

DIGESTIVE SYSTEM (Class - VI)

Long answer questions :-

Q.1) Define the term nutrition.

→ The process by which all organisms obtain or synthesize their food and convert it into simpler substances, so that it can be absorbed and utilized by the cells of the body is called nutrition.

Q.2) What is the role of liver and pancreas respectively in the digestion of food?

→ Liver produces a greenish yellow fluid called bile which breaks down fats into tiny droplets.

Pancreas secretes pancreatic juice which contains enzymes called amylase, trypsin and lipase

Amylase converts starch to maltose.

Trypsin converts proteins and peptones into peptides.

Lipase converts emulsified fats into fatty acids and glycerol.

Q.3) Name the digestive juice secreted by the stomach and give its function.

→ Pepsin. Pepsin converts proteins into simpler compound called peptones.

Proteins $\xrightarrow{\text{pepsin}}$ peptones.

Q.4) Answer the following :-

i) Name the types of teeth present in humans.

→ Incisors, canines, premolars and molars.

ii) How is the small intestine best suited for the digestion and absorption of food?

→ The intestinal glands of ileum (small intestine) produce intestinal juice which contains enzymes that help in digestion of food.

Trypsin converts peptides to Amino acids,
Maltase converts maltose to Glucose
Sucrase converts sucrose to Glucose & fructose
whereas lactase converts lactose to Glucose and galactose.

The inner lining of the small intestine contains a large number of tiny finger-like projections called villi. The villi increase the inner surface area for absorption of the digested food.

iii) What do you mean by absorption of food?

→ Absorption is the process by which the products of digestion are absorbed by the blood to be supplied to the rest of the body. During absorption, the digested products are transported into the blood or lymph through the mucous membrane.

Q.5) Define the following terms:

- • Egestion - The process of elimination of undigested food through the anus is called egestion.
- Digestion - It is a process by which the complex chemical compounds present in the food are broken down into simpler substances that are readily absorbed and utilized by the body.
- Assimilation - The process of utilization of the digested food or nutrients by the body cells is called assimilation.

Q.6) Rewrite the following parts in correct sequence -

→ Oesophagus, stomach, small intestine, large intestine (correct sequence) - - -

Q.7) What is the fate of excess glucose in our body?

→ Glucose is required to release energy for cell activities. But when in excess, glucose is stored in the form of glycogen in our body.

Q.8) Define the term digestion.

→ Digestion is a process by which the complex chemical compounds present in the food are broken down into simpler substances that are readily absorbed and utilized by the body.

Q.9) State the four ways in which saliva is useful to us.

→ i) It moistens and lubricates the mouth cavity and the tongue to make speaking and swallowing easy.

ii) It cleans the mouth and destroys germs.

iii) The saliva binds the food particles and makes it into a mass called the bolus.

iv) Saliva contains amylase which helps in breakdown of starch to maltose.
