

SOLUTION TO TEXT QUESTIONS

1. Nutrition in Plants

Multiple Choice Questions (MCQs) based on **CCE**

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1. (d) 2. (b) 3. (c) 4. (b) 5. (c)

Multiple Choice Questions (MCQs) based on **CCE**

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1. (b) 2. (c) 3. (a) 4. (c) 5. (d)

PRACTICE FOR FORMATIVE ASSESSMENT-I, BASED ON CCE (Page 13)

A. Oral Questions/Science quiz.

- The process by which green plants make their own food (like glucose) from carbondioxide and water by using sunlight energy in the presence of chlorophyll is called photosynthesis.
- The leaves contain a green pigment called chlorophyll, so, they are green in colour.
- Plants which use saprotrophic mode of nutrition are called saprophyte. Mould and mushroom are two saprophytes.

B. THINK and TELL/HOTS (Higher Order Thinking Skills) questions

- If plant leaves are devoid of any stomata, then there will be no exchange of gases in the atmosphere by the plants. They will not be able to make their food and give us oxygen.
- Insectivorous plants are generally autotrophs. But for preparing proteins they cannot get nitrogen from the surroundings. The insects that they trap fulfil their nitrogen requirements.

C. Worksheet (Class test/Paper-pen Test).

1. Tick (✓) the correct answer.

- (a) (iv) (b) (iv) (c) (ii) (d) (i)

2. Circle the odd one. Give reason for your choice.

- (a) Oxygen → It is not required for photosynthesis.
 (b) Cuscuta → It is a parasite.
 (c) Lichen → It is a symbiosis.

3. Fill in the blanks.

- (a) nitrogen
 (b) photosynthesis
 (c) guard cell
 (d) two

PRACTICE FOR SUMMATIVE ASSESSMENT-I, BASED ON CCE (Page 13)

A. Multiple Choice Questions (MCQs) Scientific/Practical skills

1. (a) 2. (c) 3. (d)

B. Very Short Answer Questions.

1. Organisms need food to get energy.
2. Chlorophyll traps the sunlight energy. This energy is used for the process of photosynthesis.
3. Stomata

C. Short Answer Type-I Questions.

1. Organisms having the heterotrophic mode of nutrition (in which organism obtains readymade food made by plants directly or indirectly) are called heterotrophs. Animals and non-green plants are heterotrophs.
2. Plants which use saprotrophic mode of nutrition (in which the organism obtains its food from dead and decaying matter of dead plants or animals) are called saprophytes. Fungi like moulds and mushrooms are saprophyte.
3. Plants that eat insects are called insectivorous plants. Venus flytrap and drosera are insectivorous plants.

D. Short Answer Type-II Questions.

1. We can decolourise the leaf by boiling it first in water and then in alcohol.
2. The organisms which obtain the readymade food from the body of a plant are called plant parasite. Cuscuta and mistle-toe are plant parasites.
3. A pitcher plant has a lid and inside the pitcher, there are hair which are directed downwards. When an insect lands in the pitcher, the lid gets closed and the trapped insect gets entangled into the hair.

E. Long Answer Questions.

1. See activity 1 of this chapter.
2. Rhizobium bacteria live in the nodules of the roots of leguminous plants and provide them nitrogen. In return, the plants provide food and shelter to the rhizobium bacteria. So, both organisms help each other in their survival.