

PCMB 300 – Winter Quarter 2008
SAMPLE QUESTIONS FOR MIDTERM EXAM

There will be multiple-choice and true/false questions. There may be diagrams associated with some questions. In the multiple-choice questions, there will be only one correct answer. This exam will cover up through secondary growth. Leaves and photosynthesis will be covered in the 2nd midterm.

1. Plant cells are distinguished from animal cells:
 - a. by the presence of chloroplasts
 - b. by the presence of vacuoles
 - c. by the presence of a plasma membrane
 - d. by the presence of a cell wallanswers a, b, and d are correct
2. An organelle that can be considered as the information center of the cell is the:
 - a. vacuole
 - b. nucleus
 - c. nucleolus
 - d. chromatin
 - e. chromosome
3. Which of the following is considered a vascular tissue?
 - a. sclerenchma
 - b. cortex
 - c. epidermis
 - d. phloem
 - e. cork
4. During anaphase of mitosis:
 - a. the chromosomes shorten and thicken
 - b. the chromosomes line up at the equator of the cell
 - c. the nuclear membrane disappears
 - d. the cell plate forms between the two daughter nuclei
 - e. the two groups of chromosomes pull apart and migrate to the opposite poles of the cell
5. Which of the following tissues/cells transport water in the plant?
 - a. phloem
 - b. xylem
 - c. sieve tubes
 - d. companion cells
 - e. parenchyma

True/False:

6. Cytokinesis occurs between interphase and mitosis.
7. A vessel cell is considered phloem tissue.
8. Turgor pressure is necessary for cell enlargement.
9. The phragmoplast is required for the manipulation of the vacuole position in nuclear division.
10. The cork cambium gives rise to the secondary epidermis.
11. The stomate is located in the epidermal tissue.
12. Lignin is present only in secondary cell walls.