

## Chapter-2, Science, Class-7

### Q.1 Fill in the blanks.

1. The major points of nutrition that are in humans are absorption, ingestion, assimilation and egestion
2. Liver is the largest gland in human body.
3. The stomach releases hydrochloric acids and Digestive juices which directly acts on the food.
4. The finger like growth in the inner wall of the small intestine is called villi.
5. Food digested by amoeba is stored in a food vacuole

### Q2. True or false:

1. Digestion always starts with starch in the stomach : (F)
2. Food gets mixed in saliva with the help of our tongue : (T)
3. Bile is stored by the gall bladder : (T)
4. The swallowed grass is brought by the ruminants as they chew it for some time: (T)

### Q3. Choose the correct answer:

#### 1. Where is the fat digested?

- a. mouth      b. stomach      c. small intestine      d. large intestine.

#### 2. Undigested food is mainly absorbed through the water in the:

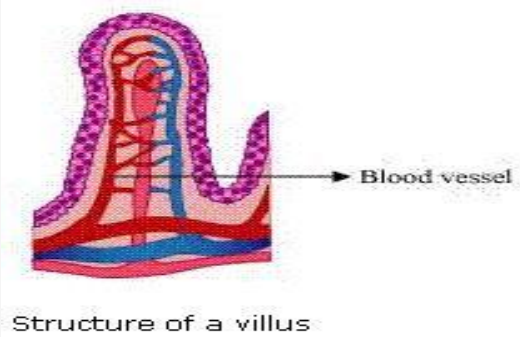
- a. Stomach      b. Food pipe      c. Large intestine      d. small intestine.

### Q.4 Match the column.

Column I	Column II
<u>Food components</u>	<u>Product(s) of digestion</u>
Carbohydrates	Sugar
Proteins	Amino acids
Fats	Fatty acids and glycerol

### Q.5 What do you mean by villi? Mention their location and function.

Ans. Small finger like projections from the walls of small intestine are called villi. It is provided with blood vessels. Villi increase the surface area of small intestine for absorption of digested food.



### Q6. Where is bile produced? Which component is helpful for the digestion of fats?

Ans. Liver secretes the bile juice which is stored in the gall bladder. Bile plays an important role in the digestion of fats. In gallbladder, the bile juice is stored in a sac, which helps in the digestion of fats in our body.

### Q7. Which is that type of carbohydrate that is not digested by humans but digested by ruminants? Explain why ?

Ans. Cellulose is a type of carbohydrate that can be digested by ruminants and not by humans. Ruminants have a large sac-like structure between small and large intestine where the food containing cellulose is digested by the action of certain bacteria. On the other hand, humans cannot digest cellulose, as the cellulose digesting enzymes are absent in them.

### Q.8 Why do we get instant energy from glucose?

Ans. Glucose is a simple sugar. With the help of oxygen, there is an easy break down of glucose in the cell which gives instant energy to all the organisms. As glucose can be easily absorbed in blood, it provides instant energy to the body.

### Q.9 Fill in the blanks:

- (i) Absorption of food: Small intestine
- (ii) Chewing of food: Buccal cavity (teeth).
- (iii) Killing of bacteria: Stomach (hydrochloric acid)
- (iv) Complete digestion of food: Small intestine
- (v) Formation of faeces: Large intestine

### Q.10 Give one difference and similarity between amoeba and human nutrition.

Ans. Similarity between nutrition in Amoeba and human beings.

Both Amoeba and human have holozoic type of nutrition.

Differences between nutrition in Amoeba and human beings.

#### Digestion in Humans

- a. Humans have a mouth and a complex digestive system. A human ingests food through mouth.
- b. Digestive juices are secreted in the buccal cavity, stomach, and small intestine.
- c. Digestion of carbohydrates, proteins, and fats starts in separate regions.

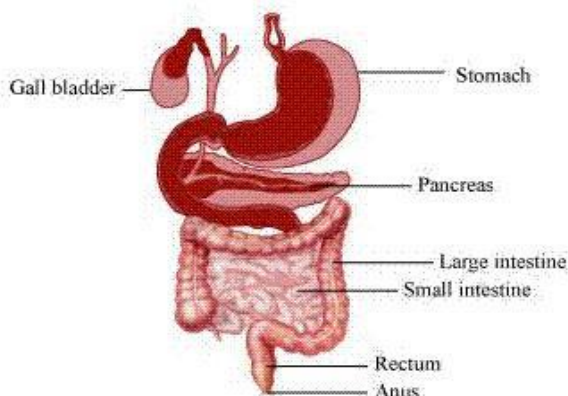
#### Digestion in Amoeba

- a. Mouth and digestive system are absent in Amoeba. It ingests food through pseudopodia.
- b. Digestive juices are secreted in the food vacuole.
- c. All the food components are digested in the food vacuole.

### Q.11 Match the following:-

Table 1	Table 2
<ul style="list-style-type: none"><li>1. Salivary gland</li><li>2. Liver</li><li>3. Stomach</li><li>4. Small intestine</li><li>5. Large intestine</li><li>6. rectum</li></ul>	<ul style="list-style-type: none"><li>1. Saliva secretion</li><li>2. bile juice secretion</li><li>3. Acid release</li><li>4. Digestion is completed</li><li>5. Absorption of water</li><li>6. Storage of undigested food</li></ul>

### Q. 12 Label the digestive system



### Q.13 Can we survive only on raw, leafy vegetables/grass? Discuss.

No. Humans cannot survive only on raw, leafy vegetables, or grass. It is because the grass is rich in cellulose, which is a type of carbohydrate that humans are not able to digest due to the absence of cellulose-digesting enzymes.