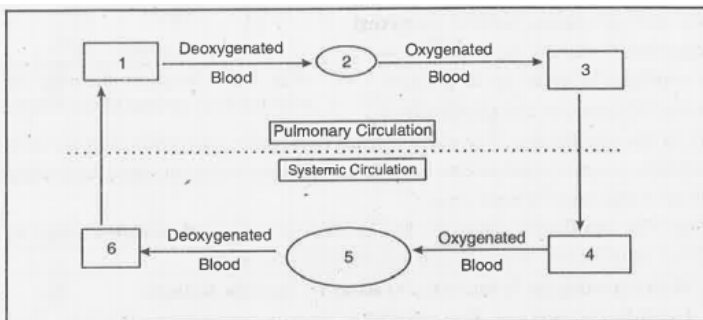
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93. Why is mitochondria termed Power house of the cell?



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94. Fill in the blanks 1,2,3,4,5,6 in the figure.





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**95.** State differences between artery and vein?



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**96.** Why are WBCs called soldiers of the body?



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**97.** What are hypertension and hypotension?



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**98.** Name the three major types of blood vessels.explain briefly



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**99.** Write a note on lymphatic system in human beings



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**100.** Write function of lymph



**Watch Video Solution**

**101.** Give difference between blood and lymph



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**102.** How are xylem and phloem well suited for transport of materials in plants?



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**103.** How are water and mineral transported in plants?



**Watch Video Solution**

**104.** Mention any three methods adopted by plants to minimize the transpiration rate.



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**105.** Write a short note on root pressure?



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**106.** What are the disadvantages of transpiration?



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**107.** What is translocation?



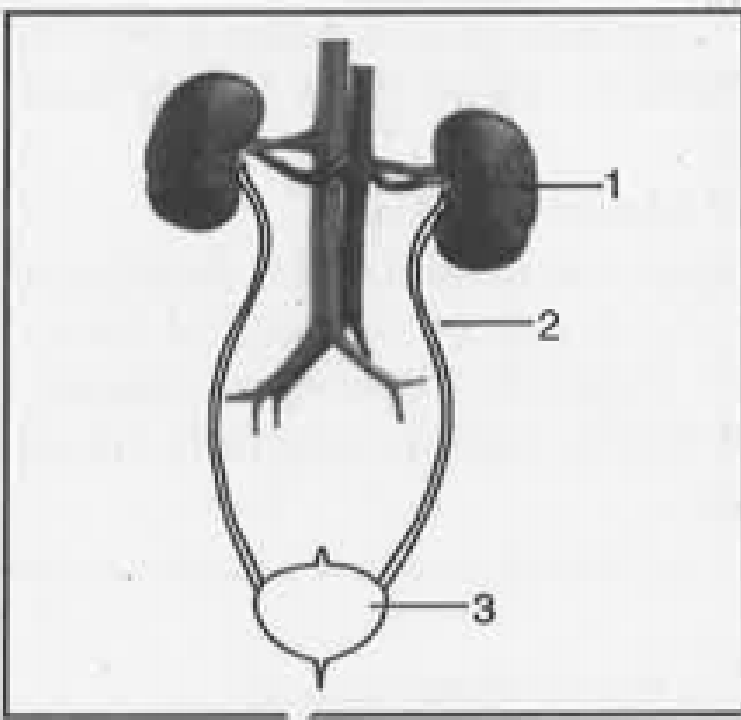
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**108.** What is blood pressure?(b)What are normal value of systolic and diastolic blood pressure(c) How is it measured?(d) Name the instrument used to measure blood pressure?



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**109.** Label the parts of human excretory system?



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**110.** How does the excretion take place in amoeba?



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**111.** State one main function of the following:  
glomerulus



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**112.** State one main function of the following:  
malpighian capsule



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**113.** State one main function of the following:  
sweat gland



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**114.** State one main function of the following:  
nephron of kidney tubule



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**115.** State one main function of the following:

Loop of henle?



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**116.** Name the cheif organs of excretion in man.mention the waste products that they excrete?



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**117.** Name the following: A process by which the unwanted nitrogenous wastes are eliminated from the body.



**Watch Video Solution**

**118.** Name the following: Major excretory organs of man



**Watch Video Solution**



**119.** Name the following: The structural and functional units of kidney.



**Watch Video Solution**

**120.** Name the following: A tuft of blood capillaries found in the Bowman's capsule of nephron



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**121.** Name the following : The structure that brings urine from the kidney to the urinary bladder



**Watch Video Solution**

**122.** Name the following: Thin membranous sac serving as the reservoir of urine



**Watch Video Solution**

**123.** Name the following: Any two organic constituents of normal human urine?



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**124.** Name the following : The chief nitrogenous waste product in the human urine and the organ which produces it.?



**Watch Video Solution**

**125.** Name the following: Name two excretory products formed by the liver?



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**126.** What do you understand by artificial kidney? Name the principle on which it works?



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**127.** Write a note on haemodialysis?



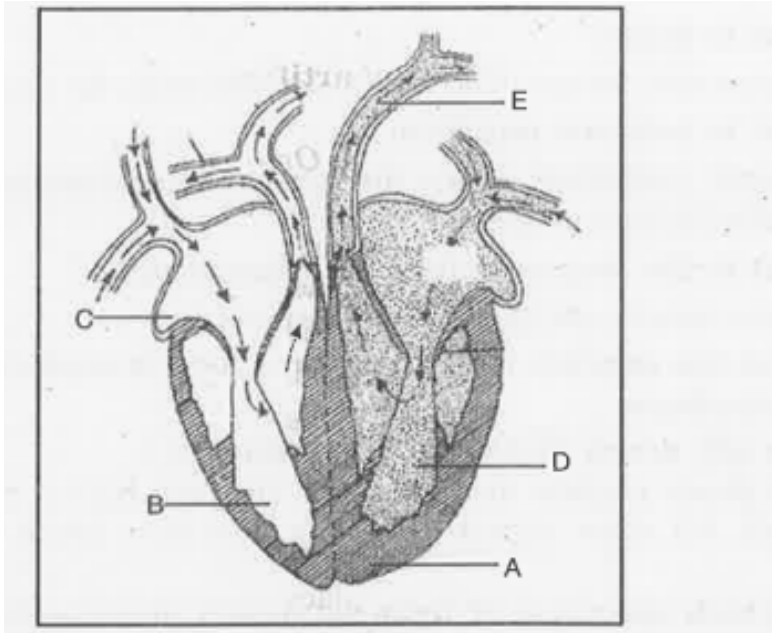
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**128.** What are the functions of tongue?



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**129.** Label the part A-E, Write function of E



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**130.** Why are maintenance processes required

?



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**131.** List three characteristics of living organisms?



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**132.** What are life processes?



**Watch Video Solution**

**133.** What is the basic requirement of maintenance?



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**134.** What are sources of energy for living organisms?



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**135.** List the common reactions required to obtain energy from carbon based molecules?



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**136.** Name any four life processes required for maintenance?



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**137.** What are nutrients?



**Watch Video Solution**

**138.** What is nutrition ? Why is it necessary?



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**139.** What is food? What is holozoic nutrition?



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**140.** What is the source of food for heterotrophs?



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**141.** Name the process which prepares food for autotrophs?



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**142.** Why are green plants called producers?



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**143.** In which spectrum of light maximum photosynthesis occurs?



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**144.** Where is chlorophyll present in cells of leaves?



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**145.** How does oxygen produced during photosynthesis enter the atmosphere?



**Watch Video Solution**

**146.** Where does photolysis occur in plant?



**Watch Video Solution**

**147.** What are the advantages of cooked food?



**Watch Video Solution**

**148.** What is the role of  $CO_2$  during photosynthesis?



**Watch Video Solution**

**149.** What is the role of stomata in green leaves?



**Watch Video Solution**

**150.** Name the minerals obtained from soil by plants?



**Watch Video Solution**

**151.** What is the role of nitrogen in plants?



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**152.** What is the food of amoeba?



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**153.** Is food vacuole of amoeba, temporary structure or a permanent one?



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**154.** What is saliva?



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**155.** Name the enzyme present in saliva.





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**156.** Name the organ through which food passes into stomach from oral cavity?



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**157.** Name the largest part of alimentary canal?



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**158.** Which of the animals need long small intestine?



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**159.** What is the nature of food entering small intestine from stomach?



**Watch Video Solution**

**160.** Name the juices which convert acidic food into alkaline in small intestine?



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**161.** Name the digestive juice secreted by liver?



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**162.** Name the digestive juice secreted by pancreas?



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**163.** List the enzymes which help in the digestion of proteins?



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**164.** What is approximate length of human alimentary canal?



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**165.** Name the largest gland present in human body?



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**166.** Name the gland which is exocrine as well as endocrine in nature



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**167.** What are three parts of small intestine?





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**168.** Differentiate between chyme and chyle?



[Watch Video Solution](#)

**169.** Name the four enzymes present in pancreatic juice?



[Watch Video Solution](#)

**170.** Maximum water is absorbed in which part of alimentary cannal



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**171.** What is digestion?



**Watch Video Solution**

**172.** What is assimilation?



**Watch Video Solution**

**173.** What is egestion?



**Watch Video Solution**

**174.** Why villi are present in small intestine and not in stomach?



**Watch Video Solution**



**175.** What happens to pyruvate produced during anaerobic respiration?



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**176.** What is aerobic respiration?



**Watch Video Solution**

**177.** What is anaerobic respiration?



**Watch Video Solution**

**178.** What is ATP ?



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**179.** Expand NADP



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**180.** Name three animals which respire through skin?



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**181.** Where does krebs cycle occur in the body?



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**182.** What is hypoxia?



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**183.** Name the respiratory substrate?



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**184.** What is the end product of aerobic respiration?



**Watch Video Solution**

**185.** What is fermentation?



**Watch Video Solution**

**186.** Man breaths how many times per minute?



**Watch Video Solution**

**187.** What are the functions of ATP?



**Watch Video Solution**

**188.** What is bark?



**Watch Video Solution**

**189.** Name the tissue which transport food in plants?



**Watch Video Solution**

**190.** What is xylem?



**Watch Video Solution**

**191.** Name two substances which enter the root through the root hairs?



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**192.** What is ascent of sap?



[Watch Video Solution](#)

**193.** Name the transport tissue of Plant body?



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**194.** Name the three types of blood vessels?



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**195.** List types of circulation in human body?



**Watch Video Solution**

**196.** Name the fluid medium of blood?



**Watch Video Solution**



**197.** Why is the S-A node called pace-maker of the heart?



**Watch Video Solution**

**198.** Name the organs which play role in circulation of blood?



**Watch Video Solution**

**199.** Name the types of cells which destroy harmful bacteria in the body?



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**200.** Name the instrument used to measure blood pressure?



**Watch Video Solution**

**201.** Name the artery which carry impure(deoxygenated) blood from heart to lungs



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**202.** Expand ECG?



**Watch Video Solution**

**203.** What is excretion?



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**204.** How many nephrons are present in each kidney?



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**205.** What are the excretory structures of amoeba?



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**206.** What is a malpighian body(renal corpuscle)?



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**207.** Name the reservoir of urine in the body?



**Watch Video Solution**

**208.** What is Micturition ?



**Watch Video Solution**

**209.** Name the structures which store wastes in plants?



**Watch Video Solution**

**210.** What are resins and gums?



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**211.** Define autotrophic nutrition?





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**212.** Define heterotrophic nutrition?



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**213.** Among the following which is a parasitic plant?

A. plasmodium

B. cuscuta

C. amoeba

D. rhizobium

**Answer:**



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**214.** Dark reaction and light reaction of photosynthesis takes place is:

A. stroma and grana of chloroplast  
respectively



B. grana and stroma of chloroplast  
respectively

C. grana only

D. stroma only

**Answer:**



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**215.** Chemical reaction takes place during dark  
reaction of photosynthesis is:

A. photosynthesis

B. hydrolysis

C. carbon dioxide is bonded with RUBP

D.

**Answer:**



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**216.** Plants are green in colour because:

A. The absorb green light only

B. they reflect green light

C. they absorb green light but reflect all other lights

D. None of the above are correct

**Answer:**



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**217.** The nutrition in mucor is:

A. parasitic

B. autorophic

C. saprophytic

D. holozonic

**Answer:**



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**218.** In amoeba the digestion is intracellular because:

A. amoeba is unicellular

B. amoeba is multicellular

C. amoeba is found in pond

D. amoeba is microscopic animal

**Answer:**



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**219.** Which of the following has no digestive enzyme?

A. saliva

B. bile

C. gastric juice

D. intestinal juice

**Answer:**



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**220.** Give a brief account of factors affecting the process of photosynthesis

A. a) RUBP

B. b ) PEP

C. c ) NADPH

D. d ) ATP

**Answer:**



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**221.** Viruses show.....movements



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**222.** Growth,.....and repair and .....are characteristics of life?



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**223.** .....is needed by living organisms for movements and maintenance



**Watch Video Solution**

**224.** .....is needed by living organisms for movements and maintenance.





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225. ....is the largest gland of body.



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226. ....and .....are the raw materials for photosynthesis



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227. RBC transport .....in the body.



[Watch Video Solution](#)

228. Xylem and ...are the main conducting tissues in plants



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229. Translocation of food takes place through.....in plants



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