

1. Select the incorrect statement(s).
  - (i) Plants can make their own food.
  - (ii) Animals including humans cannot make their own food.
  - (iii) Raw materials used by plants to make their food are water, oxygen and carbon dioxide.

(a) (ii) and (iii)                      (b) Only (iii)                      (c) (i) and (ii)                      (d) (i) and (iii)
2. The ultimate source of energy for all living organisms is/are  
(a) oxygen                      (b) plants                      (c) sun                      (d) microorganisms.
3. Select the incorrect statement about Cuscuta.
  - (a) It is also called Amaranth.
  - (b) Its leaf is modified into pitcher.
  - (c) It does not have chlorophyll.
  - (d) It derives nutrients from host plant.
4. Select the mismatched pair.
  - (a) Venus flytrap - An insectivorous plant
  - (b) Black bread mould - A saprotroph
  - (c) Rafflesia - A total parasite
  - (d) Rhizobium - An autotroph
5. Lichen is an association of
  - (a) an alga and a fungus
  - (b) a green plant and a fungus
  - (c) a green plant and an alga
  - (d) bacteria and legume plant.
6. Symbiotic relationship is one, in which
  - (a) organisms feed on dead and decaying organic matter
  - (b) organisms trap and feed on insects
  - (c) two organisms live together and get benefited from each other
  - (d) one organism grows as parasite on the body of other.
7. \_\_\_\_\_ can trap atmospheric nitrogen and convert it into soluble form.
  - (a) Mushroom
  - (b) Rhizobium
  - (c) Algae
  - (d) Both (a) and (b)
8. Which of the following options contains leguminous crops only?
  - (a) Rice, wheat and maize
  - (b) Wheat, rice and peas
  - (c) Peas, beans and maize
  - (d) Peas, beans and gram
9. In the absence of which of the following, will photosynthesis not occur in leaves?
  - (a) Guard cells
  - (b) Chlorophyll
  - (c) Vacuole
  - (d) Space between cells
10. Pitcher plant traps insects because it
  - (a) is a heterotroph
  - (b) grows in soils which lack in nitrogen
  - (c) does not have chlorophyll
  - (d) has a digestive system like human beings.
11. When we observe the lower surface of a leaf through a magnifying lens we see numerous small openings. Which of the following is the term given to such openings?
  - (a) Stomata
  - (b) Lamina
  - (c) Midrib
  - (d) Veins

12. Which of the following raw material is available in the air for photosynthesis?  
(a) Oxygen                      (b) Carbon dioxide              (c) Nitrogen                      (d) Hydrogen

**Assertion-Reason Codes:**

- (a) If both Assertion and Reason are true and Reason is the correct explanation of Assertion.  
(b) If both Assertion and Reason are true and Reason is not the correct explanation of Assertion.  
(c) If Assertion is true but Reason is false.  
(d) If both Assertion and Reason are false.
13. Assertion: Leaves are considered as food factories of plants.  
Reason: The synthesis of food in plants through photosynthesis occurs in leaves.
14. Assertion: Rhizobium shows symbiotic relationship with leguminous plants.  
Reason: Rhizobium bacteria found in the stems of the leguminous plants.
15. Assertion: Plants use complex organic substances like carbon dioxide, water and minerals for the synthesis of food.  
Reason: Simpler inorganic substances such as carbohydrates are the products of photosynthesis.
16. Assertion: Carbon dioxide present in air is taken through stomata.  
Reason: Carbon dioxide is needed by plants for the synthesis of food by the process of respiration.
17. Assertion: Xylem vessels transport water and minerals to the leaves.  
Reason: Xylem vessels conducts food.