

Class-VII (CHAPTER-02) NUTRITION IN ANIMALS

Questions

1. Fill in the blanks:
 - (a) The main steps of digestion in humans are -----, -----, -----, ----- and -----.
 - (b) The largest gland in the human body is -----.
 - (c) The stomach releases hydrochloric acid and ----- juice which act on food.
 - (d) The inner wall of the small intestine has many finger-like outgrowths called-----.
 - (e) Amoeba digests its food in the -----.
2. Mark 'T' if the statement is true and 'F' if it is false.
 - (a) Digestion of starch starts in the stomach. (T/F)
 - (b) The tongue helps in mixing food with saliva. (T/F)
 - (c) The gall bladder temporally stores bile. (T/F)
 - (d) The ruminants bring back swallowed grass into their mouth and chew it for some time. (T/F)
3. Tick () mark the correct answers in each of the following:
 - (a) Fat is completely digested in the
 - (i) Stomach
 - (ii) mouth
 - (iii) Small intestine
 - (iii) large intestine.
4. Match the item of Column I with those given in Column II.

Column I	Column II
Food components	product of digestion
Carbohydrates	Fatty acids and glycerol
Proteins	Sugar
Fats	Amino Acids
5. What are villi? What is their location and function?
6. Where is the bile produced? Which component of the food does it digest?
7. Name the carbohydrate that can be digested by ruminants but not the human beings. Give the reason also.

8. Name the type of carbohydrate that can be digested by ruminants but not by humans. Give the reason also.
9. Why do we get instant energy from glucose?
10. 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 -----.
11. Write one similarity and one difference between the nutrition in amoeba and human beings.
12. Match the items of Column I with suitable items in 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. |
13. Label fig. 2.2 of the digestive system.
14. Can we survive only on raw, leafy vegetables/grass? Discuss.
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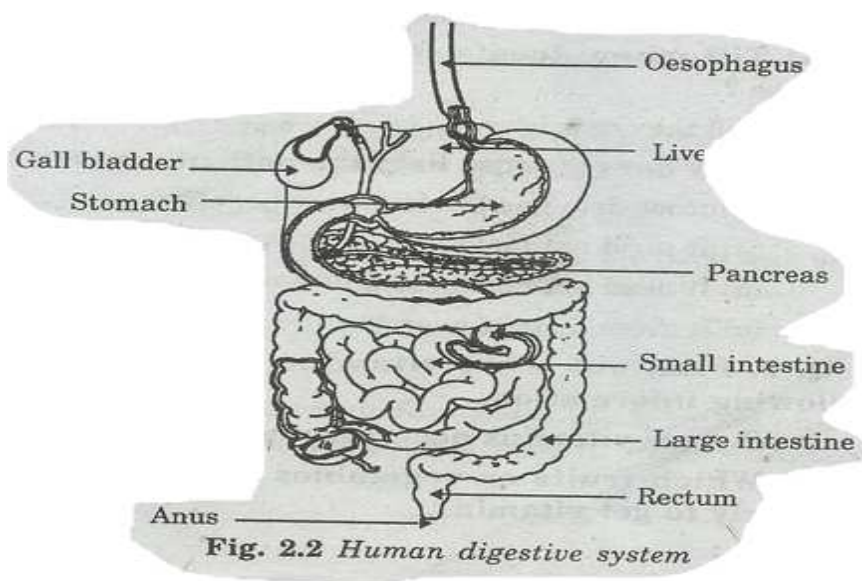
Answers

1. Fill in the blanks:
 - (a) The main steps of digestion in humans are **ingestion**, **digestion**, **absorption**, **assimilation** and **egestion**.
 - (b) The largest gland in the human body is **liver**.
 - (c) The stomach releases hydrochloric acid and **gastric** juice which act on food.
 - (d) The inner wall of the small intestine has many finger-like outgrowths called **villi**.
 - (e) Amoeba digests its food in the **food vacuole**.
2.
 - (a) F
 - (b) T
 - (c) T
 - (d) T
3.
 - (a) (iii) small intestine.
 - (b) (iv) large intestine.
4.

Food components	product of digestion
Carbohydrates	→ Fatty acids and glycerol
Proteins	→ Sugar
Fats	→ Amino Acids
5. The inner wall of the small intestine have thousands of finger-like outgrowths. These are called villi. Villi are located in the small intestine. The villi increase the surface area for absorption of the digested food. Each villus has a network of thin and small blood vessels close to its surface. The surface of the villi absorbs the digested food materials.
6. Bile is produced by liver and is stored in gall bladder. Bile juice digests fat.
7. Cellulose can be digested by ruminants but not by human beings. The human being do not produce cellulose digesting enzyme.
8. Cellulose is a type of carbohydrate that can be digested by ruminants but not by humans. Ruminants have a large sac-like structure called rumen which is present in

between the small intestine and large intestine. The cellulose is digested here by the action of certain bacteria which are not present in humans.

9. Glucose is the simplest form of carbohydrate which can be broken easily to give energy. So, glucose is called instant energizer.
10. (i) small intestine
(ii) buccal cavity
(iii) stomach
(iv) small intestine
(v) large intestine
11. Similarity: Both amoeba and human use digestive juices to digest food.
Difference: Human needs to chew food, whereas in amoeba, there is no chewing.
12. (a) (iii)
(b) (iv)



14. No, because to live alive a healthy life we need a complete balance of all nutrients. Raw green vegetables may have cellulose which cannot be digested by us. So, only green leafy vegetables will not solve the purpose.