

## Unit 2 Quiz

### True False Questions

Indicate True or False for the following Statements.

1. DNA is a nucleic acid found in cells. ( True/False )
2. All cells have some common parts such as the plasma membrane, cytoplasm, ribosomes and DNA. ( True/False )
3. Cells without a nucleus are eukaryotic cells. ( True/False )
4. Mitochondria are not found in prokaryotic cells. ( True/False )
5. Prokaryotes were the first type of organism to evolve. ( True/False )
6. True or False: all living things are made of cells. ( True/False )
7. True or False: plant cells contain mitochondria. ( True/False )
8. Pathogens can be destroyed by the process of phagocytosis. ( True/False )

### Multiple Choice Questions

For each question, four alternative choices are given, of which only one is correct. You have to select the correct alternative and mark it in the appropriate option.

9. Which structure is found only in plant cells but not in animal cell?
  - a. Cell wall
  - b. Ribosomes
  - c. Mitochondria
  - d. None of the above
10. What is the function of ribosomes?
  - a. To make lipids
  - b. To form the boundary between the cell and its environment
  - c. To store energy
  - d. To make proteins
11. The gel-like material of cytoplasm is called \_\_\_\_\_.
  - a. Cytosol
  - b. Microtubules
  - c. Tubulin
  - d. None of the above
12. Eukaryotic cells contain \_\_\_\_\_.
  - a. Ribosomes
  - b. Nucleus
  - c. Both A and B
  - d. None of the above
13. Prokaryotic cells are significantly less advanced than their eukaryotic counterparts. But which of the following do they have in common?
  - a. Ribosomes
  - b. Mitochondria
  - c. Nucleus

- d. All of the above
14. The organelle inside eukaryotic cells that contains most of the cell's DNA and acts as the control center of the cell is called the \_\_\_\_\_.
- Nucleus
  - Mitochondria
  - Vacuoles
  - None of the above
15. What is the function of mitochondria?
- Make proteins
  - Store the cell's genetic information
  - Store substances in the cell
  - Provide energy for the cell
16. The smallest functioning unit of an organism is
- a molecule
  - an element
  - a cell
  - tissue
17. Animal cells lack \_\_\_\_\_.
- Cell membranes
  - Mitochondria
  - Lysosomes
  - Cell walls
18. Plants make their own food by the process called \_\_\_\_\_.
- Photosynthesis
  - Respiration
  - Both A and B
  - None of the above
19. A plant cell is different from an animal cell because it has:
- Rigid cell wall
  - A large central vacuole
  - Plastids
  - All of the above
20. Genetic information, which contains the information for the structure and function of an organism, is found encoded in DNA in the form of \_\_\_\_\_.
- Ribosomes
  - Chloroplasts
  - Endoplasmic reticulum
  - Genes
21. The organelle that provides a plant cell with its structure, and also lets waste out and food in, is the
- chloroplast
  - cell wall
  - vacuole
  - mitochondria

22. If a plant looks droopy, it's probably because it has shrunken
- chloroplasts
  - centrioles
  - mitochondria
  - vacuoles
23. One example of active transport is \_\_\_\_\_.
- The sodium ( $\text{Na}^+$ )/potassium ( $\text{K}^+$ ) pump
  - Osmosis
  - Facilitated diffusion
  - None of the above
24. In active transport:
- Energy is required
  - Energy is not required
  - Both A and B
  - None of the above
25. The molecule that provides the energy needed for active transport is \_\_\_\_\_.
- ATP
  - Water
  - Glucose
  - Sodium
26. Bacteria might be engulfed and transported into the interior of cells by white blood cells called macrophages. Which method of transport would a cell most likely use for this process?
- exocytosis
  - phagocytosis
  - pinocytosis
  - transport pump
27. Endocytosis is the process of taking vesicles into the cell using the \_\_\_\_\_.
- Plasma membrane
  - Cell wall
  - Mitochondrial membrane
  - None of the above
28. During one cycle, the sodium-potassium pump binds and moves \_\_\_\_\_  $\text{Na}^+$  out of the cell and \_\_\_\_\_  $\text{K}^+$  into the cell.
- 2, 3
  - 1, 2
  - 3, 2
  - 2, 2