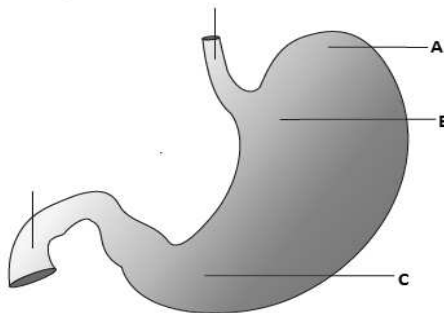


DIGESTION AND ABSORPTION

navas cheemadan

- What are the major components of food?
- Largest endocrine gland : Thyroid gland
Largest gland :
- Salivary gland : salivary amylase
Gastric gland :
- Liver : Hepatic duct
Gall bladder :
- Pneumotaxic centre : pons
Vomit centre :
- What are the functions of
a) Food
b) organic materials
- Arrange the following enzymes under 2 heading
(Pepsin, salivary amylase, maltase, trypsin, lactase, sucrose)
- What is the role of digestion in human being?
- Explain the term digestion?
- Arrange the following events in correct order
(Egestion-digestion-assimilation-ingestion-absorption)
- Label the parts



- Arrange the parts of alimentary canal in correct order
(Anus, stomach, large intestine, small intestine, mouth, oesophagus)
- Expand
a) CCK b) GIP c) PEM
- Hydrochloric acid of pH 1.8 (Acidic) is present in the stomach,
a) How the stomach is protected from the action of HCl
b) What are the function of HCl
c) What ill happened if HCl is not secreted.
- Which factor in gastric secretion helps in the absorption of Vitamin B12 ?
- An empty stomach contains several infoldings. Which are the projections of mucosa layer of stomach

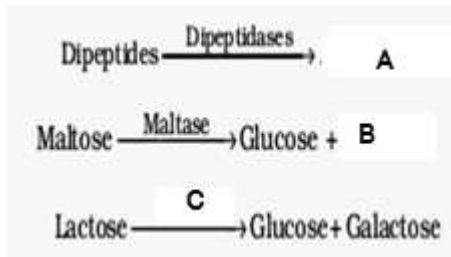
- Name it
 - What is its function
- Explain the following terms
a) Frenulum b) Thecodont
c) Diphyodont d) Heterodont
 - Grandmother told to Vishnu, don't talk while eating food.
a) Do you agree with this statement
b) Substantiate
 - In a television Medical show related to human digestion, Doctor said that " No significant digestive activity occurs in the large intestine "
a) Do you agree with this statement
b) What are the function of large intestine
 - Write down the dental formula of human being?
 - Fill in the blanks

Type of teeth	Total number of teeth in adult
Incisor	6
canine	
Pre molar	
molar	

- Write an account on kwashiorkor and marasmus?
- Why human teeth are called heterodont?
- Write one word for the following
a) breaking down of the fats into very small micelles
b) Structural and functional unit of liver
c) human being forms two sets of teeth during their life
d) Each tooth is embedded in a socket of jaw bone
e) An adult human has 32 permanent teeth which are of four different types
f) Common passage for both food and air
g) Largest gland in the human body
h) small protein coated fat globules
- Bile juice is secreted by the liver. But it lacks any digestive enzyme.
a) what is the function of bile juice in human digestion?
b) what are the component of bile juice
- Ultimate form of all energy is
- A young infant may be feeding entirely on mothers milk, which is white in color but the stools, which the infant passes out is quite yellowish . What is this yellowish colour due to?

DIGESTION AND ABSORPTION

28. Fill A,B and C



29. Hardest part of human body?

30. Match the following

a) Goblet cells	1) anti bacterial agent
b) lysozyme	2) mucus
c) saliva	3) HCl
d) oxyntic cell	4) sublingual gland
	5) Pepsinogen

31. What is the function of enamel ?

32. Where do you find the following

- a) Lacteal b) Papille
- c) brunners gland
- c) Gastro oesophageal sphincter
- d) Ileo-caecal valve
- e) Pyloric sphincter
- f) sphincter of oddi
- g) crypts of Lieberkuhn
- h) Lysozyme

33. Write down any 2 carbohydrate digesting enzyme present in the intestinal juice (Succus entericus)

34. Which component of the food digested first in the alimentary canal

- a) protein b) lipid c) Carbohydrate d) Nucleic acid

35. In a class discussion your Biology teacher argued that Protein digestion will not occur if the pH of stomach is increased into 7.

- a) Do you agree with this statement?
- b) What is the role of HCl in digestion

36. Utilization of absorbed food material by the cell is called.....

37. Small intestine is the longest intestine.

- a) What is the advantage of such lengthy intestine
- b) What are the parts of large intestine?

38. Find the odd man

- a) Incisor, canine, ileum, molar
- b) Duodenum, jejunum, caecum, ileum
- c) Pepsinogen, Trypsinogen, chymotrypsinogen, amylase
- d) Jaundice, emphysema, diarrhoea, vomiting

39. Which of the following pair is true

Parotid gland - lower jaw

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Sublingual gland	-	below tongue
Sub maxillary gland	-	cheek
Peptic cell	-	HCl

40. What is the function of epiglottis in human?

41. How stomach wall is protected from the action of HCl?

42. a) Why pancreas is called as heterocrine gland?

b) What are the components of pancreatic juice?

c) What are the 4 types of pancreatic enzyme?

43. Identify the part of body

- a) Widest part of alimentary canal
- b) C-shaper part of alimentary canal
- c) Last molar teeth
- d) Largest gland in the human body
- e) The digestive gland without digestive enzyme

44. Intestinal mucosa secrete an enzyme called Enterokinase. It has to play a major role in protein digestion, But it never digest a protein

a) Evaluate this statement

b) show its action in human digestion

45. Gastric juice of infants contains milk protein digesting enzyme called.....

46. Match the following

List I	List II
A. Salivary amylase	i. Protein
B. Bile salts	ii) Milk protein
C. Rennin	iii) Starch
D. Pepsin	iv) Lipids
E. Steapsin	v) Emulsification of fat

47. Wave like movement of oesophagus is called.....

48. Explain the following

- a) bolus
- b) Chyme

49. Write any three Gastro intestinal hormone with its function ?

50. Which of the following part regulate the back flow of faecal matter from large intestine to small intestine

- a) Pyloric sphincter
- b) Gastro-oesophageal spincter
- c) Ileo-caecal valve
- d) semilunar valve

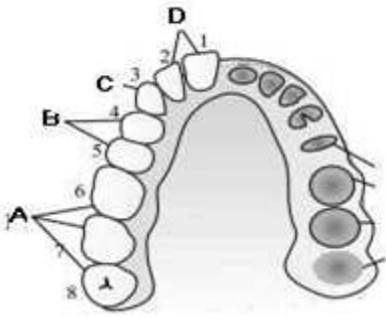
51. Which type of stomach movement helps in mixing of food with gastric juice ?

52. Label the following part

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The food he eat never return into mouth, give reason?



53. What is the role of Intrinsic factor to human?
54. The wall of alimentary canal from oesophagus to rectum possesses four layers namely serosa, muscularis, sub-mucosa and mucosa
- Where do you find Smooth muscles from the above layers
 - What are the components of serosa and sub mucosa
55. Doctor satheesh told to his patient that, he is suffering from indigestion.
- What are the causes of indigestion?
 - Write any other digestive disorder with reason?
56. Explain protein digestion using reactions?

60. Find out the correct match

a)Hepatic lobule	1.Sub mucosal glands
b)brunner's gland	2.Bases of villi
c)Crypts of Lieberkuhn	3.Glisson's capsule
d)Sphincter of oddi	4.Gall bladder
e)Cystic duct	5.Hepatopancreatic duct
	6.Serous gland

61. Which of the following statement is true

- Sub mucosa of duodenum contains brunners gland
- chief cells of gastric gland secrete HCl
- maximum absorption of food occurs in the small intestine
- Stomach stores food material for 4-5 hours

62. Why salivary amylase not functioning in stomach?

63. Fatty acids and glycerol being insoluble, cannot be absorbed into the blood

a)then how it is absorbed into blood?

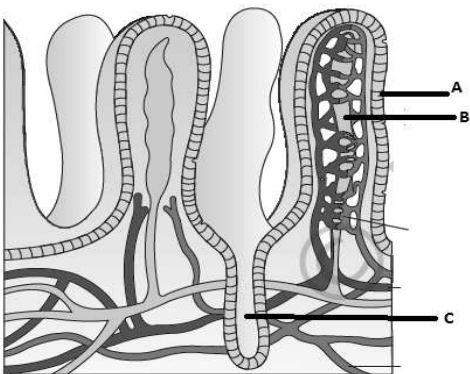
b)What is emulsification of fat?

64. Anti bacterial agent present in the saliva is.....?

65.

66. a)Identify the diagram

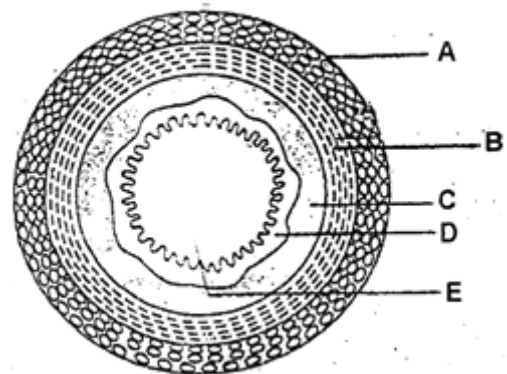
57. A)Label the part



b)what is the function of villus in human being?

58. Maximum absorption of food material take place from.....

59. Ramu eat his food in inverted position as shown below



b)Label A,B,C,D and E

c)Where do you find Gastric gland and intestinal gland from the above diagram

67. Match Coloumn I with coloumn II and chose the correct option

Coloumn i	Coloumn II
A)goblet cell	1.Antebacterial agent
B)Lysozyme	2. Mucus
C)Saliva	3.HCl
D)oxyntic cell	4.Sublingual gland

68. Match the coloumn I with Coloumn II and Coloumn III. Choose the correct option

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Coloumn I (substrate)	Coloumn II (Enzyme)	Coloumn III (Product)
1.Lactose	A.Lipase	I.Galactose
2.Monoglycerides	B.Trypsin	II.Maltose
3.Starch	C.Lactose	III.Fatty acid
4.Peptone	D.amylase	iv)Dipeptides

69. Match the following

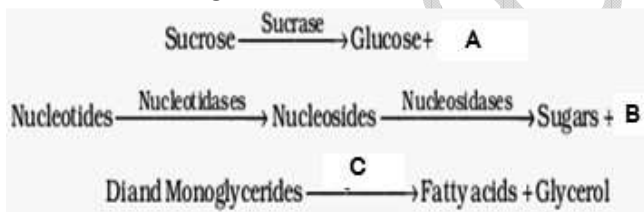
Coloumn1	Coloumn2
a)Cardiac sphincter/Gastro esophageal sphincter	i)opening of hepato pancreatic duct into duodenum
b)sphincter of oddi	ii)between duodenum and posterior stomach
c)ileo caecal valve	iii)between oesphagus and anterior stomach
d)pyloric sphincter	iv)between small intestine and large intestine

70. "The end product of fat digestion are not absorded directly into blood stream". Justify

71. a) Which is the carbohydrate digesting enzyme in the saliva?

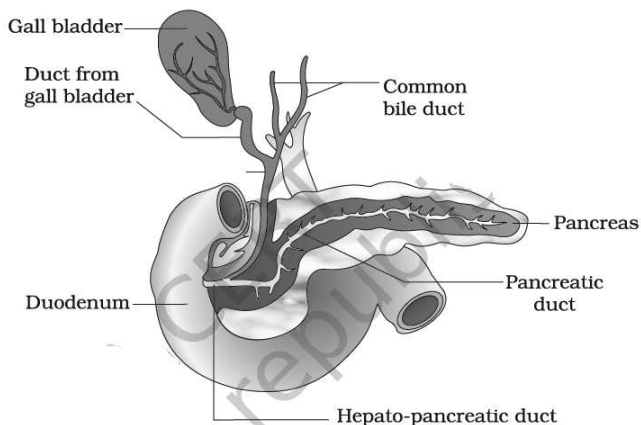
b)what is its optimum pH?

72. Fill the blank using correct answers



73. Explain digestion of starch using reactions?

74. Which of the following is labeled incorrectly



75. From which part of the body drugs, minerals and water is absorbed?