

THE DIGESTIVE SYSTEM(EXERCISE QUESTIONS)

Multiple choice questions(answers) :

- 1.The teeth which help in tearing the food are the -Canines
- 2.Last molar tooth in human beings is called-Wisdom tooth
- 3.The hardest substance in your body is-Enamel
- 4.Saliva converts starch into-Maltose
- 5.Proteins of the milk are converted into curd by the enzyme
-Rennin
- 6.Bile juice is produced by-Liver

Short answer questions:

1.Write true or false in the following statements.

- i) Molars help in cutting and tearing food. (False)
- ii) Carbohydrates are digested into glucose. (True)
- iii) Proteins are digested into fatty acids. (False)

2.Fill in the blanks:

- i)The teeth called canines are a total of four in number on the sides of incisors.
- ii)Pharynx is a common opening of food pipe and wind pipe.
- iii)Molars are meant for grinding and crushing the food.
- iv)Incisors are meant for biting and cutting the food.
- v)The canines are used for tearing the food.
- vi)The premolars and molars are used for crushing and grinding the food.
- vii) In an adult human, there are a total of 32 teeth.
- viii)The human teeth appear in two sets, the first set is called milk teeth which consists of only 20 teeth.

3.Name the following:

- i) End product of starch after digestion-Glucose
- ii)The organ where protein digestion begins-Stomach

- iii)The organ into which the pancreatic juice and the bile juice are poured-Small intestine
- iv)The enzyme which digests fat in ileum-lipase
- v)The simplest form of carbohydrates-Glucose
- vi)The part of alimentary canal where water from the undigested food is absorbed-Large intestine
- vii)The end product of protein digestion-amino acids

4. Identify and name the four types of teeth and state their functions.

A-Incisor, It helps in biting and cutting the food.

B-Canine, It helps in tearing the food.

C-Premolar, It helps in crushing and grinding the food.

D-Molar, It helps in crushing and grinding the food.

5.State whether the following statements are True or False.

- i)Wisdom tooth appears at the age of 5-6 years when the child starts going to school. (False)
- ii)The temporary set of teeth includes incisors, canines and premolars only. (True)
- iii)The ducts from the salivary glands open into the duodenum. (False)
- iv)Saliva changes starch into maltose. (True)

6.Fill in the blanks:

Digestive enzymes	acts on	to form
i)Pepsin	Proteins	Peptones and proteoses
ii)Steapsin	fats	fatty acids

7.i) Name the juice secreted by liver - Bile juice

ii) Name the organ where this juice is temporarily stored-

Gall bladder

iii) What is the main function of this juice?

Ans-Bile juice breaks down fats into tiny droplets and this process is called emulsification.

8. Name the three enzymes found in the pancreatic juice and mention their functions.

Ans-i) Amylase-Acts on the starch converting it into maltose.

ii) Trypsin-Converts proteins and peptones into peptides.

iii) Lipase-Converts emulsified fats into fatty acids and glycerol.

9. Name the three regions of the large intestine.

Ans-The three regions of the large intestine are-Caecum, Colon and Rectum.

10. Given alongside is the diagram of the human alimentary canal.

i) Name the parts 1-11 indicated by guidelines.

1. Stomach 2. Bile duct 3. Pancreas 4. Large intestine 5. Small intestine 6. Rectum 7. Appendix
8. Duodenum 9. Gall bladder 10. Liver 11. Anus

ii) State the function of the juice secreted by part 1.

Ans-The gastric juice secreted by the gastric glands in the stomach contains water, hydrochloric acid and an enzyme pepsin. The acid kills the germs (which may have entered along with the food), prevents rotting of food during its long stay in stomach and it activates the enzyme pepsin. Pepsin converts protein into a simpler compound called peptones.

iii) State the function of the three enzymes found in the juice secreted by part

3.

Ans-The three enzymes secreted by Pancreas are:

i) Amylase-It acts on the starch converting it into maltose.

ii) Trypsin-It converts proteins and peptones into peptides.

iii) Lipase-It converts emulsified fats into fatty acids and glycerol.

Inside questions

1.Name the following:

- 1)The nutrients required in larger quantities - Macronutrients
- 2)The nutrients required in minute quantities- Micronutrients
- 3)The food canal along with the associated gland forms -Digestive system
- 4)The last molar on each side of the jaw-Wisdom tooth
- 5)The process of taking in food through the mouth- Ingestion
- 6)A fluid containing water,salts and a slimy mucus which is secreted from the salivary glands-Saliva
- 7)An enzyme in saliva that helps in the breakdown of starch to simple sugar- Salivary amylase
- 8)The slow wave like movement seen in the walls of the oesophagus due to the contraction and relaxation of its muscles-Peristalsis
- 9)The U-shaped part of the small intestine, continuing from the stomach-Duodenum
- 10)The acid that activates the enzyme pepsin in stomach-Hydrochloric acid
- 11)The second part of the small intestine where no digestion takes place-Jejunum
- 12)Tiny finger like projections in the wall of the small intestine which help in absorption of digested food -Villi
- 13)The process of eliminating the undigested food through the anus-Egestion
- 14)The utilization of the digested food or nutrients by the body cells- Assimilation

2.Answer the following questions:

a) Describe the structure of a tooth.

Ans-The top portion of a tooth which can be seen is called the crown. The white, hard layer which surrounds the crown is called the enamel. Dentine is the bone like hard substance just below the enamel. Dentine forms the bulk of the tooth and has a hollow space filled with soft material called pulp. It has nerves and blood vessels. The root is lower part of the tooth which is fixed in the jaw and is surrounded by cement.

b) What is plaque?

Ans-Sometimes the sugary or starchy foods that are eaten get stuck to the teeth. This along with bacteria on the teeth's surface form a yellow coloured film called plaque.

c)What are caries?

Ans-The acid produced by the bacteria slowly corrodes the enamel of the teeth and forms cavities known as caries.

d)Mention two ways by which we can take care of our teeth.

Ans-We can take care of our teeth in the following ways –

i)We should brush our teeth twice a day -once in the morning and then before going to bed.

ii)We should avoid having very hot and very cold things.

3.Draw the structure of a human tooth.

