

Fundamentals of Horticulture

Horticulture · Practice Test · 20 Questions

1. Which essential plant nutrient is primarily responsible for promoting healthy green leaf growth?

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

2. What is the primary function of the stomata on the underside of a leaf?

- A) Absorbing soil nutrients
- B) Gas exchange
- C) Anchoring the plant
- D) Storing starch

3. In soil science, which particle size is the smallest?

- A) Sand
- B) Silt
- C) Clay
- D) Gravel

4. What is the process by which plants convert sunlight into chemical energy?

- A) Respiration
- B) Transpiration
- C) Photosynthesis
- D) Germination

5. Which botanical term describes a plant that completes its life cycle in exactly one growing season?

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

6. What pH range is generally considered ideal for most garden plants?

- A) 3.0 to 4.5
- B) 6.0 to 7.0
- C) 9.0 to 10.5
- D) 11.0 to 12.0

7. Which part of the plant is primarily responsible for absorbing water and minerals from the soil?

- A) Stem
- B) Flower
- C) Leaf
- D) Root

8. What is the term for the method of propagating plants using stem, leaf, or root pieces?

- A) Grafting
- B) Cuttings
- C) Layering
- D) Budding

9. Which of these is considered a 'macronutrient' required by plants in large amounts?

- A) Iron
- B) Zinc
- C) Magnesium
- D) Manganese

10. What is the primary purpose of 'mulching' in a vegetable garden?

- A) To increase soil acidity
- B) To prevent weed growth and retain moisture
- C) To improve pollination rates
- D) To kill soil-borne insects

11. Which group of plants is known for their ability to 'fix' nitrogen in the soil?

- A) Legumes
- B) Grasses
- C) Cacti
- D) Ferns

12. What does the term 'deciduous' mean in relation to trees and shrubs?

- A) They stay green all year
- B) They produce fruit in winter
- C) They shed their leaves annually
- D) They are drought-resistant

13. Which tool is most appropriate for pruning thin, woody branches?

- A) Rake
- B) Secateurs
- C) Shovel
- D) Hoe

14. What is the main role of xylem tissue within a plant?

- A) Transporting sugars
- B) Transporting water
- C) Storing protein
- D) Protecting the bark

15. What is the term for the growth of a plant toward a light source?

- A) Geotropism
- B) Thigmotropism
- C) Phototropism
- D) Hydrotropism

16. Which type of soil is characterized by its gritty texture and rapid drainage?

- A) Clay
- B) Loam
- C) Sand
- D) Peat

17. What is the botanical name for the ripened ovary of a flowering plant?

- A) Seed
- B) Fruit
- C) Flower
- D) Embryo

18. Which environmental factor most significantly triggers the germination of most seeds?

- A) Wind
- B) Moisture
- C) Soil depth
- D) Insects

19. What is the primary benefit of crop rotation in a garden?

- A) Improving soil structure and reducing pest buildup
- B) Increasing the height of plants
- C) Making the soil more alkaline
- D) Preventing the need for sunlight

20. Which gas do plants primarily take in from the atmosphere during photosynthesis?

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