

1. Plants take carbon dioxide from the atmosphere mainly through their:
 - a. roots
 - b. stem
 - c. flowers
 - d. leaves

2. Name the following:

(i) A parasitic plant with yellow, slender and tubular stem.

(ii) A plant that has both autotrophic and heterotrophic modes of nutrition.

(iii) The pores through which leaves exchange gases.

3. Which of the following is an INCORRECT statement?

- a. Rhizobium converts atmospheric nitrogen into a soluble form.
- b. Plants cannot use nitrogen gas in the manner they use carbon dioxide.
- c. Plants need nitrogen in a soluble form.
- d. Rhizobium feeds on atmospheric nitrogen.

4. Which of the following statements is incorrect?

- a. Cuscuta does not have chlorophyll.
- b. Algae contain chlorophyll and they prepare their food.
- c. The mushroom grows on dead and decaying organic matter.
- d. Pitcher plants show saprophytic nutrition as their leaves trap the insect.

5. Given below are two statements labelled as Assertion (A) and Reason(R).

Assertion (A): During winter, it is advisable to wear multi thin layer clothes rather than a single thick layer.

Reason (R): Air trapped between the layer prevents the flow of heat.

6. Convert - 60°C to °F.

7. Convert - 160°F to °C.

8. Read the given points and arrange them sequentially in an ascending food chain.

- Grass
- Frog
- Snake
- Grasshopper
- Eagle

- a. 1 → 3 → 2 → 4 → 5
- b. 2 → 1 → 3 → 4 → 5
- c. 1 → 4 → 2 → 3 → 5

d. $1 \rightarrow 2 \rightarrow 3 \rightarrow 4 \rightarrow 5$

9. Why are forests called 'dynamic living entities'?

- a. In forests, animals reproduce naturally and maintain their species.
- b. Large animals feed on small animals, and small animals feed on plants through a food chain.
- c. Decomposers help in maintaining the supply of nutrients for the growing plants in forests.
- d. The water from the rainfall flows in streams and maintains the water table.

10. In a community of lions and wildebeest, when a population of organism 'X' was introduced, the number of lions increased while the number of wildebeest decreased. What could be an animal 'X'?

- a. Herbivore
- b. Carnivore that is a predator of wildebeest and lions
- c. Carnivore that is a predator of wildebeest, but a prey of the lions
- d. Producer

11. The acidic soil is not good for healthy growth of plants. This type of soil is neutralized by adding

- a. ammonium chloride (NH_4Cl) to the soil.
- b. calcium oxide (CaO) to the soil.
- c. sodium chloride (NaCl) to the soil.
- d. organic matter to the soil.

12. Write the neutralization reaction between hydrochloric acid and sodium hydroxide.

13. Which of the following dilute solutions are not harmful for drinking?

- a. Magnesium hydroxide
- b. Potassium hydroxide
- c. Sodium hydrogencarbonate
- d. Sodium carbonate