

BCM SCHOOL, CHANDIGARH ROAD, LUDHIANA
A SENIOR SECONDARY SCHOOL OF BCM FOUNDATION AFFILIATED TO CBSE NEW DELHI
CLASS VII SCIENCE-WORKSHEET; CHAPTER 1 NUTRITION IN PLANTS

SECTION-A; MULTIPLE CHOICE QUESTIONS:

1. A farmer observes the growth of Rhizobium on roots of his crop plants. What is its benefit?
 - a) It increases the growth of unwanted plants.
 - b) It increases the use of manures in the field.
 - c) It reduces the need for fertilisers in the field.
 - d) It reduces the need for raw material by the plants to prepare their own food.
2. Rahul was studying some specimens for their mode of nutrition. He observed a sample specimen with the following characteristics:
 - Shows saprotrophic mode of nutrition.
 - Grows on old logs and old shoes, mostly in rainy season.
 - It is edible but some of its types are poisonous.

The specimen is: a) Mushroom b) Pitcher plant c) Bread mould d) Cuscuta

3. Which of the following is tested using iodine?
 - a) Fat b) Protein c) Vitamin d) Starch
4. Which of the following statements is/are correct?
 - (i) All green plants can prepare their own food.
 - (ii) Most animals are autotrophs.
 - (iii) Carbon dioxide is not required for photosynthesis.
 - (iv) Oxygen is liberated during photosynthesis.

Choose the correct answer from the options below.

- (a) (i) and (iv) (b) (ii) only (c) (ii) and (iii) (d) (i) and (ii)

SECTION-B; ASSERTION REASON BASED QUESTIONS: Choose the appropriate answer.

- (a) Both A and R are true and R is the correct explanation of A.
(b) Both A and R are true but R is not the correct explanation of A.
(c) A is true but R is false. (d) A is false but R is true.
1. **ASSERTION:** All types of animals and non-green plants are heterotrophs.
REASON: All the heterotrophs depend on plants for their food directly or indirectly
 2. **ASSERTION:** A mutual association called symbiosis can be seen in Lichens.
REASON: The Lichen is composed of an alga and a fungus.

SECTION-C; CASE STUDY -Green plants prepare food by using carbon dioxide and water in the presence of chlorophyll and sunlight. During this process the solar energy is converted into chemical energy and carbohydrates are formed. Green leaves are the main sites of photosynthesis. The green portions of the plant contain chloroplasts; which contain chlorophyll.

- I) Define photosynthesis and write chemical equation to show the process.
- II) During photosynthesis _____ is converted into _____.
- III) Do the leaves other than green also perform photosynthesis? Give reason.
- IV) What are carbohydrates made up of?

SECTION-D; . ANSWER THE FOLLOWING QUESTIONS:

1. Nitrogen is an essential nutrient for plant growth. But farmers who cultivate pulse crops like green gram, bengal gram, black gram, etc. do not apply nitrogenous fertilisers during cultivation. Why?
2. Wild animals like tiger, wolf, lion and leopard do not eat plants. Does this mean that they can survive without plants? Can you provide a suitable explanation?
3. What do you mean by autotrophic & heterotrophic mode of nutrition?
4. Why insectivorous plants are called partial heterotrophs?
5. How does pitcher plant obtain its nutrition?
6. How do saprotrophs take their nutrition?
7. What are lichens? Write the role of each partner in lichens.
8. How can the soil be replenished? Write three points.
9. Explain the four types of heterotrophic nutrition.