

Short Answer Type Questions

1. Name the following
 - (a) The process in plants that links light energy with chemical energy
 - (b) Organisms that can prepare their own food
 - (c) The cell organelle where photosynthesis occurs
 - (d) Cells that surround a stomatal pore
 - (e) Organisms that cannot prepare their own food
 - (f) An enzyme secreted from gastric glands in stomach that acts on proteins.
2. "All plants give out oxygen during day and carbon dioxide during night". Do you agree with this statement? Give reason.
3. How do the guard cells regulate opening and closing of stomatal pores?
4. Two green plants are kept separately in oxygen free containers, one in the dark and the other in continuous light. Which one will live longer? Give reasons.
5. If a plant is releasing carbon dioxide and taking in oxygen during the day, does it mean that there is no photosynthesis occurring? Justify your answer.
6. Why do fishes die when taken out of water?
7. Differentiate between an autotroph and a heterotroph.
8. Is 'nutrition' a necessity for an organism? Discuss.
9. What would happen if green plants disappear from earth?
10. Leaves of a healthy potted plant were coated with vaseline. Will this plant remain healthy for long? Give reasons for your answer.
11. How does aerobic respiration differ from anaerobic respiration?
12. Match the words of Column (A) with that of Column (B)

Column (A)	Column (B)
(a) Phloem	(i) Excretion
(b) Nephron	(ii) Translocation of food
(c) Veins	(iii) Clotting of blood
(d) Platelets	(iv) Deoxygenated blood

13. Differentiate between an artery and a vein.
14. What are the adaptations of leaf for photosynthesis?
15. Why is small intestine in herbivores longer than in carnivores?
16. What will happen if mucus is not secreted by the gastric glands?
17. What is the significance of emulsification of fats?
18. What causes movement of food inside the alimentary canal?
19. Why does absorption of digested food occur mainly in the small intestine?
20. Match Group (A) with Group (B)

Group (A)	Group (B)
(a) Autotrophic nutrition	(i) Leech
(b) Heterotrophic nutrition	(ii) Paramecium
(c) Parasitic nutrition	(iii) Deer
(d) Digestion in food vacuoles	(iv) Green plant

21. Why is the rate of breathing in aquatic organisms much faster than in terrestrial organisms?
22. Why is blood circulation in human heart called double circulation?
23. What is the advantage of having four chambered heart?
24. Mention the major events during photosynthesis
25. In each of the following situations what happens to the rate of photosynthesis?
 - (a) Cloudy days
 - (b) No rainfall in the area
 - (c) Good manuring in the area

- (d) Stomata get blocked due to dust.

26. Name the energy currency in the living organisms. When and where is it produced?

27. What is common for cuscuta, ticks and leeches?

28. Explain the role of mouth in digestion of food.

29. What are the functions of gastric glands present in the wall of the stomach?

30. Match the terms in Column (A) with those in Column (B)

Column (A)	Group (B)
(a) Trypsin	(i) Pancreas
(b) Amylase	(ii) Liver
(c) Bile	(iii) Gastric glands
(d) Pepsin	(iv) Saliva

31. Name the correct substrates for the following enzymes

- (a) Trypsin
- (b) Amylase
- (c) Pepsin
- (d) Lipase

32. Why do veins have thin walls as compared to arteries?

33. What will happen if platelets were absent in the blood?

34. Plants have low energy needs as compared to animals. Explain.

35. Why and how does water enter continuously into the root xylem?

36. Why is transpiration important for plants?

37. How do leaves of plants help in excretion?

Long Answer Type Questions

1. Explain the process of nutrition in Amoeba.
2. Describe the alimentary canal of man.

3. Explain the process of breathing in man.
4. Explain the importance of soil for plant growth.
5. Draw the diagram of alimentary canal of man and label the following parts.
Mouth, Oesophagus, Stomach, Intestine
6. How do carbohydrates, proteins and fats get digested in human beings?
7. Explain the mechanism of photosynthesis.
8. Explain the three pathways of breakdown in living organisms.
9. Describe the flow of blood through the heart of human beings.
10. Describe the process of urine formation in kidneys.