

Botany. Biol 1411. Homework Chapter 3

1. In a mature, functioning, healthy cell with a nucleus, which of the following is *extracellular*?
 - A) endoplasmic reticulum
 - B) middle lamella
 - C) nucleolus
 - D) chromosomes
 - E) ribosomes

2. Which of the following do NOT develop from proplastids?
 - A) chloroplasts
 - B) chromoplasts
 - C) symplast
 - D) leucoplasts
 - E) amyloplasts

3. The watery fluid found in vacuoles is called
 - A) chromatin.
 - B) stroma.
 - C) cristae.
 - D) protoplasm.
 - E) cell sap.

4. Which of the following are common to nearly all plant and animal cells?
 - A) plasmodesmata
 - B) nuclei
 - C) centrioles
 - D) plastids
 - E) cell membrane

5. The fluid within cells in which the nucleus and other organelles are suspended is
 - A) protoplasm.
 - B) cytoplasm.
 - C) cell sap.
 - D) pectin.
 - E) stroma.

6. Which of the following are not found within chloroplasts?
- A) starch grains
 - B) DNA
 - C) ribosomes
 - D) enzymes
 - E) Golgi bodies
7. Which of the following functions as an organic catalyst?
- A) stroma
 - B) granum
 - C) thylakoid
 - D) microfilament
 - E) enzyme
8. Which of the following would be found in a eukaryotic cell but NOT in a prokaryotic cell?
- A) ribosome
 - B) cell membrane
 - C) mitochondrion
 - D) nucleus
 - E) both [c and d] are correct
9. Which of the following are primary constituents of cell membranes?
- A) nucleotides
 - B) phospholipids
 - C) proteins
 - D) carbohydrates
 - E) steroids
10. The organelle known as the _____ is involved in RNA synthesis.
- A) ribosome
 - B) nucleolus
 - C) mitochondrion
 - D) Golgi
 - E) nucleus

11. Which of the pairs is mismatched?
- A) chloroplast; photosynthesis
 - B) nucleus; chromosomes
 - C) microtubule; movement
 - D) mitochondrion; energy production
 - E) ribosome; digestion
12. Maintaining the internal turgor pressure of cells is a function of the
- A) Golgi.
 - B) cytoplasm.
 - C) lysosome.
 - D) vacuole.
 - E) microtubules.
13. Leeuwenhoek is credited with applying the term *cell* to the boxlike compartments he saw in cork tissue.
14. Pasteur discovered that alcoholic fermentation involved the activity of yeast.
15. A plasma membrane consists primarily of carbohydrate molecules.
16. Cell vacuoles contain water and dissolved substances.
17. *Cyclosis* is another name for the cell cycle.
18. Vacuoles function in regulating the movement of RNA out of the nucleus.
19. Anthocyanins are water-soluble pigments found in vacuoles.
20. Leucoplasts contain yellow to orange pigments.