Q1W7- Test 1- Plant Structure and Function

Multiple Choice
Identify the choice that best completes the statement or answers the question.

____ 1. Parallel veins in a leaf would indicate that the plant is a _____.
a. dicotyledon
b. biennial
c. perennial
d. monocotyledon

____ 2. Which of the following is a characteristic of monocots?
a. alternating strands of xylem and phloem that surround a core
b. xylem forms a star shape in the root cross section
c. woody stems with thick bark
d. vascular bundles of stem in cross section are in a ring

____ 3. The veins of a leaf contain the _____.
a. apical meristem
b. epidermis
c. endodermis
d. vascular tissue

____ 4. Where does most photosynthesis take place?
a. in the cells of the cortex
b. in the spongy mesophyll
c. in the palisade mesophyll
d. in the stomata

____ 5. What is the primary function of plant leaves?
a. to support the plant
b. to produce flowers
c. to take in water
d. to trap sunlight for photosynthesis

____ 6. A plant is probably a dicot if it has _____.
a. netted veins
b. one seed leaf within the seed
c. parallel veins
d. flower parts in multiples of three

____ 7. To control water loss, the size of the stomata is reduced by the _____.
a. xylem
b. phloem
c. cambium
d. guard cells

____ 8. A plant that produces too little of the gibberellins might _____.
a. grow too tall
b. increase the rate of seed germination
c. develop many buds
d. not form flowers

____ 9. Which of the following is NOT a characteristic of a parenchyma cell?
a. the most abundant type of plant cell
b. thick, rigid cell walls
c. thin, flexible cell walls
d. large central vacuoles

____ 10. The epidermal structures that control the exchange of gases are called _____.
a. mesophyll
b. trichomes
c. root hairs
d. stomata

____ 11. Sugars and other organic compounds are transported throughout the plant by the _____.
a. tracheids
b. guard cells
c. phloem
d. xylem

____ 12. Which of the following cells would be found in xylem tissue?
a. sieve tube members
b. tracheids
c. companion cells
d. guard cells

____ 13. The _____ produces new xylem and phloem cells in the stems and roots.
a. epidermis
b. endodermis
c. apical meristem
d. vascular cambium

____ 14. The plant hormone, auxin, is produced in the _____ of a growing plant.
a. leaves
b. vascular tissue
c. branches
d. apical meristem

____ 15. A plant's response to an external stimulus that comes from a particular direction is called _____.
a. tropism
b. nastic response
c. flowering
d. cell division

____ 16. Guard cells close the _____ to prevent excess water loss.
a. stomata
b. trichomes
c. epidermis
d. collenchyma

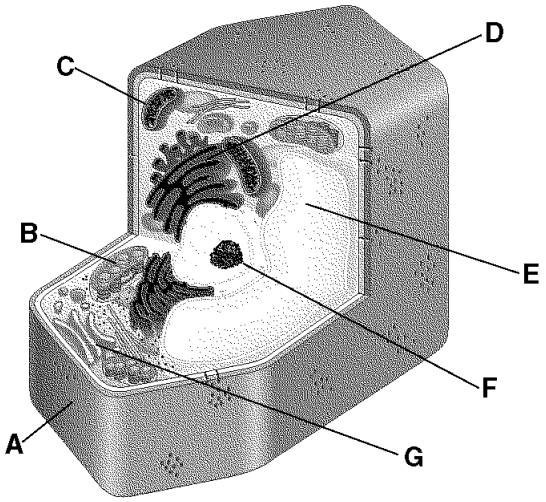

Figure 23-1

____ 17. Which structure shown in Figure 23-1 is not found in animal cells?
a. A
b. C
c. D
d. F

____ 18. What is the purpose of structure B in Figure 23-1?
a. powerhouse of the cell
b. making ribosomes
c. generating food
d. waste management

____ 19. Part A of the cell in Figure 23-1 is very flexible in a particular cell. What type of cell is it?
a. parenchyma
b. collenchyma
c. sclerenchyma
d. stomata

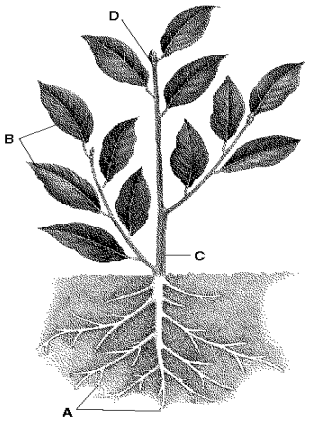

Figure 23-2

____ 20. What structure shown in Figure 23-2 produces sugars?
a. A
b. B
c. C
d. D

____ 21. Where is most of the vascular tissue found in Figure 23-2?
a. A
b. B
c. C
d. D

____ 22. Which structure shown in Figure 23-2 demonstrates negative gravitropism?
a. A
b. B
c. C
d. D

____ 23. Which structure shown in Figure 23-2 has the greatest percentage of dermal cells?
a. A
b. B
c. C
d. D

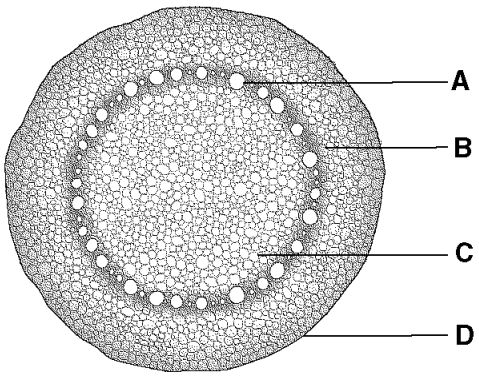

Figure 23-3

____ 24. What type of cells are found at section C of Figure 23-3?
a. collenchyma
b. parenchyma
c. sclerenchyma
d. stomata

____ 25. What is transported by section A of Figure 23-3?
a. sugar
b. heat
c. water
d. waste

____ 26. What is transported by section B of Figure 23-3?

a. sugar
b. heat
c. water
d. waste

____ 27. Where is this type of tissue located?
a. at the surface
b. in the ground
c. inside the leaf
d. inside a seed

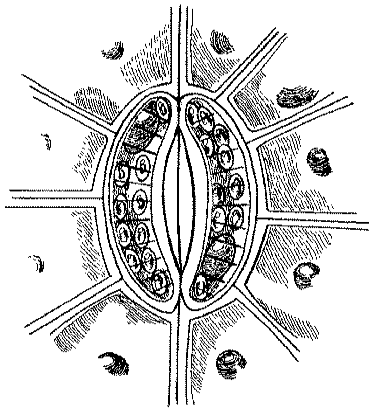

Figure 23-4

____ 28. What are the organelles shown in the guard cells shown in Figure 23-4?
a. stomata
b. mitochondria
c. ribosomes
d. chloroplasts

____ 29. What is the purpose of the structure shown in Figure 23-4?
a. transpiration
b. photosynthesis
c. water transport
d. waste removal

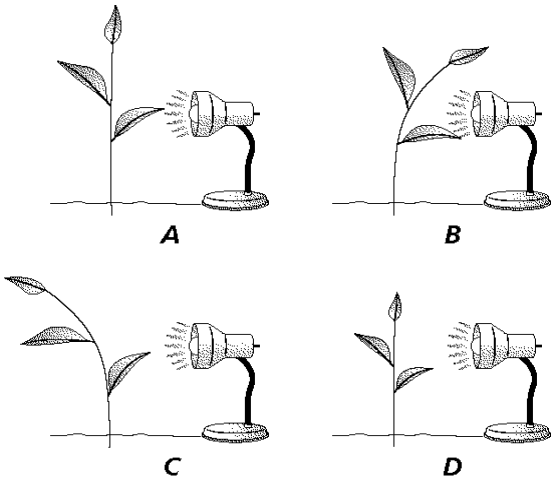

Figure 23-5

____ 30. Which picture shown in Figure 23-5 is the most likely outcome?
a. A
b. B
c. C
d. D

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