



# **BIOLOGY**

## **BOOKS - MBD NCERT SOLUTIONS**

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

**Example**

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



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



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



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4. What is the function of digestive enzymes?



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



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



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7. How are water and minerals transported in plants?



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8. How is food transported in plants?





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9. How does urine formation occur in human?



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10. 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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**11.** The breakdown of pyruvate of give  $CO_2$   
water and energy takes place in

A. cytoplasm

B. mitochondria

C. chloroplast

D. nucleus

**Answer:**



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**12.** What is the role of saliva in the degestion of food?



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



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



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



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



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17. Explain process of nutrition in amoeba?



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18. Difference between the following: autotrophic and heterotrophic nutrition



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**19.** Difference between the followings:  
herbivore and carnivore



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



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



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**22.** State the functions of blood.



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**23.** What are life processes?



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



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**25.** Define autotrophic nutrition?



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**26.** What is saprophytic nutrition?



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27. Explain the two main steps of photosynthesis



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28. Give a brief account of factors affecting the process of photosynthesis



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**29.** How respiration takes place in roots and stem nodes in plants?



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**30.** To demonstrate that photosynthesis takes place in the presence of chlorophyll



**Watch Video Solution**

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



**Watch Video Solution**

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



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



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



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



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



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



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



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



**Watch Video Solution**

**40.** What are parasitic nutrition?



**Watch Video Solution**

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



**Watch Video Solution**

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



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



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**44.** Name the enzymes of the pancreatic juice, the substrates they digest, and the products of their digestive action.



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



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



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



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**48.** 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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**49.** What are stomata and lenticels?



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**50.** Briefly explain breathing, external respiration exchange of gases and tissue respiration



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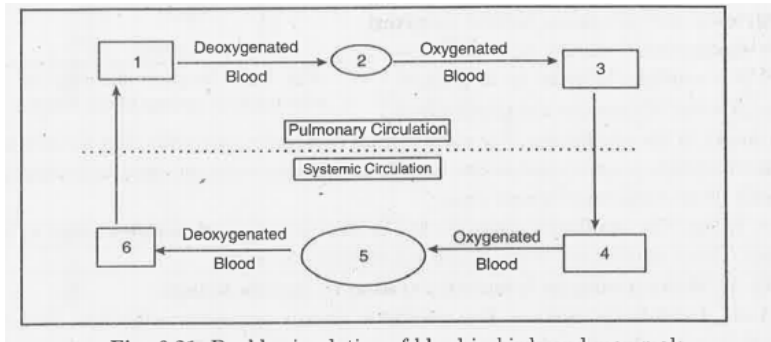
**51.** Why are the mitochondria called power houses of the cell?





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



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53. State differences between artery and vein?



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**54.** Why are neutrophils called soldiers of the body ?



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**55.** Hypertension and Hypotension.



**Watch Video Solution**

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



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



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**58.** The difference between blood and lymph :



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



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**60.** Mention any three methods adopted by plants to minimise the transpiration rate.



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**61.** What is translocation?



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**62.** What is blood pressure ? What are normal value of systolic and diastolic blood pressure ? How is it measured ? Name the instrument used to measure blood pressure.



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**63.** Write a note on mechanism of blood clotting



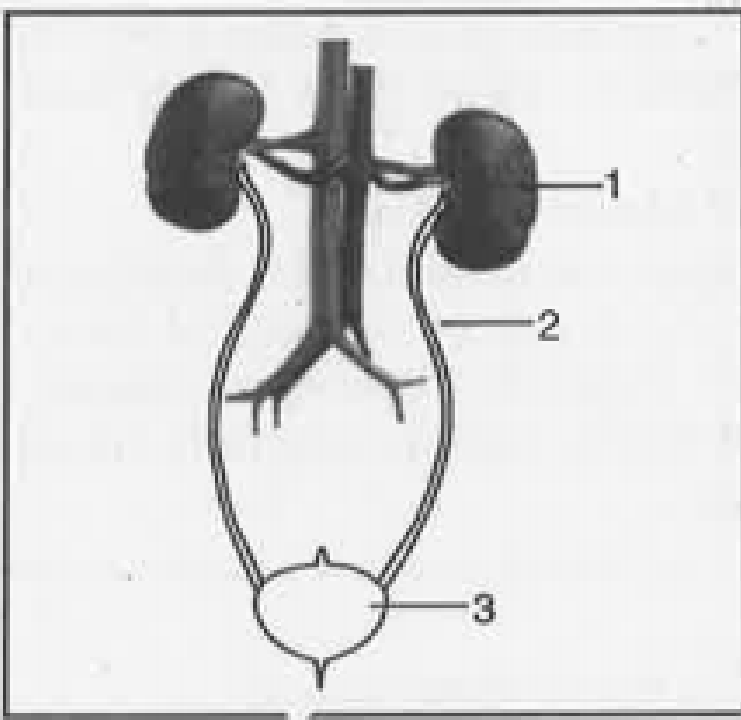
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**64.** Briefly describe excretory system?



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



**Watch Video Solution**

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



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



**Watch Video Solution**

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



**Watch Video Solution**



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



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



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

Loop of henle?



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**72.** Name the chief organs of excretion in man.

Mention the waste products that they excrete?



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



**Watch Video Solution**

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



**Watch Video Solution**

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



**Watch Video Solution**

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



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



**Watch Video Solution**

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



**Watch Video Solution**

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



**Watch Video Solution**

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



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



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



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



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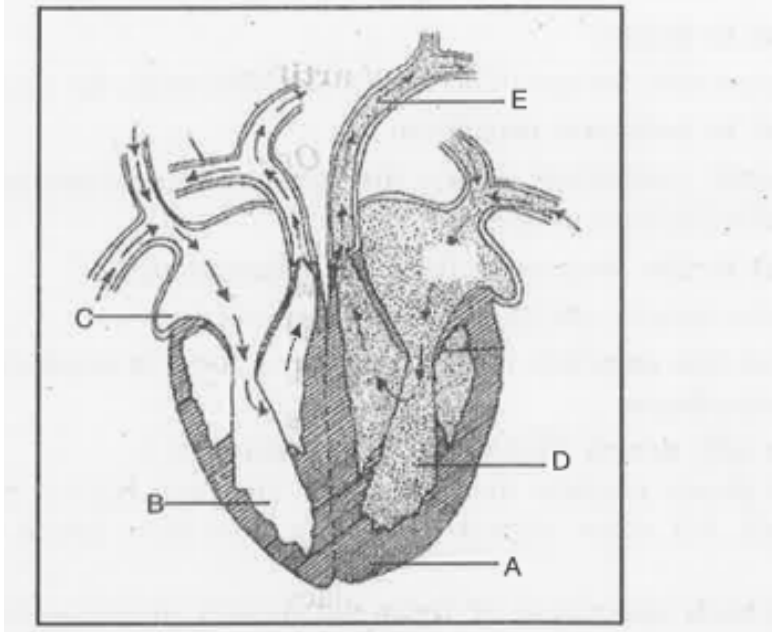
**84.** State the function of tongue



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**85.** Label the part A-E, Write function of E, also write function of E.





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**86.** Why are maintenance processes required ?



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



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**88.** What are life processes?



**Watch Video Solution**

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



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90. What are sources of energy for living organisms?



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



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



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**93.** What are nutrients?



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



**Watch Video Solution**

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



**Watch Video Solution**

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



**Watch Video Solution**

**97.** Name the process which prepares food in autotrophs?



**Watch Video Solution**

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



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



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



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



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**102.** Where does photoynthesis occur in plant?



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



**Watch Video Solution**

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



**Watch Video Solution**



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



**Watch Video Solution**

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



**Watch Video Solution**

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



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



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



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**110.** What is saliva?



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**111.** Name the enzymes present in saliva.



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



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



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**114.** Which of the animals need long large intestine?



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



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



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



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



[Watch Video Solution](#)

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



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



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



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



**Watch Video Solution**

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



**Watch Video Solution**

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





**Watch Video Solution**

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



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**126.** What in digestion?



**Watch Video Solution**

**127.** What is assimilation?



**Watch Video Solution**

**128.** What is egestion?



**Watch Video Solution**

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



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**130. Aerobic respiration**



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**131. What is anaerobic res-piration?**



**Watch Video Solution**

**132. What is ATP ?**



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**133.** Expand NADP



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



**Watch Video Solution**

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



**Watch Video Solution**

**136.** What is hypoxia?



**Watch Video Solution**

**137.** Name the respiratory sub-strate?



**Watch Video Solution**

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



**Watch Video Solution**

**139.** What is fermentation?



**Watch Video Solution**

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



**Watch Video Solution**

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



**Watch Video Solution**

**142.** What is bark?



**Watch Video Solution**

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



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**144.** What is xylem?



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



**Watch Video Solution**



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



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**147.** Name the transport tissue of body?



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



**Watch Video Solution**

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



**Watch Video Solution**

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



**Watch Video Solution**

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



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



**Watch Video Solution**

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



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



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



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**156.** Expand ECG?



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**157.** Write about excretion?



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



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**159.** What is the excretory structure in Amoeba?



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**160.** What is Malpighian body ?



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**161.** Name the reservoir of urine in the body.



**Watch Video Solution**

**162.** What is micturition?



**Watch Video Solution**

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



**Watch Video Solution**

**164.** What are resins and gumd?



**Watch Video Solution**

**165.** Define autotrophic nutrition?



**Watch Video Solution**

**166.** Define heterotrophic nutrition?



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**167.** Which one of the following is a parasitic plant ?

A. plasmodium

B. cuscuta

C. amoeba

D. rhizobium

**Answer:**



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**168.** Dark reaction and light reaction of photosynthesis takes place in

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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**169.** 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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**170.** 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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**171.** The nutrition in mucor is:

A. parasitic

B. autorophic

C. saprophytic

D. holozonic

**Answer:**



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**172.** 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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**173.** Which of the following has no digestive enzyme ?

A. saliva

B. bile

C. gastric juice

D. intestinal juice

**Answer:**



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174.  $CO_2$  acceptor during dark reaction of photosynthesis is

A. RUMP

B. PEP

C. NADPH

D. ATP

**Answer:**



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175. Viruses show.....movKHOents



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176. Growth,.....and reappear and .....are characteristics of life?



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177. ....is needed by living organisms for movements and maintenance



[Watch Video Solution](#)

**178.** .....is needed by living organisms for movement and maintenance.



**Watch Video Solution**

**179.** .....is the largest gland of body.



**Watch Video Solution**

**180.** .....and .....are the raw materials for photosynthesis



**Watch Video Solution**

**181.** RBC transport .....in the body.



**Watch Video Solution**

**182.** Xylem and ....are the main conducting tissues in plants



**Watch Video Solution**

**183.** Translocation of food takes place through.....of plants



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