

NUTRITION IN PLANTS

CLASS TEST

F.M.- 15

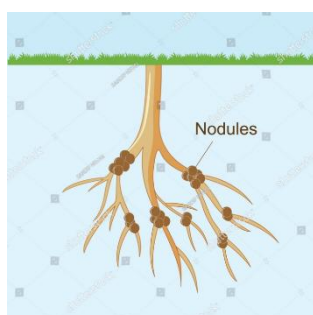
1. Assertion: Underwater plants breathe through stomata present on the upper surface of the leaves. (1)
Reason: Aquatic plants have leaves with waxy coating.
2. Assertion: Some organisms live together and share both shelter and nutrients. (1)
Reason: The organisms that live together are called lichen.
3. Assertion: Plants convert light energy into chemical energy during the process of photosynthesis. (1)
Reason: Sugar produced from photosynthesis by plants is used by human beings as a source of energy.
4. Food is produced by autotrophs in the form of _____ which is a type of _____. This nutrient is a source of _____ required by all living things for doing various activities. As a result autotrophs are also called _____. (4)
5. Read the following case study and answer the questions: (3)

Arjun visited a botanical garden where he saw a strange plant called the Pitcher Plant. It had green, jug-shaped leaves that looked like cups filled with water. To his surprise, he saw small insects trapped inside those leaves! The guide explained that it is an insectivorous plant that grows in places where the soil lacks important nutrients. To survive, the plant traps insects, digests their bodies, and absorbs nutrients from them. Even though it is green and it can do photosynthesis, it still needs extra nutrition from insects to grow well. Arjun was amazed to learn that some plants could act like "hunters"!

- i. Is the Pitcher Plant an autotroph or a heterotroph? Explain your answer.
- ii. Why does the Pitcher Plant trap insects?
- iii. Name two more plants that get nutrition by trapping insects.

6. Identify the organism and its mode of nutrition-

(2*2=4)

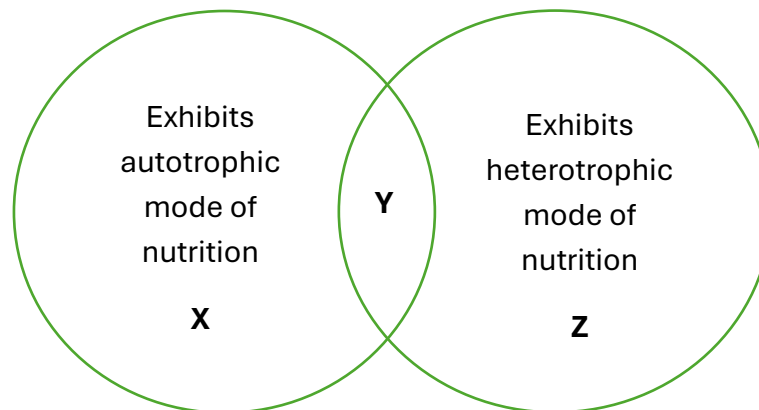


i.



ii.

7. Refer to the given Venn diagram and select the **incorrect statement** regarding X, Y and Z. (1)



- i. X could be an organism that produces oxygen as a by-product of its food making process.
- ii. Y could be an organism that fulfills its nitrogen requirement by feeding on insects.
- iii. Z could be a leafless and rootless organism that has root-like structures called haustoria.
- iv. X could be an organism which forms a white coloured cottony mass of fine threads over stale bread, fruits, etc.