

Digestion and Absorption

I. Select the correct answer from the following questions:

Question 1.

Trypsin convert

- (a) Fats into fatty acids
- (b) Sucrose into glucose and fructose
- (c) Proteins into peptones
- (d) Starch and glycogen into maltose

▼ Answer

Answer: (c) Proteins into peptones

Question 2.

Liver cells secrete

- (a) Trypsin
- (b) Bile and no enzyme
- (c) Amvlopsin
- (d) Lipase

▼ Answer

Answer: (b) Bile and no enzyme

Question 3.

Bilirubin and biliverdin mainly occur in

- (a) Blood
- (b) Bile
- (c) Pancreatic juice
- (d) Saliva

▼ Answer

Answer: (b) Bile

Question 4.

Milk protein is curdled into

- (a) Rennin
- (b) Maltase
- (c) Trypsin
- (d) Lactase

▼ Answer

Answer: (a) Rennin

Question 5.

Amino acids are absorbed by

- (a) Lacteals of villi
- (b) wall of rectum
- (c) Blood capillaries of villi
- (d) Lacteals and blood capillaries of villi

▼ Answer

Answer: (c) Blood capillaries of villi

Question 6.

Glycogen is stored in

- (a) Liver only
- (b) Liver and muscles
- (c) Muscles only
- (d) Pancreas

▼ Answer

Answer: (b) Liver and muscles

Question 7.

Renin is found is

- (a) Gastric juice in stomach
- (b) Pancreatic juice

- (c) Kidneys
- (d) Liver

▼ Answer

Answer: (a) Gastric juice in stomach

Question 8.
Digestion of fats, proteins and carbohydrates is completed in

- (a) Large intestine
- (b) small intestine
- (c) stomach
- (d) Liver

▼ Answer

Answer: (b) Small intestine

Question 9.
Gastric juice contains

- (a) Pepsin
- (b) Rennin
- (c) HCl
- (d) All of these

▼ Answer

Answer: (d) All of these

Question 10.
Which of these is a group of end product of carbohydrate digestion?

- (a) Galactose, glucose, maltose
- (b) Sucrose, galactose, maltose
- (c) Glucose, galactose, fructose
- (d) None of these

▼ Answer

Answer: (c) Glucose, galactose, fructose

Question 11.
Human digestive juices lack

- (a) Amylase
- (b) Nucleases
- (c) Cellulase
- (d) Lactase

▼ Answer

Answer: (c) Cellulase

Question 12.
In alimentary canal maximum absorption of water occurs in

- (a) Rectum
- (b) Stomach
- (c) Small intestine
- (d) Large intestine

▼ Answer

Answer: (a) Rectum

Question 13.
Starch is hydrolysed by

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

▼ Answer

Answer: (c) Amylase

Question 14.
Chief function of bile is

- (a) Emulsification of fat
- (b) Regulation of digestion
- (c) Elimination of waste products
- (d) Digestion of fat through enzymes.

▼ Answer

Answer: (a) Emulsification of fat

Question 15.

Gastric juice contains

- (a) Pepsin, lipase and rennin
- (b) Pepsin, trypsin and rennin
- (c) Pepsin only
- (d) Pepsin, amylase and rennin

▼ Answer

Answer: (a) Pepsin, lipase and rennin

Question 16.

Trypsin changes

- (a) Protein to polypeptides
- (b) Starch to sugar
- (c) Fats to fatty acids and glycerol
- (d) All of these

▼ Answer

Answer: (a) Protein to polypeptides

Question 17.

HCl of gastric juice is produced by

- (a) Oxyntic cells
- (b) Chief cells
- (c) Columnar
- (d) Goblet cells

▼ Answer

Answer: (a) Oxyntic cells

Question 18.

Glycogen is formed from

- (a) Lactic acid
- (b) Amino acids
- (c) Glucose
- (d) All of these

▼ Answer

Answer: (d) All of these

Question 19.

The end product of carbohydrate digestion is

- (a) Lactose
- (b) Maltose
- (c) Sucrose
- (d) Glucose

▼ Answer

Answer: (d) Glucose

Question 20.

teeth are used for cutting food.

- (a) Incisors
- (b) Canines
- (c) Molar
- (d) Premolar

▼ Answer

Answer: (a) Incisors

Question 21.

The secretion that lubricates the alimentary canal

- (a) Bile juice
- (b) Pepsin
- (c) Gastric juice
- (d) Mucus

▼ [Answer](#)

Answer: (d) Mucus

Question 22.

On chewing food became sweet since

- (a) Food contains vitamin B
- (b) Food contains sugar
- (c) Salivary gland pour saliva
- (d) None of the above

▼ [Answer](#)

Answer: (c) Salivary gland pour saliva.

Question 23.

Largest gland of human body is

- (a) Heart
- (b) Pancreas
- (c) Liver
- (d) None of the above

▼ [Answer](#)

Answer: (c) Liver

Question 24.

Large intestine is a muscular tube of about

- (a) 1.5 m
- (b) 1m
- (c) 2.5 m
- (c) 2m

▼ [Answer](#)

Answer: (a) 1.5 m

Question 25.

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 which in human is

- (a)
- (b)
- (c)
- (d)

▼ [Answer](#)

Answer: (b)

II. Fill in the blanks:

Question 1.

The major components of our food are, and

▼ [Answer](#)

Answer: Carbohydrates, proteins, fat

Question 2.

Food provides energy and for growth and repair of tissues.

▼ [Answer](#)

Answer: organic materials

Question 3.

..... in food cannot be utilised by our body in their original form.

▼ [Answer](#)

Answer: Bio macromolecules

Question 4.

Digestive system process of conversion of complex food substances to simple absorbable form is called

▼ [Answer](#)

Answer: digestion

Question 5.

An adult human has 32 permanent teeth which are of four different types, namely,, and

▼ [Answer](#)

Answer: incisors (I), Canine (C), Premolars (PM), molars (M)

Question 6.

The stomach, located in the upper left portion of the abdominal cavity, has major parts.

▼ [Answer](#)

Answer: three

Question 7.

The colon is divided into three parts and a descending part.

▼ [Answer](#)

Answer: an ascending, a transverse

Question 8.

The wall of alimentary canal from oesophagus to rectum possess four layers namely serosa,, and

▼ [Answer](#)

Answer: muscularis, sub mucosa, mucosa

Question 9.

Villi are supplied with a network of capillaries and a large lymph vessel called the

▼ [Answer](#)

Answer: lacteal

Question 10.

All the four layers show in different parts of the alimentary canal.

▼ [Answer](#)

Answer: modifications

Question 11.

..... is the largest gland of the body weighing about in an adult human.

▼ [Answer](#)

Answer: Liver, 1.2 to 1.5 kg

Question 12.

Each lobule is covered by a thin connective tissue sheath called the

▼ [Answer](#)

Answer: Glisson's capsule

Question 13.

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

▼ [Answer](#)

Answer: a bolus

Question 14.

The bolus is then conveyed into the pharynx and then into the oesophagus by swallowing or

▼ Answer

Answer: deglutition

Question 15.
Various types of movement are generated by the of small intestine.

▼ Answer

Answer: muscularis layer

III. Mark the statements True (T) or False (F)

Question 1.
In diarrhoea the skin and the eyes turn yellow due to the deposit of bile pigments.

▼ Answer

Answer: False

Question 2.
The abnormal frequency of bowel movement and increased liquidity of the faecal discharge is known as jaundice.

▼ Answer

Answer: False

Question 3.
The causes of indigestion are inadequate enzyme secretion, anxiety, food poisoning, over eating and spicy food.

▼ Answer

Answer: True

Question 4.
Absorption of substances take place in different parts of the alimentary canal, like mouth, stomach, small intestine and large intestine.

▼ Answer

Answer: True

Question 5.
Fatty acids and glycerol being insoluble, cannot be absorbed into the blood.

▼ Answer

Answer: True

Question 6.
Small amounts of monosaccharides like glucose, amino acids and some of electrolytes like chloride ions are generally absorbed by a simple diffusion.

▼ Answer

Answer: True

Question 7.
The functions of small intestine are (i) absorption of some water, minerals and certain drugs (ii) secretion of mucus which help in adhering the waste (undigested) particles together and lubricating it for an easy passage.

▼ Answer

Answer: False

Question 8.
Fats are broken down by lipases with the help of bile into di- and monoglycerides.

▼ Answer

Answer: True

Question 9.
Nucleases in the pancreatic juice acts on nucleic acids to form nucleotides and nucleosides.

▼ Answer

Answer: True

Question 10.

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.

▼ Answer

Answer: True

Question 11.

The gastric juice contains inactive enzymes, trypsinogen, chymotrypsinogen, procarboxypeptidases, amylases, lipases and nucleases.

▼ Answer

Answer: False

Question 12.

The food mixes thoroughly with the acidic gastric juice of the stomach by the churning movements of its muscular wall and the villi.

▼ Answer

Answer: False

Question 13.

The gastro-oesophageal sphincter controls the passage of food into the stomach. The saliva secreted into the oral cavity contains electrolytes (Na^+ , K^+ , Cl^- , HCO_3^-) and enzymes, salivary amylase and lysozyme.

▼ Answer

Answer: True

Question 14.

The pancreas is a compound elongated organ situated between the limbs of the 'U' shaped duodenum.

▼ Answer

Answer: True

Question 15.

The bile secreted by the hepatic cells passes through the hepatic ducts and is stored and concentrated in a thin muscular sac called the gall bladder.

▼ Answer

Answer: True

IV. Match the items in the two columns.

Column I	Column II
(a) Small intestine	1. Elastic bag
(b) Pancreas	2. Largest part of the food canal
(c) Duodenum	3. Gland located in the band of duodenum
(d) Pharynx	4. Narrow worm shaped projection
(e) Appendix	5. Receives bile and pancreatic juice
(f) Colon	6. Common passage for air breathed and the food swallowed
(g) Liver	7. Largest gland in body
(h) Stomach	8. Has three limbs ascending transverse and descending
(i) Parotid	9. Bile juice
(g) HCl	10. Small intestine
(k) Biliverdin and bilirubin	11. Small intestine
(l) Villi and microvilli	12. Dental formula in human
(m) abdominal cavity	13. into the blood by this mechanism
(n) I, C, PM, M 2123/2123	14. Gastric juice
(o) Various nutrients like amino acids, monosaccharides like glucose, electrolytes like Na^+ are absorbed	15. cardiac, fund, pyloric portions

▼ Answer

Answer:

Column I	Column II
(a) Small intestine	2. Largest part of the food canal
(b) Pancreas	3. Gland located in the band of duodenum
(c) Duodenum	5. Receives bile and pancreatic juice
(d) Pharynx	6. Common passage for air breathed and the food swallowed
(e) Appendix	4. Narrow worm shaped projection
(f) Colon	8. Has three limbs ascending transverse and descending
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