

Q.4. Match the terms of column I with those given in the column II.

Column I	Column II
Food Components	Products of Digestion
(A) Carbohydrates	(p) Fatty acids and glycerol
(B) Proteins	(q) Sugar
(C) Fats	(r) Amino acids

Ans. (A) q (B) r (C) p

Q.5 What are villi? What is their location and function?

Ans. The inner wall of the small intestine has thousands finger-like outgrowths called villi. These are found in small intestine. The villi increase the surface area for absorption of food.

Q.6 Where is the bile produced? Which component of the food does it digest?

Ans. Bile is produced in liver and is stored in a sac called the gall bladder. It helps in the digestion of fats.

Q.7 Name the type of carbohydrates that can be digested by ruminants but not by humans. Give the reasons also.

Ans. Cellulose is the carbohydrate that can be digested by ruminants. Ruminants have large sac like structure between the small intestine and large intestine. The cellulose of the food is digested by the action of certain bacteria which are not present in human beings.

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

Ans. We get instant energy from glucose because it easily breaks down in the cell with the help of oxygen. This provides instant energy to an organism. Glucose does not need digestion, it is directly absorbed into the blood.

Q.9 Which part of the digestive canal is involved in:

- (i) Absorption of food _____.
- (ii) Chewing of food _____.
- (iii) Killing of bacteria _____.
- (iv) Complete digestion of food _____.
- (v) Formation of faeces _____.

Ans. (i) Small intestine
(ii) Mouth
(iii) Stomach
(iv) Small intestine
(v) Large intestine

Q.10 Write one similarity and one difference between the nutrition in amoeba and human beings.

Ans. **Similarity:** During the digestion of food, in amoeba digestive juices are secreted into the food vacuole. They act on the food and break it into simpler substances. In human beings, the inner walls of stomach and the small intestine also secrete the digestive juices. The digestive juices convert complex substances of food to simpler ones.

Difference: Amoeba feeds on microscopic organisms. When it senses food, it pushes out pseudopodia around the food particle. The food is trapped in a food vacuole. Human beings intake food through their mouth. The food is digested as food travels through the various organs.

Q.11 Match the items of column I with suitable items of column II.

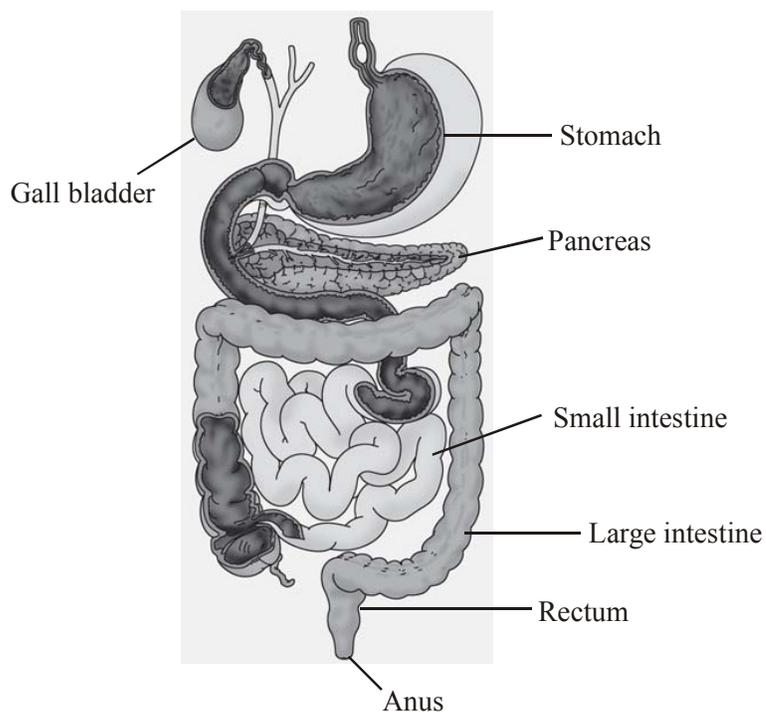
Column I	Column II
(a) Salivary gland	(i) Bile juice secretion
(b) Stomach	(ii) Storage of undigested food
(c) Liver	(iii) Saliva secretion
(d) Rectum	(iv) Acid release
(e) Small intestine	(v) Digestion is completed
(f) Large intestine	(vi) Absorption of water
	(vii) Release of faeces

Ans. (a) (iii) (b) (iv) (c) (i)
(d) (ii), (vii) (e) (v) (f) (vi)

Q.12 Label figure of the digestive system.



Ans.



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

Ans. We know that all animals, fungi, many bacteria, non-green plants and human beings do not possess the ability to produce their own food. Therefore, all of them depend upon autotrophs for their food supply either directly or indirectly. The green plants (leafy vegetables or grass) trap solar energy and manufacture their food in the form of glucose. So, leafy vegetables and grass can provide sufficient energy required for the survival of human being.