

Botany. Homework Chapter 6

1. In a mature, woody dicot stem, the tissue between the xylem and the phloem is the
 - A) vascular cambium.
 - B) cortex.
 - C) apical meristem.
 - D) cork cambium.
 - E) pith.

2. Which of the following function primarily in the lateral conduction of food in a stem?
 - A) resin canals
 - B) laticifers
 - C) tyloses
 - D) lenticels
 - E) rays

3. Which of the following specialized stems have relatively long internodes?
 - A) rhizomes
 - B) stolons
 - C) tubers
 - D) corms
 - E) bulbs

4. The tyloses that prevent conduction of any kind in wood are most frequently found in
 - A) laticifers.
 - B) sieve-tube elements.
 - C) resin canals.
 - D) cork cells.
 - E) xylem cells.

5. The ground tissue or fundamental tissue of monocots is composed of
 - A) collenchyma.
 - B) sclerenchyma.
 - C) parenchyma.
 - D) cork cells.
 - E) meristematic cells.

6. A very thin sheet of desirable wood that is carefully cut so as to produce the best possible view of the grain and then glued to cheaper lumber is called
- A) excelsior.
 - B) cooperage.
 - C) quartersawed wood.
 - D) veneer.
 - E) piling wood.
7. A twig's age can be determined by
- A) counting the number of leaves or leaf scars on it.
 - B) counting the number of groups of bud scale scars on it.
 - C) measuring the distances between nodes.
 - D) counting nodes.
 - E) examining its pith.
8. The procambium produces
- A) secondary xylem and phloem.
 - B) cortex.
 - C) pith.
 - D) epidermis.
 - E) primary xylem and phloem.
9. In woody dicots, which of the following may eventually be crushed as growth occurs?
- A) secondary xylem
 - B) cork
 - C) cork cambium
 - D) pith
 - E) vascular cambium
10. Which of the following describe leaf gaps and bud gaps?
- A) gaps in the cylinders of xylem and phloem where traces branch off from them
 - B) air spaces in leaves
 - C) spaces on internodes between leaves
 - D) spaces between bud scales
 - E) None of these answers are correct.

11. Cells produced by the vascular cambium do NOT include
- A) tracheids.
 - B) vessel elements.
 - C) phelloderm.
 - D) sieve-tube elements.
 - E) companion cells.
12. An increment borer is
- A) a beetle that consumes wood in several small stages.
 - B) an instrument used for determining the age of a tree.
 - C) a device for calculating the number of leaves on a tree.
 - D) a small wood drill.
 - E) an electronic instrument used for determining if the wood of a tree is healthy.
13. In monocot stems the parenchyma cells are referred to collectively as
- A) cortex.
 - B) pith.
 - C) phelloderm.
 - D) vascular bundles.
 - E) ground or fundamental tissue.
14. Which of the following have no nodes or internodes?
- A) stolons
 - B) rhizomes
 - C) cladophylls
 - D) tubers
 - E) none of these answers are correct.
15. The bases of lost branches that have become covered over with new annual rings of wood are called
- A) veneer.
 - B) traces.
 - C) seasoned wood.
 - D) knots.
 - E) lignum vitae.

16. Which function does the stem have in common with the root?
- A) synthesis of starch
 - B) photosynthesis
 - C) conduction
 - D) absorption
 - E) both [b and c] are correct
17. Leaves and buds are attached to the stem at the
- A) internodes.
 - B) axils.
 - C) apex.
 - D) nodes.
 - E) sides.
18. One generally distinguishing characteristic between woody stems and herbaceous stems is that woody stems
- A) have no vascular cambium.
 - B) produce new growth each season.
 - C) normally live only one season.
 - D) are usually green and soft.
 - E) both [b and d] are correct
19. Which can be used to determine the age of a woody twig?
- A) leaf scars
 - B) vascular bundle scars
 - C) lenticels
 - D) terminal bud scale scars
 - E) birth certificate
20. A discrete region of xylem and phloem in a dicot stem is called a
- A) vascular cambium.
 - B) vascular sheath.
 - C) vascular bundle.
 - D) vascular cortex.
 - E) vascular node.
21. The cortex and the pith consist primarily of parenchyma cells.
22. Most stem tips have caps over them that protect them while they are growing.

23. Lenticels and stomata function in gas exchange.

24. An increment borer is a common pest of woody stems.