

Fundamentals of Horticulture

Horticulture · Answer Key · 20 Questions

1. Which process do plants primarily use to convert light energy into chemical energy?

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

2. What is the primary function of the xylem in a vascular plant?

- A) Transporting water and minerals**
- B) Storing starch
- C) Producing pollen
- D) Transporting sugars

3. Which soil component is known for having the smallest particle size and high water retention?

- A) Sand
- B) Silt
- C) Clay**
- D) Loam

4. What is the term for the process of removing dead or overgrown branches from a plant to encourage growth?

- A) Pollination
- B) Pruning**
- C) Grafting
- D) Propagation

5. Which of the following is a macronutrient essential for plant growth and often found in fertilizers?

- A) Gold
- B) Nitrogen**
- C) Neon
- D) Silver

6. What is the primary role of the stoma in a plant leaf?

- A) Absorbing soil nutrients
- B) Gas exchange**
- C) Anchoring the plant
- D) Attracting pollinators

7. Which type of plant completes its entire life cycle--from germination to seed production--in one growing season?

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

8. What is the main purpose of mulch in a garden bed?

- A) To increase soil acidity
- B) To prevent weeds and retain moisture**
- C) To provide sunlight to seeds
- D) To increase soil temperature

9. Which part of the plant is responsible for anchoring it into the ground and absorbing water?

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

10. What is the scientific term for the development of a plant from a seed?

- A) Germination**
- B) Photosynthesis
- C) Transpiration
- D) Pollination

11. Which pH range is generally considered optimal for the majority of vegetable crops?

- A) 2.0 - 4.0
- B) 6.0 - 7.0**
- C) 9.0 - 10.0
- D) 11.0 - 12.0

12. What is the process called when pollen is transferred from the male part of a flower to the female part?

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

13. Which greenhouse effect describes the trapping of heat to keep plants warm?

- A) The thermal barrier
- B) The glazing effect
- C) The greenhouse effect**
- D) The insulation layer

14. What is the primary function of chlorophyll in plants?

- A) To absorb light energy**
- B) To protect against pests
- C) To store genetic material
- D) To transport water

15. Which technique involves joining a shoot from one plant onto the rootstock of another?

- A) Grafting**
- B) Layering
- C) Division
- D) Cutting

16. What is the term for plants that lose their leaves annually?

- A) Evergreen
- B) Deciduous**
- C) Coniferous
- D) Succulent

17. Which plant structure contains the reproductive organs?

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

18. What is the primary gas absorbed by plants during photosynthesis?

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

19. Which organism is commonly encouraged in soil to help decompose organic matter?

- A) Earthworms**
- B) Cockroaches
- C) Aphids
- D) Locusts

20. What is the name for the growth of a plant toward a light source?

A) Geotropism

B) Phototropism

C) Hydrotropism

D) Thigmotropism