

Advanced Botanical and Natural World Trivia

Plants & Nature · Practice Test · 18 Questions

1. Which plant hormone is primarily responsible for the ripening of fruit and the abscission of leaves?

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

2. What is the primary substance that makes up the cell walls of fungi, distinguishing them from plant cell walls?

- A) Cellulose
- B) Chitin
- C) Lignin
- D) Pectin

3. In botanical terms, what is the specific name for the phenomenon where a plant species has separate male and female flowers on the same individual plant?

- A) Dioecious
- B) Monoecious
- C) Hermaphroditic
- D) Polyandrous

4. Which Australian tree species is renowned for having the highest oil content in its leaves and is a primary food source for koalas?

- A) Eucalyptus globulus
- B) Acacia pycnantha
- C) Melaleuca alternifolia
- D) Corymbia ficifolia

5. What is the specialized tissue in plants that transports water and dissolved minerals from the roots to the leaves?

- A) Phloem
- B) Cambium
- C) Xylem
- D) Pith

6. Which group of plants, known as gymnosperms, consists of only one extant species, *Ginkgo biloba*?

- A) Cycadales
- B) Ginkgoales
- C) Pinales
- D) Gnetales

7. What is the term for a symbiotic relationship between a fungus and the roots of a vascular plant?

- A) Rhizobia
- B) Mycorrhiza
- C) Lichens
- D) Endophyte

8. Which of these plants is considered a 'hemiparasite' because it performs photosynthesis but extracts water and nutrients from a host tree?

- A) *Cuscuta*
- B) Mistletoe
- C) *Rafflesia*
- D) *Orobancha*

9. What is the primary chemical compound found in the leaves of the genus *Atropa* that makes the plant highly toxic?

- A) Atropine
- B) Nicotine
- C) Caffeine
- D) Morphine

10. Which botanical family does the commercial coffee plant, *Coffea arabica*, belong to?

- A) Solanaceae
- B) Rubiaceae
- C) Fabaceae
- D) Asteraceae

11. What is the largest living organism by surface area/root network, often found in Oregon's Malheur National Forest?

- A) Pando (Quaking Aspen)
- B) *Armillaria ostoyae* (Honey Fungus)
- C) *Sequoiadendron giganteum*
- D) *Ficus benghalensis*

12. Which plant mechanism involves the movement of water vapor out of the plant and evaporation into the atmosphere?

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

13. The 'Welwitschia mirabilis' is a desert plant famous for its longevity and is native to which geographical region?

- A) The Atacama Desert
- B) The Namib Desert
- C) The Gobi Desert
- D) The Sahara Desert

14. What is the botanical term for a fruit that develops from a single flower with many separate carpels, such as a strawberry or raspberry?

- A) Pome
- B) Aggregate fruit
- C) Drupe
- D) Hesperidium

15. Which mineral is the central atom in the chlorophyll molecule, essential for photosynthesis?

- A) Iron
- B) Magnesium
- C) Calcium
- D) Potassium

16. What is the process by which plants convert nitrogen gas from the atmosphere into ammonia, usually facilitated by bacteria in root nodules?

- A) Nitrogen assimilation
- B) Nitrogen fixation
- C) Denitrification
- D) Nitrification

17. Which of the following describes the 'C4' photosynthetic pathway?

- A) A method to prevent photorespiration in hot climates
- B) A way to grow in low light conditions
- C) A process of aquatic plant breathing
- D) A method used exclusively by mosses

18. What is the scientific name for the phenomenon of plants growing towards a light source?

- A) Gravitropism
- B) Thigmotropism
- C) Phototropism
- D) Chemotropism