

SARASWATI



HEAD OFFICE

208, CD, LOCAL SHOPPING CENTER
AGGARWAL SHOPPING PLAZA,

BRANCH -1

AYODHYA CHOWK SEC -3
ROHINI

BRANCH -2

DC CHOWK SEC- 9, ROHINI

9TH & 10TH MATHS / SCIENCE
11TH & 12TH – PHYSICS / CHEMISTRY / MATHS / BIOLOGY
EXCLUSIVE BATCH FOR NEET / JEE ASPIRANTS
Ph no. 9696 500 500 / 9696 400 400

Ch- 16 (Digestion and Absorption)

1. Write the dental formula of man.

.....
.....

2. Why are villi present in the ileum and not in the stomach?

.....
.....

3. Which is the largest gland in our body? Name the chemical secreted by this gland.

.....
.....

4. In humans, starch digestion starts in the buccal cavity, but stops in the stomach. Why?

.....
.....

5. Name the substance that make up the chewing surface of teeth.

.....
.....

6. Write the function of epiglottis.

.....
.....

7. Where are crypts of Leiberkuhn located?

.....
.....
8. What is mesothelium?

.....
.....
2 marks

9. Explain the terms thecodont and diphyodont.

.....
.....
.....
10. Name the four basic layers of the wall of alimentary canal.

.....
.....
.....
11. What are the functions of liver?

.....
.....
.....
12. How would non-secretion of saliva affect digestion of food in our mouth?

.....
.....
.....
13. What would happen if HCl were not secreted in the stomach?

.....
.....
14. Amylase is secreted by two different glands. Name them. What is the action of amylase on food?

.....
.....
15. What is the source of enterokinase? Mention its action.

.....
.....
.....
16. How would it affect digestion, if there is a blockade in the bile duct?

Or

Bile juice has no digestive enzymes, yet it is important for digestion. Give reason.

.....
.....
.....
17. How would it affect the digestion of proteins, if there is a blockade in the pancreatic duct?

.....
.....
.....
18. How would it affect the digestion of fats and carbohydrates, if there is a blockade in the pancreatic duct? Explain.

.....
.....
.....
19. It is absolutely not necessary to produce amylase in an inactive form in our body, but it is not so in the case of trypsin. Give reason.

.....
.....
.....
20. Match column I with column II

Column I

Column II

(a) Bilirubin and Biliverdin

(i) Parotid

(b) Hydrolysis of starch

(ii) Bile

(c) Digestion of fat

(iii) Lipases

(d) Salivary gland

(iv) Amylasees

3 marks

21. Name the different types of teeth and their respective number in an adult human.

.....

.....

.....

.....

.....

22. Name and mention the function of each of the three major kinds of cells in the gastric glands.

.....

.....

.....

23. Describe the process of digestion of proteins in the stomach.

.....

.....

.....

24. Draw a labelled diagram of the human duodenum and the duct system of the associated digestive glands pouring their secretions into it.

.....

.....

.....

.....
25. Name three enzymes secreted by pancreas and their action on proteins, fats and starch.

.....
.....
.....
.....

26. How is the nucleic acid fraction of our food digested?

.....
.....
.....
.....

27. In which part of the alimentary canal major absorption of digested food takes place? What are the absorbed forms of different kinds of food materials?

.....
.....
.....
.....
.....

5 marks

28. Discuss the main steps in the digestion of proteins as the food passes through the alimentary canal of human beings.

.....
.....
.....
.....

29. How are polysaccharides and disaccharides digested?

Or

Describe the process of digestion of carbohydrates in human alimentary canal.

.....
.....
.....
.....

30. How does the butter in your food get digested and absorbed in the body?

.....
.....
.....
.....

31. Food is an essential requirement of living beings. Its oxidation in the body cells gives energy for life processes and other activities. If the food consumed is inadequate, the body uses the stored/reserve food materials. Lastly, the proteins of the protoplasmic substances of cells of essential organs are used up; this may become fatal.

(a) When is a man said to be starving?

(b) Name the forms of reserve food materials in human beings.

(c) What value is indicated by storage of food by the body and its use under starvation?

.....
.....
.....
.....
.....
.....

32. Saroj is class VIII student. He has just read that human beings have thirty-two teeth. He starts counting his teeth and finds only twenty-eight. His younger sister, in class I, has only twenty teeth. He asks his mother about these numbers. He also wants to know about the terms diphyodont and heterodont. Write the answers that Saroj's mother would have given him.

- (a) Why does he have only 28 teeth and when will he get 32 teeth?
- (b) What does the word 'heterodont' mean?
- (c) Why does Saroj's sister have only 20 teeth? What are these teeth known as?
- (d) What value is shown by the presence of different teeth?

.....

.....

.....

.....

.....

33. Ranjit and Sanjana, the twins, studying in class IX are reading that the food entering the duodenum, is called chyme or chyle. Listening to this, their elder brother, Ankit, intervenes and gives them the correct information.

- (a) What is chyme?
- (b) What is chyle?
- (c) What is the major difference between the above two?
- (d) What value is shown by Ankit in explaining the correct information?

.....

.....

.....

.....

.....

.....

.....

.....

34. In mammals/humans, digestion of different fractions (like proteins, fats, carbohydrates, etc.) of food takes place in different sections of the alimentary canal. There are different glands pouring their secretions (digestive enzymes) in different parts.

- (a) Where are proteins digested in human alimentary canal?
- (b) Where are the enzymes for protein digestion secreted from in man?
- (c) Where are carbohydrates digested in humans?
- (d) What value is indicated by these processes?

.....
.....
.....
.....
.....
.....

35. Preeti has just read that protein digestion in the stomach is initiated by hydrochloric acid; then the enzymes start digesting the proteins. But she cannot pin-point the function of HCl. Help her answer the following questions.

- (a) What is the role of HCl in protein digestion?
- (b) How is milk protein digested in the stomach of human infants?
- (c) What value do you learn from the action of HCl?

.....
.....
.....
.....
.....
.....
.....
.....