

# CLASS NOTES

Class: VII

Topic: CHAPTER 2 – NUTRITION IN ANIMALS (BOOK EXERCISES)

Subject: SCIENCE

All the question and answers should be written in notes copy except Q2,Q4,Q11(to be done in book).

**Q.1.Fill in the blanks:**

(a) The main steps of nutrition 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 **digestive** juices 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.**

**Q.2. Mark 'T' if the statement is true and 'F' if it is false:**

(a) Digestion of starch starts in the stomach. (T/F) - False

(b) The tongue helps in mixing food with saliva. (T/F) - True

(c) The gall bladder temporarily stores bile. (T/F) - True

(d) The ruminants bring back swallowed grass into their mouth and chew it for sometime. (T/F) - True

**Q.3.Tick (S) mark the correct answer in each of the following:**

(a) Fat is completely digested in the

(i) stomach (ii) mouth (iii) **small intestine** (iv) large intestine

**Answer: (iii) small intestine**

(b) Water from the undigested food is absorbed mainly in the:

(i) Stomach (ii) Food pipe (iii) Small intestine (iv) **Large intestine**

**Answer: (iv) Large intestine**

**Q.4.Match the items of column I with those given in column II:**

**Answer:**

Column I	Column II
Food components	Products of digestion
Carbohydrates	Sugar
Proteins	Amino acids
Fats	Fatty acids and glycerol

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

**Answer:** The finger like projections in the inner walls of small intestine is called as villi.  
Location: Villi are found in the inner walls of small intestine.  
Function: Villi increases the surface area of small intestine for the absorption digested food.

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

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

**Q.7. Name the type of carbohydrate that can be digested by ruminants but not by humans. Give the reason also.**

**Answer:** Cellulose is the carbohydrate that can be digested by ruminants. Ruminants have large sac like structure between the small intestine and large intestine called as Caecum. The cellulose of the food is digested here by the action of certain bacteria (*Ruminococcus*) which are not present in humans.

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

**Answer:** We get instant energy from glucose because it easily breaks down in the cell with the help of oxygen and it is directly absorbed into the blood which provides instant energy to the organism.

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

**Answer:**

- i. absorption of food – small intestine
- ii. chewing of food – buccal cavity (mouth)
- iii. killing of bacteria – stomach
- iv. complete digestion of food – small intestine
- v. formation of faeces – large intestine

**Q. 10. Write some similarities and differences between the nutrition in amoeba and human beings.**

**Answer:**

**Similarity:**

1. They both are heterotrophs and derive their food from other organisms.
2. Both amoeba and human beings requires energy for the growth and maintenance of the body.

**Difference:**

Nutrition in amoeba	Nutrition in human beings
Mouth and digestive system is absent.	They have mouth and complex digestive system.

<i>Digestive juices are secreted in the food vacuole.</i>	<i>Digestive juices are secreted starting from the buccal cavity and also in different organs of digestive system.</i>
<i>Amoeba captures the food with the help of pseudopodia and engulfs it.</i>	<i>Food is taken by the mouth.</i>

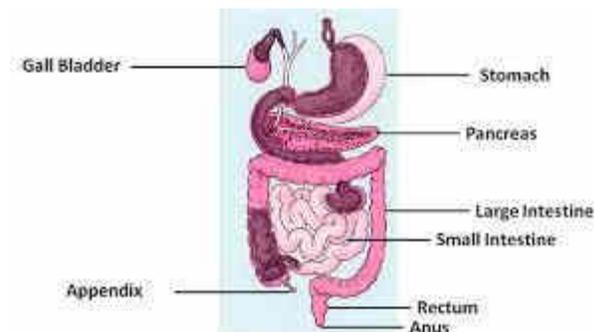
**Q.11. Match the items of Column I with suitable items in Column II.**

**Answer:**

Column I	Column II
Salivary gland	Saliva secretion
Stomach	Acid release
Liver	Bile juice secretion
Rectum	Storage of undigested food, faeces
Small intestine	Digestion is completed
Large intestine	Absorption of water

**Q.12. Label Fig. 2.11 of the digestive system.**

**Answer:**



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

**Answer:** No, we cannot survive only on raw, leafy vegetables/grass, because we cannot get all required nutrients, such as carbohydrates, proteins, vitamins and minerals, from them.

Moreover raw vegetables may not be digested easily as compared to cooked vegetables.

**The above content is prepared at home.**