

Advanced Plant Biology and Nature Science

Biology · Practice Test · 15 Questions

1. Which specific part of a plant is primarily responsible for the process of transpiration?

- A) The roots
- B) The stomata on leaves
- C) The xylem vessels
- D) The flower petals

2. What is the primary function of the waxy cuticle layer found on the surface of most plant leaves?

- A) To attract pollinators
- B) To absorb sunlight
- C) To prevent excessive water loss
- D) To provide structural support

3. In the life cycle of a fern, what is the structure that releases spores called?

- A) Sorus
- B) Stamen
- C) Pistil
- D) Rhizome

4. Which plant hormone is responsible for the phenomenon of phototropism, causing stems to grow towards light?

- A) Gibberellin
- B) Cytokinin
- C) Auxin
- D) Ethylene

5. What is the main role of the xylem tissue in a vascular plant?

- A) Transporting sugars from leaves
- B) Transporting water from roots
- C) Protecting the stem
- D) Storing starch

6. Which of these plants is classified as a monocotyledon?

- A) Oak tree
- B) Bean plant
- C) Maize
- D) Rose bush

7. What is the name of the male reproductive part of a flowering plant?

- A) Stigma
- B) Style
- C) Ovary
- D) Stamen

8. In the soil profile, which horizon contains the most organic matter, often referred to as humus?

- A) A horizon
- B) B horizon
- C) C horizon
- D) R horizon

9. Which process involves the movement of pollen from the anther to the stigma?

- A) Fertilization
- B) Germination
- C) Pollination
- D) Photosynthesis

10. What are the root-like structures found in non-vascular plants like mosses called?

- A) Taproots
- B) Adventitious roots
- C) Rhizoids
- D) Fibrous roots

11. Which nutrient is most commonly associated with healthy leaf growth and is a key component of chlorophyll?

- A) Phosphorus
- B) Potassium
- C) Nitrogen
- D) Calcium

12. What term describes a plant that completes its entire life cycle in one growing season?

- A) Perennial
- B) Biennial
- C) Annual
- D) Deciduous

13. What is the chemical byproduct of photosynthesis that is released into the atmosphere?

- A) Carbon dioxide
- B) Oxygen
- C) Glucose
- D) Nitrogen

14. Which part of the flower develops into the fruit after fertilization?

- A) Ovule
- B) Anther
- C) Ovary
- D) Sepal

15. What allows desert plants like cacti to minimize water loss through their leaves?

- A) Broad flat leaves
- B) Modified spines
- C) Large stomata
- D) Fast growth rates