

8/11

(1)

Subject - science

class - 7th

chapter - 2nd

Nutrition in Animals,

(Book activity)

① Fill in the blanks: (Book activity).

a) The main steps of nutrition in human are ingestion, digestion, absorption, assimilation and egestion.

b) The largest glands 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.

2) Mark 'T' if the statement is true and 'F' if it is false:

a) Digestion of starch starts in the stomach (F)

b) The tongue helps in mixing food with saliva (T)

- 3) The gall bladder temporarily stores bile. (T)
- 4) The ruminants bring back swallowed grass into their mouth and chew it for some time. (T)

3) Tick mark the correct answer in each of the following.

- a) Fat is completely digested in the - (small intestine)
- b) water from the undigested food is absorbed mainly in the - (large intestine)

4) Match the items of column I with those given in column II:

Ans ↓ Column I	Column II
1) Food components	a) product(s) of digestion
2) Carbohydrates	b) Sugar
3) proteins	c) Amino acid
4) Fats	d) fatty acids and glycerol

(Note book)

5) what are villi? what is their location and function?

Ans → villi are the finger-like projection or outgrowth. They are present in small intestine of our digestive system.

6) where is <sup>the</sup> bile produced? which components of food does its help to digest?

Ans → Bile juice is produced in the liver and its help in the digestion of fats by breaking large fats globule into smaller ones.

7) Name the type of carbohydrate that can be digested by ruminants but not by human. Give the reason also.

Ans → cellulose is the carbohydrates 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.

8) why do we get instant energy from glucose?

Ans → Glucose is a simple sugar which is easily absorbed by the blood ~~where~~ whereas other carbohydrates are first broken down into glucose and then absorbed, hence glucose gives instant energy.

9) which part of the digestion canal is involved in:

- a) absorption of food - Small intestine
- b) chewing of food - Buccal cavity
- c) Killing of bacteria - Stomach
- d) complete digestion of food - Small intestine
- e) formation of faeces - large intestine.

10) write one similarity and one difference between the nutrition in Amoeba and human beings.

Ans → similarity ↓

Both ~~amoeba~~ amoeba and human being the holozic type of nutrition.

Difference ↓

Humans intake food through buccal cavity. In amoeba food is ingested through pseudopodia.

11) Match the items of column I with suitable

Ans ↓ items of column II. (Book activity)

(column I)

- a) Salivary gland.
- b) stomach
- c) liver
- d) rectum
- e) small intestine
- f) large intestine.

(column II)

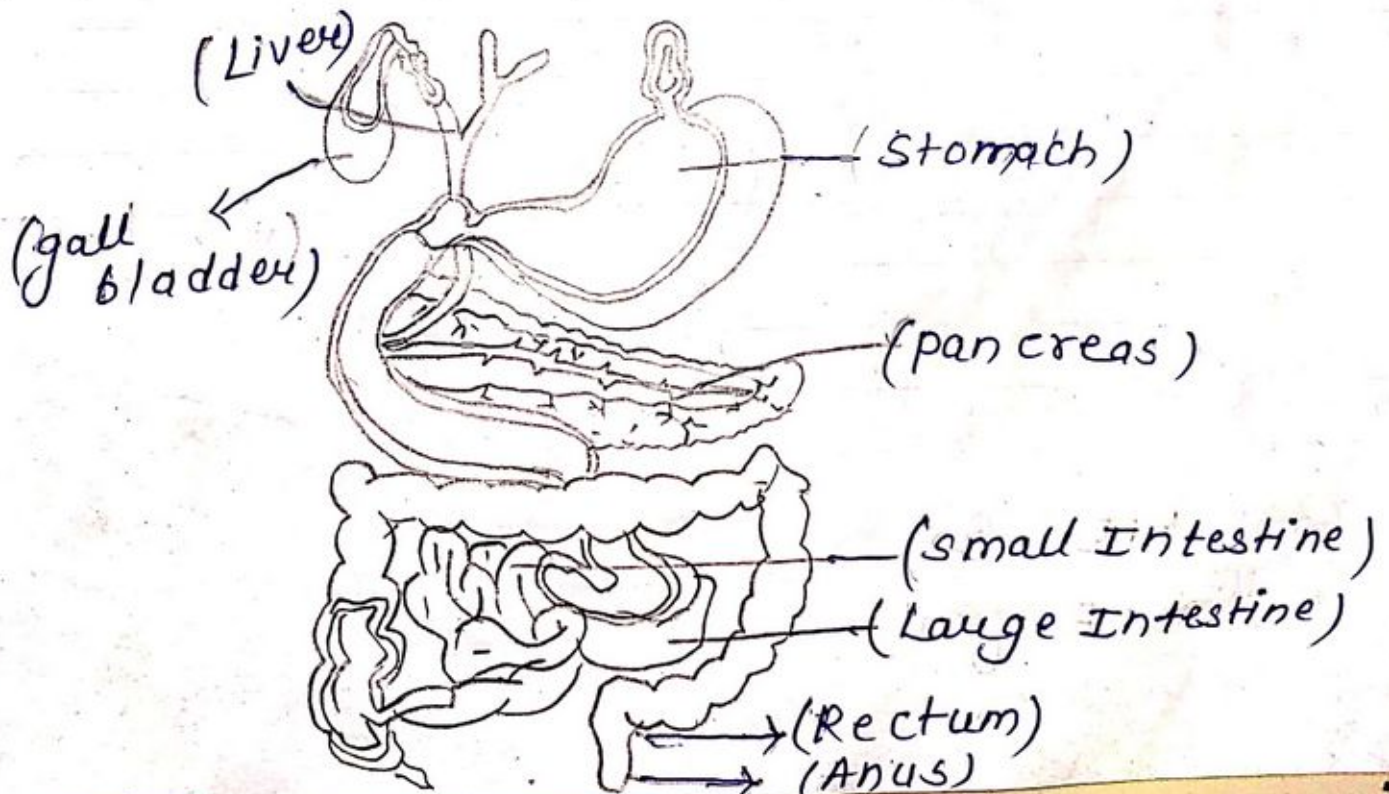
- Saliva secretion
- Acid release
- Bile juice secretion
- Storage of undigested food
- Digestion is completed
- absorption of water.

(Note book)

13) Or Can we survive only on raw, leafy vegetables | grass? discuss.

Ans → We know that the animal, fungi, bacteria, non-green plants and human beings do not have the ability make their own food they depend upon autotrophs for their food directly or indirectly. The green plant trap solar energy and make their own food in the form of glucose. so we can say that leafy vegetables and grass can provide sufficient energy to help us survive.

12) Label Fig. 2.11 of the digestive system



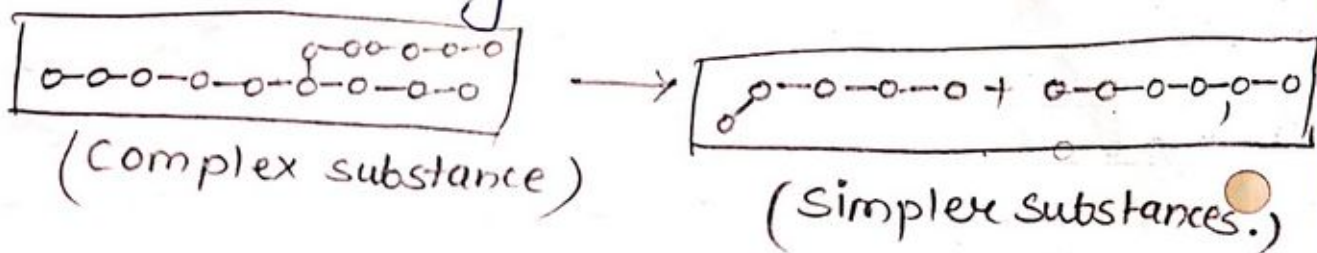
## Additional questions

(7)

(Note book)

1) what is digestion.

Ans → The process of break down of complex components of food into simpler substances is called digestion.



2) Write various function of tongue?

Ans → Various functions of tongue are:-

- 1) It helps in talking.
- 2) It helps to taste our food.
- 3) It mixes saliva with food during chewing of food and help in swallowing food.

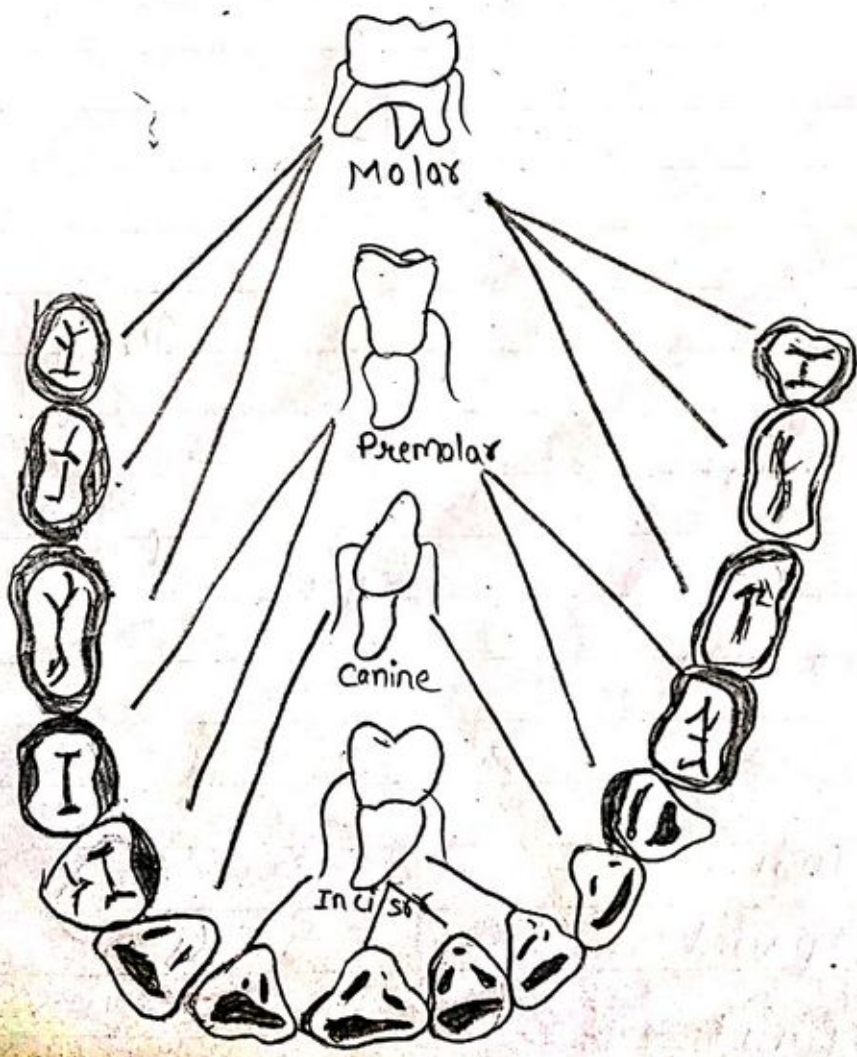
3) Which part of the digestive system secretes hydrochloric acid.

Ans → Stomach secretes hydrochloric acid.

4) Name the different types of teeth in a adult man state their function? Also give a well labelled diagram of types of teeth.

Ans → There are four types of teeth in our mouth.

- 1) Incisives → They help in cutting and biting of food.
- 2) Canines → Canines help in tearing of food.
- 3) Premolars → They help in grinding and mastication of food.
- 4) Molars → They help in chewing of food.





5) what is the location of liver and pancreas in the body.

Ans → The liver is a reddish brown gland situated in the upper part of the abdomen at the right side. It is the largest glands in the body.

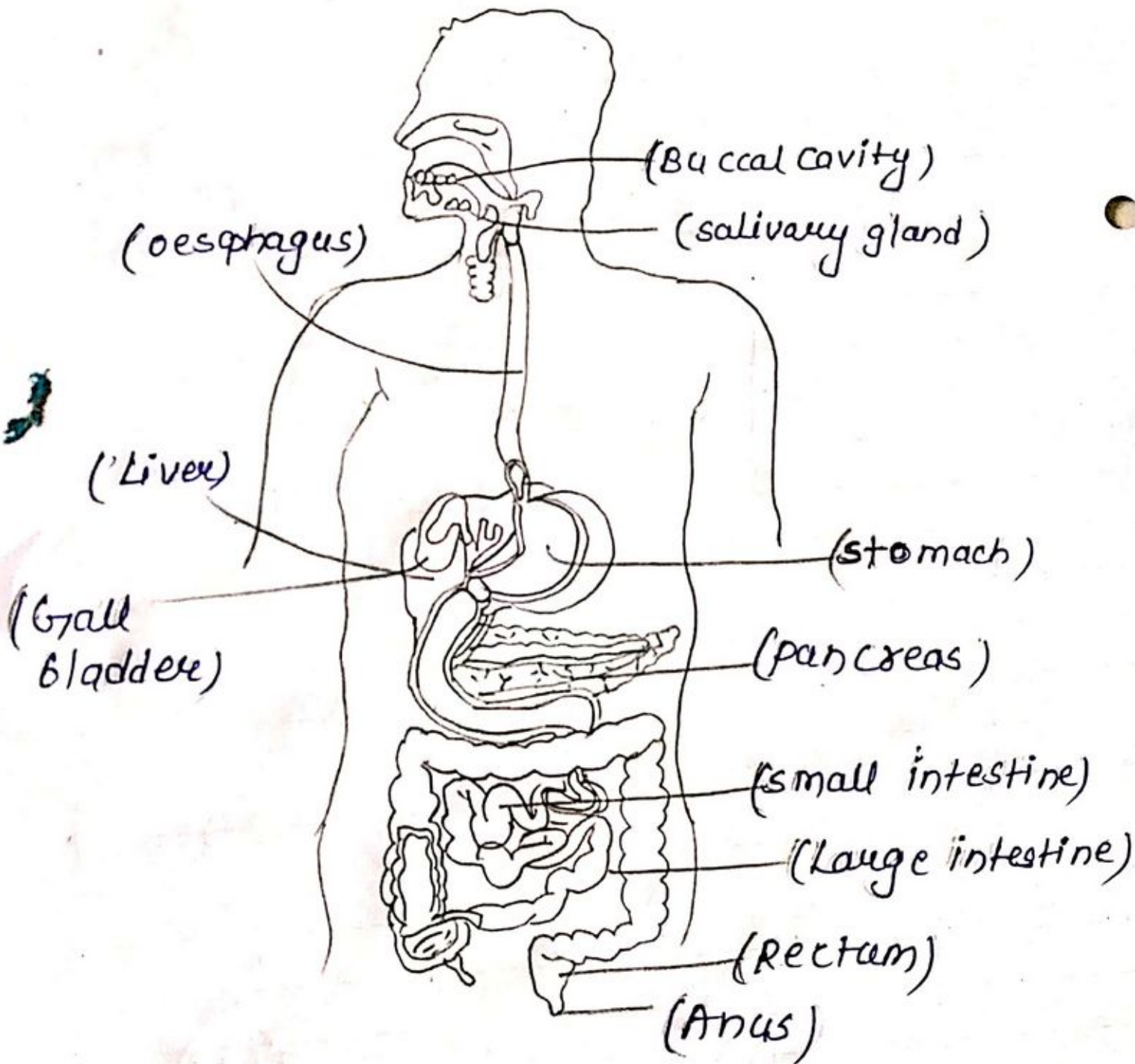
The pancreas is a large cream coloured gland located just below the stomach.

6) what is rumination?

Ans → Some grass-eating animals chewing continuously even when they are not eating.

This animals partially chewed their food and quickly swallow the food and store it in a part of stomach called rumen. Here this food is partially digested and stored as cud. These animal have the ability to bring this cud to their mouth for complete chewing. This process is called rumination. And the animals who chew cud are called ruminants.

7) Draw the well labelled diagram of Human digestive system?



## 8) Summary of the digestive Process. (Nutrition).

- 1) Ingestion → The process of taking food into the body is called ingestion.
- 2) Digestion → The break down of ingested food in mouth cavity, stomach, and small intestine is called digestion.
- 3) Absorption → Digested food is absorbed through the villi of small intestine, is called absorption.
- 4) Assimilation → Absorption of food material inside the tissue is called assimilation.
- 5) Egestion → Removal of undigested food through the anus is called egestion.