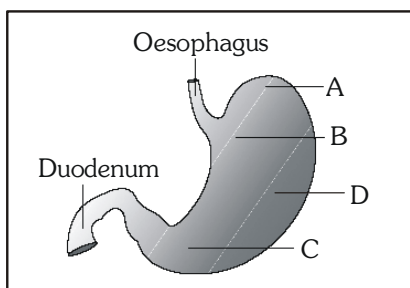


DIGESTION AND ABSORPTION

1.



Anatomical regions of human stomach are :-

- (1) A-Fundus; B-Pyloric; C-Cardia; D-Body
- (2) A-Cardia; B-Fundus; C-Pyloric; D-Body
- (3) A-Fundus; B-Cardia; C-Pyloric; D-Body
- (4) A-Pyloric; B-Fundus; C-Cardia; D-Body

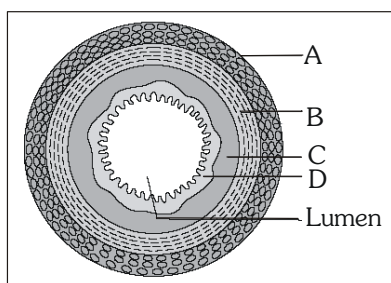
2.

The wall of alimentary canal from stomach to rectum posses four layers. The sequence of these layers from outside to inside is :-

- (1) Serosa → Mucosa → Submucosa → Muscularis
- (2) Mucularis → Serosa → Mucosa → Submucosa
- (3) Serosa → Muscularis → Mucosa → Submucosa
- (4) Serosa → Muscularis → Submucosa → Mucosa

3.

The below diagram represents the TS of gut. Identify A, B, C and D :-



- (1) A - Serosa; B - Muscularis; C - Submucosa; D - Mucosa
- (2) A - Muscularis; B - Serosa; C - Submucosa; D - Mucosa
- (3) A - Serosa; B - Muscularis; C - Mucosa; D - Submucosa
- (4) A - Serosa; B - Submucosa; C - Muscularis; D - Mucosa

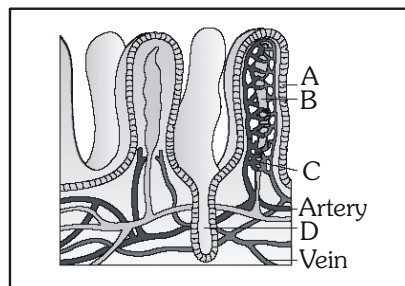
4.

Which of the following statement is false ?

- (1) Mucosal epithelium has goblet cells which secrete mucus for lubrication.
- (2) Mucosa forms gastric glands in the stomach and crypts in between the bases of villi in intestine.
- (3) Cells lining the villi has brush border or microvilli.
- (4) All the four basic layer in the wall of gut never show modification in different parts of the alimentary canal.

5.

The below diagram represents a section of small intestinal mucosa showing villi. Identify A, B, C and D :-



- (1) A - Villi, B - Lacteal, C - Capillaries, D - Crypts
- (2) A - Lacteal, B - Villi, C - Capillaries, D - Crypts
- (3) A - Villi, B - Lacteal, C - Crypts, D - Capillaries
- (4) A - Crypts, B - Lacteal, C - Capillaries, D - Villi

6.

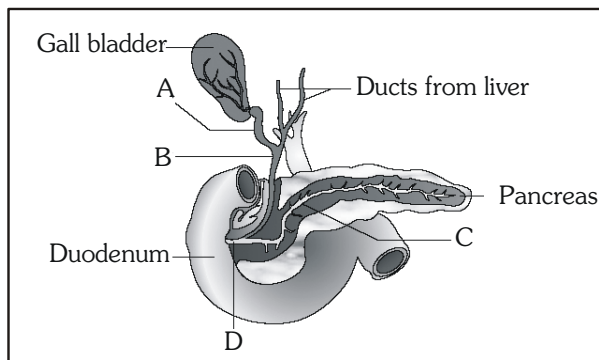
Find out the correct match :-

	Column-I		Column-II
A	Hepatic lobule	I	Base of Villi
B	Crypts of leiberkuhn	II	Glisson's capsule
C	Sphincter of Oddi	III	Gall bladder
D	Cystic duct	IV	Hepato-pancreatic duct

- (1) A-II, B-I, C-IV, D-III
- (2) A-I, B-II, C-IV, D-III
- (3) A-I, B-II, C-III, D-IV
- (4) A-IV, B-III, C-II, D-I

7.

The below diagram is a duct system of liver, gall bladder and pancreas. The names of ducts from A to D :-



- (1) A - Cystic duct, B - Bile duct, C - Pancreatic duct, D - Hepato-pancreatic duct.
- (2) A - Bile duct, B - Cystic duct, C - Pancreatic duct, D - Hepato-pancreatic duct.
- (3) A - Cystic duct, B - Bile duct, C - Hepato-pancreatic duct, D - Pancreatic duct.
- (4) A - Cystic duct, B - Pancreatic duct, C - Bile duct, D - Hepatio-pancreatic duct.

8. Optimum pH of saliva is :-
 (1) 6.8 (2) 8.6 (3) 7 (4) 9.5

9. About 30% starch is digested in :-
 (1) Oral cavity (2) Stomach
 (3) Small intestine (4) Colon

10. Find out the correct matching between the cells of gastric gland and their respective secretory products:-

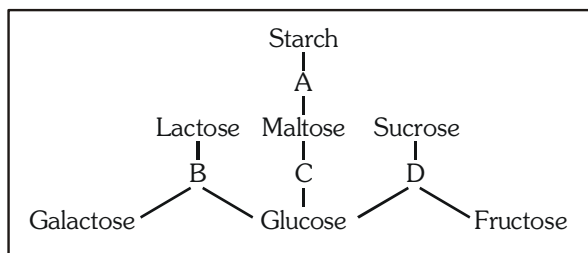
	Column-I		Column-II
A	Mucus neck cells	I	HCl, Intrinsic factor
B	Peptic/Chief cells	II	Mucus
C	Parietal/Oxyntic cells	III	Pepsinogen

- (1) A-II, B-III, C-I (2) A-III, B-II, C-I
 (3) A-I, B-II, C-III (4) A-II, B-I, C-III

11. Enterokinase is :-
 (1) Pancreatic hormone
 (2) Intestinal hormone
 (3) Pancreatic enzyme
 (4) Component of intestinal juice

12. First step in digestion of fat in intestine is :-
 (1) Emulsification
 (2) Enzyme action
 (3) Absorption by lacteals
 (4) Storage in adipose tissue

13. Identify enzymes A, B, C, and D in digestion of carbohydrates :-



- (1) A-Amylase, B-Invertase, C-Maltase, D-Lactase
 (2) A-Amylase, B-Lactase, C-Maltase, D-Invertase
 (3) A-Amylase, B-Maltase, C-Lactase, D-Invertase
 (4) A-Amylase, B-Maltase, C-Invertase, D-Lactase

14. Find out the correct sequence of substrate, enzyme and product :-

- (1) Small intestine : Proteins $\xrightarrow{\text{Pepsin}}$ Amino acids
 (2) Stomach : Fats $\xrightarrow{\text{Lipase}}$ Micelles
 (3) Duodenum : Triglycerides $\xrightarrow{\text{Trypsin}}$ Monoglycerides
 (4) Small intestine : Starch $\xrightarrow{\alpha\text{-Amylase}}$ Maltose

15. Match the columns and choose the correct option :-

	Column-I		Column-II
A	Salivary amylase	I	Proteins
B	Bile Salts	II	Milk protein
C	Rennin	III	Starch
D	Pepsin	IV	Lipids

- (1) A-III, B-IV, C-II, D-I
 (2) A-III, B-IV, C-I, D-II
 (3) A-IV, B-III, C-II, D-I
 (4) A-I, B-II, C-III, D-IV

16. The secretion of the brush border cells along with secretions of goblet cells present in the mucosa of small intestine constitutes :-

- (1) Chyme
 (2) Chyle
 (3) Succus entericus
 (4) Gastric juice

17. The juice having maltase, dipeptidase, lipase, nucleotidase, nucleosidase etc is called :-

- (1) Pancreatic juice
 (2) Gastric juice
 (3) Intestinal juice / Succus entericus
 (4) Bile

18. Which of the following processes is aided by the bile salts ?

- (1) Nucleic acid $\xrightarrow{\text{Nuclease}}$ Nucleotides
 $\xrightarrow{\text{Nucleotidase}}$ Nucleosides $\xrightarrow{\text{Nucleosidase}}$ Sugar + bases
 (2) Sucrose $\xrightarrow{\text{Sucrase}}$ Glucose + Fructose
 (3) Fats $\xrightarrow{\text{Lipase}}$ Diglycerides $\xrightarrow{\text{Lipase}}$ Monoglycerides
 (4) $\left. \begin{array}{l} \text{Proteins} \\ \text{Peptones} \\ \text{Proteoses} \end{array} \right\} \xrightarrow[\text{Carboxypeptidase}]{\text{Trypsin/Chymotrypsin}} \text{Dipeptides}$

19. Which of the following statement is false ?

- (1) The break down of most of biomacromolecules occurs in duodenum.
 (2) Simple substances (digested foods) are absorbed in the jejunum and ileum.
 (3) Very significant digestive activity occurs in large intestine.
 (4) Undigested and unabsorbed substances are passed into the large intestine.

- 20.** Which of the following is not the function of large intestine?

 - Absorption of some water, minerals and certain drugs.
 - Nutrient absorption
 - Secretion of mucus to lubricate faeces
 - Temporary storage of faeces in rectum

21. In addition to neural control, hormones also influence the :-

 - gastric secretions
 - intestinal secretions
 - muscular activities of different parts of alimentary canal
 - All of these

22. Which of the following statement is incorrect?

 - Absorption of simple sugar, alcohol, some water and medicines takes place in stomach.
 - Maximum water absorption occurs in small intestine.
 - Small intestine is the major site of digestion and absorption of food.
 - Fatty acid and glycerol are absorbed by lacteals.
 - Nothing is absorbed in mouth and large intestine.

(1) I, IV and V (2) V
(3) IV (4) II and III

23. Which of the following statement is wrong about chylomicrons?

 - Chylomicrons are produced in the epithelial cells of small intestine.
 - It contains triglycerides, cholesterol and phospholipids.
 - It is carbohydrate coated.
 - Chylomicrons released from the epithelial cell into lacteals.

(1) I and IV (2) II and III
(3) I, II, III and IV (4) Only III

24. Chylomicrons are concerned with :-

 - digestion of fats
 - absorption of proteins
 - digestion of protein
 - absorption of fats

25. Which of the following statement is incorrect?

 - Faecal accumulation in the rectum initiates a neural reflex causing an urge for its removal.
 - Reflex action for vomiting is controlled by medulla.
 - Irregular bowel movements causes constipation
 - In diarrhoea the absorption of food get enhanced

ANSWERS KEY

Que.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Ans.	3	4	1	4	1	1	1	1	1	1	4	1	2	4	1	3	3	3	3	2
Que.	21	22	23	24	25															
Ans.	4	2	4	4	4															