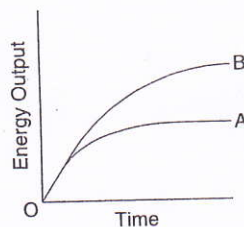
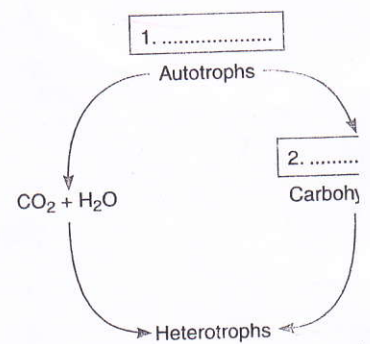


**A. Very Short Answer Type Questions (1 mark each)**

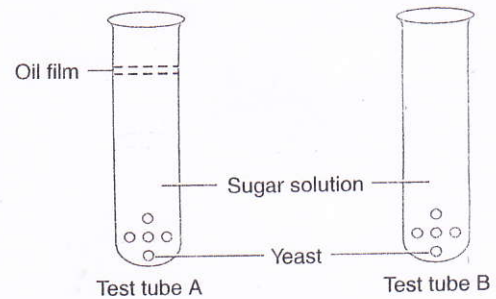
1. Define nutrition.
2. Name the raw materials required for photosynthesis.
3. What do you mean by nutrients?
4. What type of nutrition is exhibited by *Amoeba*, *Ascaris* and Tapeworm.
5. Which muscles help in breathing movements in man.
6. Name the carrier that carries oxygen in the blood of human beings.
7. Name the respiratory organs of fish, prawn and cockroach.
8. How are grana and thylakoid inter-related?
9. How many lobes are present the left human lung?
10. What is the function of epiglottis?
11. How is food ingested in *Amoeba*?
12. Define photosynthesis.
13. Which food constituent is digested in the mouth cavity of man?
14. In which organ of the body are the loops of Henle found?
15. Which organ secretes a hormone when the blood sugar rises. Name a digestive enzyme released by this o
16. Write one feature which is common to each of the following pairs of terms/organs:  
(a) Glycogen and starch (b) Chlorophyll and haemoglobin
17. Where is blood oxygenated in fishes?
18. How *Amoeba* and other unicellular animals get rid of their nitrogenous wastes?
19. Mention the function of urinary bladder.
20. Name the valve present between right auricle and right ventricle.
21. What should be the ideal blood pressure for a normal adult man?
22. Which plant structures are associated with transpiration?
23. Name the four chambers of the human heart.
24. What is the function of haemoglobin?
25. Name two structures in plants where waste products get accumulated.
26. Write one feature which is common to each of the following pairs of terms/organs:  
(a) Gills and lungs (b) Arteries and veins

**B. Short Answer Type Questions (2 marks each)**

1. What is fermentation? Give one example where fermentation occurs.
2. How does a saprophyte obtain its food?
3. What is the role of pepsin in the digestive process? At what pH does it work?
4. Differentiate between breathing and respiration.
5. Name the steps involved in various phases of photosynthesis.
6. Write two important functions of liver.
7. In the flow chart given alongside, fill in the blank spaces with the kind of energy available.
8. Why does raw bread taste sweet when it is chewed for a while?
9. What is the role of hydrochloric acid during the process of digestion in stomach?
10. Name the different modes of respiration in frog.
11. How many energy molecules are produced during glycolysis?
12. A graph was plotted to show the energy output of two types of respiration. Identify the types of resp denoted by curves A and B.



13. In the test tubes A and B shown here, yeast was kept in sugar solution. Which products of respiration would you expect in test tubes A and B?
14. Although bile juice has no digestive enzyme, it is still considered to be very important during digestion of food. Give two reasons.
15. What is the function of the glomerulus?
16. What do you mean by systolic and diastolic blood pressure?
17. Why is the left ventricle more muscular than the right ventricle?
18. Mention two important functions performed by human kidney.
19. What is the pericardium? Mention the functions of pericardial fluid.
20. What is the route of water in plant during transpiration.
21. Name the components of the human circulatory system.
22. What do the following transport?  
(a) xylem (b) phloem (c) pulmonary vein (d) vena cava



### C. Short Answer Type Questions (3 marks each)

1. Describe the two types of digestion of food in the human stomach.
2. Mention the difference between aerobic and anaerobic respiration.
3. What is the difference between autotrophic and heterotrophic mode of nutrition?
4. Mention the conditions necessary for photosynthesis.
5. Describe the process of digestion in the small intestine of man.
6. Describe the mechanism of oxygen transport in human blood.
7. Mention the different ways of exchange of gases in animals.
8. Name the enzymes present in the pancreatic juice and mention their role in digestion.
9. How is digested food absorbed in the intestine of man?
10. Mention the difference between arteries and veins.
11. What will happen if both kidneys stop functioning?
12. What are blood capillaries? How are these structurally different from arteries?
13. Name the blood vessels which bring blood to the heart and the vessels which take the blood away from the heart.
14. Mention the advantage of separation of oxygenated and deoxygenated blood in human beings.
15. Mention the difference between WBCs and RBCs.
16. How do blood platelets help in clotting of blood?
17. What is glomerular filtration? Describe mechanism of its formation.
18. Mention the composition of blood plasma.

### D. Long Answer Types Questions (5 marks each)

1. What is lymphatic system? Mention the functions of lymph.
2. Differentiate between lymph and blood.
3. What do you mean by haemodialysis? Under what conditions and how is it carried out?
4. Describe the flow of blood during double circulation in the human heart. Illustrate your answer with a labelled diagram.
5. How is urine formed in human beings? Mention the composition of human urine.
6. Describe the mechanism of breathing in human beings.
7. How are oxygen and carbon dioxide transported in human beings?
8. Describe the different forms of heterotrophic nutrition, giving examples.
9. Name the digestive glands found in human beings. Mention the role of digestive juices secreted by them and the enzymes present in them.
10. Draw a labelled diagram of alimentary canal of human beings.
11. What are the characteristics of a good respiratory surface?
12. Describe the mechanism of anaerobic respiration.