

## CHAPTER 6

### LIFE PROCESSES

ASSIGNMENT -2

IN TEXT QUESTIONS (Page-101)

**Write these Qs./Ans in your notebook (or loose sheets of paper)**

**Question 1:**

What are the differences between autotrophic nutrition and heterotrophic nutrition?

**Answer 1:**

**Autotrophic nutrition**

1. Food is synthesised from simple inorganic raw materials such as CO<sub>2</sub> and water.
2. Presence of green pigment (chlorophyll) is necessary.
3. Food is generally prepared during day time.
4. All green plants and some bacteria have this type of nutrition.

**Heterotrophic nutrition**

1. Food is obtained directly or indirectly from autotrophs. This food is broken down with the help of enzymes.
2. No pigment is required in this type of nutrition.
3. Food can be prepared at all times.
4. All animals and fungi have this type of nutrition.

**Question 2:**

Where do plants get each of the raw materials required for photosynthesis?

**Answer 2:**

The following raw materials are required for photosynthesis:

1. The raw material CO<sub>2</sub> enters from the atmosphere through stomata.
2. Water is absorbed from the soil by the plant roots.
3. Sunlight, an important component to manufacture food, is absorbed by the chlorophyll and other green parts of the plants.

**Question 3:**

What is the role of the acid in our stomach?

**Answer 3:**

The role of the acid (HCl) in our stomach is:

1. It kills germs present in the food.
2. Makes the food acidic, so that pepsin can digest protein.

**Question 4:**

What is the function of digestive enzymes?

**Answer 4:**

Digestive enzymes are bio-catalysts such as amylase, lipase, pepsin, trypsin, etc. which help in the breaking down of complex food particles into simple ones. These simple particles can be easily absorbed by the blood and thus transported to all the cells of the body.

**Question 5:**

How is the small intestine designed to absorb digested food?

**Answer 5:**

The small intestine has millions of tiny finger-like projections called villi. These villi increase the surface area for food absorption. Within these villi, many blood vessels are present that absorb the digested food and carry it to the blood stream. From the blood stream, the absorbed food is delivered to each and every cell of the body.

**Draw labelled diagrams of** 1) A Cross section of a leaf  
2) Human Digestive System