

EXPLANATIONS



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Answer Key

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109	110	111	112	113	114	115	116										
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NCERT Based Questions

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u	c	c	c	d	c	a	a	b	b	c	b	b	c	a	c	d	d
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Multi-Concept Questions

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
c	a	c	c	a	c	b	a	d	a	d	a	c	b	c	c	d	d
19	20	21	22	23	24	25	26	27	28	29	30						
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NEET Past 10 Year Questions

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
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19	20	21	22	23	24	25	26										
d	b	a	b	с	a	с	b										

16. Digestion and Absorption



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Topic-wise Questions

- 1. (a) Food is one of the basic requirements of all living organisms. The major components of our food are carbohydrates, protein and fats.
- **2. (a)** The water we take in, plays an important role in metabolic processes and also prevents dehydration of the body.
- **3. (d)** The process of conversion of complex food substances to simple absorbale forms is called digestion and is carried out by our digestive system by mechanical and biochemical methods
- **4. (d)** The number of teeth that grow twice in human life is 20(8 incisors, 4 canines and 8 molars).
- **5. (d)** Human digestive system consists of alimentary canal and associated/digestive glands.
- **6. (d)** The tongue is a freely movable muscular organ attached to the floor of the oral cavity by the frenulum.
- 7. (b) The small intestine is the largest, narrow and tubular part of alimentary canal. It is divided into three parts proximal duodenum, middle jejunum and distal ileum. Large intestine is divided into caecum, colon and rectum. The correct arrangement of the parts through which food passes from the small intestine to the anus is:
 - $Duodenum \rightarrow Jejunum \rightarrow Ileum \rightarrow Caecum \rightarrow Colon \rightarrow Rectum$
- **8.** (a) The hard chewing surface of teeth that helps in the mastication of food is called enamel.
- 9. (c) Pharynx serve as a common passage for food and air.
- **10. (b)** Number of milk teeth found in humans is 20.
- 11. (d)
- 12. (a) Opening of the trachea of wind pipe is called glottis.
- **13. (d)** The colon is divided into three parts namely ascending, transverse and descending.
- **14. (c)** A narrow finger like tubular projection which is a vestigial organ and arises from caecum is called vermiform appendix.
- **15.** (c) The stomach is located in the upper left portion of abdominal cavity.
- **16.** (d) In man the zymogen or chief cells are mainly found in fundic part of stomach.

- **17. (b)** The outermost layer of the wall of alimentary canal is made up of thin mesothelium (epithelium of visceral organs) with some connective tissue.
- 18. (a) Mucosa forms the lining of the alimentary canal.
- **19. (c)** The structure which prevents the entry of food into respiratory tract is epiglottis.
- **20.** (a) Alimentary canal includes the following parts: buccopharyngeal cavity → oesophagus → stomach → small intestine → Large intestine
- 21. (b) Vermiform appendix is part of alimentary canal.
- 22. (c) The hardest constituent of tooth is enamel.
- **23.** (d) Dental formula shows number and type of teeth in one half of both jaws.
- **24.** (a) Third molar, four in number is called wisdom teeth.
- 25. (c)
- **26.** (d) Pulp cavity of a tooth is lined by odontoblasts
- 27. (c)
- **28. (d)** Type of salivary glands found in human are parotids, submaxillary, sub-linguals and sub-mandibular
- **29. (d)** The opening of hepato-pancreatic duct in the duodenum is guarded by sphincter of Oddi.
- **30.** (c) Liver is situated in abdominal cavity just below the diaphragm.
- **31.** (d) The structural and functional units of liver are called hepatic lobules.
- **32. (d)** Each hepatic lobule is covered by a thin connective tissue sheath called the Glisson's capsule.
- 33. (d) Amount of saliva secreted per day is 1000 ml.
- **34.** (a) The duct of gall bladder is called cystic duct.
- **35. (c)** The cystic duct along with the hepatic duct from liver forms the common bile duct
- **36. (b)** Pancreas produces three types of digestive enzymes and two hormones.
- **37. (b)** Cholesterol is synthesised in liver
- **38. (b)** Phagocytic cells of liver are Kupffer's cells.
- **39. (b)** Gall bladder takes part in the storage of bile.
- 40. (c)
- **41. (b)** Bile is secreted by liver.

- **42. (c)** The level of glucose will not be affected because glucose level can be maintained by the insulin hormone secreted from pancreas and hormones do not pass through duct.
- **43. (b)** Brunner's glands are found in duodenum.
- **44. (d)** Mastication of food and facilitation of swallowing are the major function of buccal cavity.
- **45. (d)** The process of digestion is accomplished by mechanical and chemical processes.

The buccal cavity performs two major functions, mastication of food and facilitation of swallowing.

The teeth and the tongue with the help of saliva masticate and mix up the food throughly.

Mucus in saliva helps in lubricating and adhering the masticated food particles into a bolus.

- 46. (d)
- **47. (b)** Bolus passes down through the oesophagus by successive waves of muscular contractions called peristalsis.
- **48.** (c) Stomach stores food for 4-5 hours.
- **49. (c)** The food mixes throughly with the acidic gastric juice of the stomach by the churning movements of its muscular wall and is called the chyme.
- **50. (b)** Renin acts on milk protein and changes casein into paracasein.
- **51.** (d) Curdling of milk in small intestine would occur with the help of chymotrypsin.
- **52.** (d) The mucus and bicarbonates present in the gastric juice play an important role in lubrication and protection of the mucosal epithelium from excoriation by the highly concentrated HCI.
- **53. (d)** Secretions released in the small intestine are bile juice, pancreatic juice and intestine juice.
- **54. (b)** Because saliva converts starch into maltose.
- **55. (b)** Enzymes present in pancreatic juice are: trypsinogen, amylases, lipases, nucleases, chymotrypsinogen and procarboxy-peptidase.
- **56.** (d) The secretions of the brush border clls of the mucosa along with the secretions of the goblet cells constitute the succus entericus or intestinal juice.
- **57.** (c) The undigested and unabsorbed substances called faeces enters into the caecum of large intestine through ileocaecal valve.
- **58.** (c) In the absence of enterokinase, trypsinogen would not get converted into active trypsin (proteolytic enzyme), so digestion of protein (like albumin) is affected in intestine.
- **59. (b)** Partially digested semisolid food formed in stomach is chyme.
- Physics Wallah

- 60. (b)
- **61. (c)** Succus entericus is secreted by crypts of Lieberkuhn and Brunner's glands.
- 62. (c) Lactose

 Lactase → Glucose + Galactose
- **63. (b)** Carbohydrate digestion begins in mouth by salivary amylase.
- **64. (b)** Prorennin is produced by zymogen or chief or peptic cells.
- **65. (b)** Pepsin acts in acidic medium (pH 1.8).
- **66. (b)** Nucleotidase is found in intestinal juice.
- 67. (d)
- **68.** (a) Bile juice helps in the digestion of fats due to presence of bile salts (sodium glycolate and taurocolate).
- 69. (a) Pepsinogen is found in gastric juice.
- **70. (b)** Enzyme maltase of human gut acts on food at pH more than 7 (7.8), changes maltose to glucose.
- **71. (b)** Trypsin differs from pepsin in digestion of protein in alkaline medium (7.8pH).
- **72. (b)** DNase and RNase (nucleases) enzymes produced by pancreas.
- 73. (d) Muscular contractions of alimentary canal are peristalsis.
- **74. (b)** Glucose is stored in the liver as glycogen. Glycogen can be converted to free glucose by the process of glycogenolysis, which involves the activation of a phosphorylase enzyme by the hormone glucagon. glucagon is made by the pancreas and is released when the blood sugar levels fall.
- 75. (c)
- **76.** (c) In humans, digestion is extracellular (outside the cell).
- 77. (a) Cattle are able to digest cellulose which humans cannot because cattle have cellulose digesting bacteria.
- **78. (b)** Hydrolysis of lipids produces fatty acids and trihydric alcohol (glycerol).
- **79.** (a) HCI in gastric juice inactivates ptyalin (salivary amylase) and activates pepsin.
- **80. (c)** When food moves through your digestive system, it enters through the mouth and then passes to the stomach, small intestine, and finally the colon.
- **81. (b)** In case of taking food rich in lime juice, the action of ptyalin on starch is reduced because lime juice decreases the pH.
- 82. (a) Fat digestion is facilitated by bile juice.
- **83. (d)** On removal of pancreas, the compound which remains undigested is protein because pancreas release trypsinogen (main proteolytic enzyme).

Digestion and Absorption

- 84. (a) Pepsin initiates protein digestion in stomach.
- **85. (c)** Enzyme which does not directly act upon food substrate is enterokinase (it acts on another proenzyme trypsinogen).
- **86.** (d) pH of succus entericus is 7.8
- 87. (b)
- 88. (b)
- **89.** (a) Common among amylase, rennin and trypsin is that these all are enzymes/proteins.
- **90.** (a) The process by which the end products of digestion pass through the intestinal mucosa into the blood or lymph is called absorption.
- **91.** (d) The absorbed substances finally reach the tissues which utilise them for their activities. This process is called assimilation.
- **92.** (a) Defaecation is carried out by mass peristaltic movement and is a voluntary process.
- **93.** (d) Beer (alcohol) leaves human stomach at the earliest.
- **94. (b)** Lacteals take part in absorption of fat /fatty acids and glycerol.
- 95. (a) Functional units of food absorption are villi.
- **96. (b)** Intestinal villi are mainly concerned with absorption.
- **97.** (d) In small intestine, active absorption occurs in case of glucose, amino acids and Na⁺ ions.
- 98. (d) Fatty acids and glycerol being insoluble, cannot be absorbed into the blood. They are first incorporated into small droplets called micelles which move into the intestinal mucosa. They are re-formed into very small protein coated fat globules called the chylomicrons (tritglycerices), which are transported into the lymph vessels (lacteals)in the villi. These lymph vessels ultimately release the absorbed substances into the blood stream.
- 99. (d) End product of protein digestion is amino acid.
- **100. (d)** Epithelial cells involved in absorption of digested food have microvilli on their free surface.
- **101.(b)** Part of alimentary canal meant for reabsorption of water from chyle is colon.
- 102.(b)
- **103.(c)** Most digestion and absorption takes place in small intestine.
- 104. (d)
- 105. (a) Most of the fats absorbed in small intestine enter lacteal.
- **106.(b)** The most common ailment of the digestive system is inflammation of the intestinal tract.

- **107.** (d) Vomit centre is located in medulla of hindbrain.
- **108. (c)** Pellagra is characterised by swollen lips, thick pigmented skin of hands and legs, and irritability.
- **109.** (d) Ejection of stomach contents through the mouth is called vomiting.
- 110. (a) A patient is advised to specially consume more meat, lentil, milk and eggs in diet when the patient suffers from protein deficiency, i.e., kwarshiorkar.
- 111. (d) Marasmus is caused by a simultaneous deficiency of proteins and carbohydrates. It is found in infants less than a year in age, if mother's milk is replaced too early by other foods which are poor in both proteins and caloric value, or if the mother has second pregnancy or childbirth when the older infant is still too young.
- 112. (b) Major requirement of protein in the body is for growth.
- 113. (c)
- **114. (b)** Vitamin K is required for synthesis of prothrombin.

115. (a)

116. (c) A doctor advises a patient to eat more yellow fruits, carrots and butter. The patient seems to be suffering from night blindness.

NCERT Based Questions

1. (c)

A. Stomach	3. J-shaped
B. Duodenum	1. C-shaped
C. Villi	4. Finger like
D. Rugae	5. Irregular fold

2. (b) The bile released into the duodenum contains bile salts, bile pigments (bilirubin and bili-verdin), cholesterol and phospholipids but no enzymes.

3. (c) 4. (b)

- **5.** (c) The egestion of faeces to the outside through the anal opening is called defaecation.
- **6. (a)** Absorption of glycerol, fatty acids and monglycerides take place by lymph vessels within villi.
- 7. (d)
- **8. (c)** Deficiency of HCI leads to non-conversion of inactive pepsiongen into active pepsin if secretion of parietal cells of gastric glands is blocked.
- 9. (c) A gastrovascular cavity has a single opening.
- 10. (b) 11. (c)
- **12. (c)** Blood of anaemic patient has large immature nucleated erythrocytes without haemoglobin. His diet should be supplemented with iron compounds.

- 13. (b)
- **14. (d)** Both the crown and root of tooth is covered by a hard bony substance called dentine.
- 15. (c)
- **16. (a)** Pancreatic juice contains variety of inactive enzymes like trypsinogen, chymotrypsinogen, and carboxypeptidases.
- 17. (d) Chemical process of digestion starts in the oral cavity by the hydrolytic action of the carbohydrate (potato contains starch) splitting enzyme, the salivary amylase. Carbohydrates in the chyme are hydrolysed by pancreatic amylase into disaccharides.
- **18. (d)** All macromolecules are too large to be absorbed without first being broken down into simpler substances.
- 19. (d) Intestinal villi are the numerous small finger-shaped projections which increases the absorptive surface area. They contain abundant blood capillaries and lymph vessels called lacteals. They also possess countless minute microvilli which further add to the absorptive surface.

They do not participate in the digestion of fats but helps in their absorption and various other food substances such as water, mineral, salts, amino acids, vitamins, etc.

- 20. (c) 21. (c)
- 22. (c) The duct of gall bladder along with hepatic duct from the liver forms the common bile duct. The bile duct and the pancreatic duct open together into the duodenum as a common hepato-pancreatic duct which carries both bile and pancreatic juice.
- 23. (d) 24. (c)
- **25.** (a) Tetanus is a medical condition which is characterised by a prolonged contraction of skeletal muscle fibres. Hence, this disorder is not associated with digestive system.
- 26. (a) 27. (b)
- **28. (b)** Adrenal gland is not associated with the alimentary canal. This gland is present at the anterior part of each kidney acting as an endocrine gland, involve in regulating body growth and developmental mechanisms.
- **29. (c)** Tongue is a freely movable muscular organ that is attached to the floor of the oral cavity by the frenulum.
- **30. (b)** The tongue functions primarily to move food into position for chewing and swallowing. It also functions in tasting food and facilitating speech.
- **31. (b)** Biomacromolecules of food like carbohydrates, fats, proteins and nucleic acid are converted into simpler monomers during the digestion process.

Human digestive system consists of alimentary canal and its associated gland.

Stomach is the widest organ of the alimentry canal. It is a J-shaped bag like structure, and plays an important role in digestion.

The codont are teeth that are embedded in the sockets of the jaw bones.

Serosa is an another name for serous membrane, forming outer wall of the visceral organs.

32. (c) Duodenum is a 'C'-shaped structure emerging from the stomach.

Epiglottis is a cartilaginous flap that prevents the entry of food into the glottis.

Glottis is the opening of the wind pipe.

Caecum is a small blind sac which hosts some symbiotic microorganisms that helps in the digestion process.

- 33. (a) 34. (c)
- **35. (d)** Both gall stones and enlargement of pancreas can produce jaundice by blocking the entry of bile into the duodenum. Hepatitis decreases the liver's ability to excrete bilirubin. Excessive fragile RBC may release so much haemoglobin in the blood that bilirubin is formed in very high concentration, producing jaundice.
- **36.** (d) Lipase is a fat digestive enzyme.

Nuclease is the enzymes that digest nucleic acid.

Carboxypeptidases are the enzymes involved in the digestion of proteins, peptones and proteases.

Dipeptidases are the enzymes that break dipeptides into amino acids.

37. (b) Arrangement of teeth in each half of the upper and lower jaw in the order I,C,PM,M is represented by a dental 2123

formula, which in humans is
$$\frac{2123}{2123}$$
.

- 38. (a)
- **39. (d)** Liver plays a critical role in controlling rate metabolism by maintaining glucose concentration in normal range but gastrin is secreted by G-cells in pyrolic region of stomach not by liver. It stimulates gastric glands to secrete and release gastric juices.
- **40. (a)** Trypsinogen is an inactive pancreatic enzyme that is activated by enterokinase enzyme secreted by intestinal mucosa. Active form of trypsinogen is called trypsin, which in turn, activates other enzymes present in the pancreatic juice.

Digestion and Absorption

41. (a) During swallowing, the epiglottis covers the opening to the airways to prevent the entry of food or liquid, therefore, if the epiglottis does not function properly then one might get congestion.

42. (b)

Multi-Concept Questions

- 1. (c) Chylomicrons are assembled in the intestine and transport dietary triglycerides to the periphery. Endogenously synthesised triglycerides are transported in the form of VLDL (very low density lipoprotein), cholesterol is transported to the periphery in the form of LDL (low density lipoprotein) and reverse cholesterol transport takes place by HDL (high density lipoprotein).
- 2. (a)
- **3. (c)** The main cause of neonatal jaundice (very high load of bilirubin in a newborn) is excessive breakdown of the red blood cells and is known as haemolytic disease of the newborn. This occurs when there is a incompatibility between the blood groups of mother and her baby.
- **4. (c)** Trypsinogen is activated by an enzyme, enterokinase, secreted by the intestinal mucosa into active trypsin, which in turn activates the other enzymes in the pancreatic juice.
- 5. (a)
- **6. (c)** Arrangement of teeth in each half of the upper and lower jaw in the order I, C, PM, M is represented by a dental formula.
- 7. (b)
- 8. (a) Oxyntic cells secrete HCl (pH: 2.0-3.0) and intrinsic factor (factor essential for absorption of vitamin B₁₂). Alpha cells of islets of Langerhans secrete the peptide hormone glucagon, which elevates the glucose levels in the blood. Kupffer cells are specialised macrophages found in the liver.
- 9. (d)
- 10. (a) Small amounts of monosaccharides like glucose, amino acids and some electrolytes like chloride ions are generally absorbed by simple diffusion.
- 11. (d) 12. (a) 13. (c)
- **14. (b)** Pellagra is a disease that occurs due to deficiency of vitamin nicotinamide. Its symptoms are swollen lips, diarrhoea, thick pigmented skin of hands and legs and nervous disorder (irritability).
- 15. (c)
- **16. (c)** The tongue along with saliva also helps in mastication and mix up the food thoroughly.

- 17. (d)
- **18. (d)** Trypsinogen is activated by an enzyme, enterokinase, secreted by the intestinal mucosa into active trypsin, which in turn activates the other enzymes in the pancreatic juice.
- **19. (d)** Brunner's gland help in maintaining alkaline pH and protects the intestinal mucosa from acid.
- 20. (d)
- **21.** (a) Sub-mucosal glands secretes mucus which along with bicarbonates (secreted by pancreas) protect the epithelium.
- **22.** (a) The upper surface of the tongue has small projections called papillae, some of which bear taste buds.
- **23. (c)** The process of digestion is accomplished by mechanical and chemical processes. About 30 per cent of starch is hydrolysed by salivary amylase.
- **24.** (a) Statements B, C and D are correct.

 The undigested food becomes semi-solid in nature and then enters into the rectum.
- **25. (b)** Each villus is richly supplied with blood capillaries and lymph vessel or lacteal. Peptic or chief cells secrete the proenzyme pepsinogen.
- **26. (c)** Triglycerides are coated with phospholipids, cholesterol, and proteins to form chylomicrons
- 27. (d) The abnormal frequency of bowel movement and increased liquidity of the faecal discharge is known as diarrhoea. It reduces the absorption of food. Vomiting is the ejection of stomach contents through the mouth. This reflex action is controlled by the vomit centre in the medulla. The digestive wastes, solidified into coherent faeces in the rectum initiate a neural reflex causing an urge or desire for its removal.
- 28. (c) The intestinal mucosal epithelium has goblet cells which secrete mucus. The secretions of the brush border cells of the mucosa along with the secretions of the goblet cells constitute the intestinal juice or succus entericus. This juice contains a variety of enzymes like disaccharidases (e.g., maltase), dipeptidases, lipases, nucleosidases, etc. Thus, due to certain abnormality, if brush-bordered cells of intestine not developed, complete digestion of proteins and carbohydrates does not occur.
- 29. (b) In alimentary canal, serosa is the outermost layer and is made up of a thin mesothelium (epithelium of visceral organs) with some connective tissues. In esophagus, instead of serosa, a dense sheath of collagen fibers called the adventitia is present which lacks mesothelium.

30. (b) Myenteric plexuses are located between the inner and outer layers of the muscularis externa.

NEET Past 10 Year Questions

1. (a) NCERT (XI) Ch - 16, Pg. 262

Trypsinogen is activated by an enzyme, enterokinase, secreted by the intestinal mucosa into active trypsin, which in turn activates the other enzymes in the pancreatic juice.

2. (b) NCERT (XI) Ch - 16, Pg. 259-260

Serosa is the outermost layer of the alimentary canal. The innermost layer lining the lumen of the alimentary canal is the mucosa.

Vermiform appendix which is a vestigial organ, arises from the caecum.

Highly coiled ileum opens into the large intestine.

3. (b) NCERT (XI), Ch - 16, Pg. 282

Rennin is a proteolytic enzyme found in gastric juice of infants which helps in the digestion of milk proteins.

4. (b) NCERT (XI), Ch - 16, Pg. 262

Gastric glands secretre parietal or oxyntic cells. These cells are responsible for the secretion of HCl and intrinsic factor (factor essential for absorption of vitamin B₁₂).

5. (b) NCERT (XI) Ch - 16, Pg. 262

Goblet cells secrete mucus and bicarbonates present in the gastric juice which plays an important role in lubrication and protection of the mucosal epithelium from excoriation by the highly concentrated HCl.

6. (c) NCERT (XI) Ch - 16, Pg. 260 & 262

Crypts of Lieberkuhn are present in small intestine. Glisson's capsule is present in liver. Islets of langerhans constitutes the endocrine portion of pancreas. Brunner's glands are found in submucosa of duodenum.

7. (b) NCERT (XI) Ch - 16, Pg. 257

In humans, teeth are embedded in sockets of jaw (thecodont); produced in two sets – deciduous or milk teeth followed by permanent set of teeth (diphyodont); and of more than a tooth morphology – Incisors, Canine, Pre- molars and molars (heterodont).

8. (d) NCERT (XI) Ch - 16, Pg. 262

Parietal cells of stomach secrete intrinsic factor, which is necessary for absorption of vitamin B_{12} , essential for erythropoiesis.

9. (b) NCERT (XI) Ch - 16, Pg. 260

- Kupffer-cells are phagocytic cells of liver.
- Zymogen cells are enzyme producing cells.

- Paneth cell secretes lysozyme which acts as antibacterial agent.
- Argentaffin cells are hormone producing cells.
- **10. (c)** Total number of teeth in human child = 20. Premolars are absent in primary dentition.

11. (d) NCERT (XI) Ch - 16, Pg. 262

Rennin and pepsin enzymes are present in the gastric juice. Maltase is present in the intestinal juice.

12. (d) NCERT (XI) Ch - 16, Pg. 261

The bile duct and the pancreatic duct open together into the duodenum as the common hepato-pancreatic duct which is guarded by a sphincter called the sphincter of Oddi.

13. (b) NCERT (XI) Ch - 16, Pg. 262

Parietal or Oxyntic cells secrete HCl and intrinsic factor (factor essential for absorption of vitamin B₁₃).

14. (a) NCERT (XI) Ch - 16, Pg. 262

Rennin is a proteolytic enzyme found in gastric juice of infants which helps in the protein digestion. Small amounts of lipases also secreted by gastric glands.

15. (c) NCERT (XI) Ch - 16, Pg. 263

Brunner glands are present in the submucosa of intestine. Secretion of Brunner glands along with secretion of crypts of lieberkuhn constitutes intestinal juice.

16. (a) Milk teeth of man include 8 incisors, 4 canines and 8 molars (premolars are absent). Molar of milk teeth are shed off and replaced by premolars.

17. (a) NCERT (XI) Ch - 16, Pg. 263

The secretions of the goblet cells along with secretion of brush border epithelium constitute the intestinal juice or *succus entericus*. This juice contains a variety of enzymes like disaccharidase (maltase), dipeptidases, lipases, nucleosidases, etc.

18. (c) NCERT (XI) Ch - 16, Pg. 265

Fructose, glucose and some amino acid are absorbed with the help of Na⁺ by facilitated diffusion.

19. (d) NCERT (XI) Ch - 16, Pg. 262

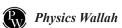
Rennin is a proteolytic enzyme found in gastric juice of infants which helps in protein digestion.

20. (b) NCERT (XI) Ch - 16, Pg. 265

Amino acid absorb into blood by active transport.

21. (a) NCERT (XI) Ch - 16, Pg. 259

Caecum is a small blind sac which hosts some symbiotic micro-organisms. A narrow finger -like tubular projection, the vermiform appendix which is a vestigial organ, arises from the caecum.



Digestion and Absorption

22. (b) NCERT (XI) Ch - 16, Pg. 266

Anxiety and eating spicy food together in an otherwise normal human, may lead to indigestion. In this condition, the food is not properly digested leading to a feeling of fullness. The causes of indigestion are inadequate enzyme secretion, anxiety, food poisoning, over eating, and spicy food.

Trypsinogen is activated by an enzyme enterokinase, secreted by the intestinal mucosa into active trypsin, which in turn activates the other enzymes in the pancreatic juice.

Dental formula of adult human teeth is

$$\frac{2}{2}, \frac{1}{1}, \frac{2}{2}, \frac{3}{3}$$

25. (c) NCERT (XI) Ch - 16, Pg. 262

In humans mile protein digesting enzyme in stomach is pepsin. Rennin is also present in small amounts in human infants but not adults. Pepsin acts on water soluble caseinogen (milk protein) to form soluble 'casein'.

26. (b) NCERT (XI) Ch - 16, Pg. 258

During swallowing, glottis can be covered by a thin elastic cartilaginous flap called epiglottis to prevent the entry of food into the larynx.

ABOUT PHYSICS WALLAH



Alakh Pandey is one of the most renowned faculty in NEET & JEE domain's Physics. On his YouTube channel, Physics Wallah, he teaches the Science courses of 11th and 12th standard to the students aiming to appear for the engineering and medical entrance exams.



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