

**DIAGNOSTIC TEST**  
**CELL ORGANELLES**

**Multiple Choice Questions**

1. Cells that do not have a distinct nucleus are called:  
A. eukaryotic  
B. prokaryotic  
C. multicellular
2. Cells that have internal membranes surrounding specialised organelles are:  
A. eukaryotic  
B. prokaryotic  
C. unicellular
3. The controlling organelle within a cell is the:  
A. nucleolus  
B. gene  
C. nucleus
4. The nucleolus is made of large nucleic acids called:  
A. DNA  
B. RNA  
C. REM
5. The jellylike fluid that contains nutrients in a cell is the:  
A. cytoplasm  
B. vacuole  
C. nucleus
6. Small organelles that are responsible for protein synthesis are the:  
A. ribosomes  
B. RNA  
C. genes
7. The system of membranes that help transport chemicals such as proteins through the cell is the:  
A. golgi body  
B. ribosome  
C. endoplasmic reticulum
8. The organelles that are responsible for collecting, sorting, processing and distributing proteins and carbohydrates are the:  
A. golgi bodies  
B. ribosomes  
C. plastids
9. The organelle found in both animal and plant cells that is clear but contains dissolved nutrients is the:  
A. vacuole  
B. cytoplasm  
C. centriole
10. The 'powerhouse' of the cell that generates the cell's energy-rich ATP molecules is the:  
A. mitochondrion  
B. chloroplast  
C. nucleus

**True-False Questions**

11. The mitochondrion is responsible for photosynthesis.
12. Chloroplasts contain green chlorophyll and are responsible for photosynthesis.
13. All cells have a cell wall but only plant cells have a cell membrane.
14. Metabolism is all the chemical reactions occurring in an organism.
15. An electron microscope is used to view cell organelles.

**Short Answer Questions**

16. What are the main differences between animal and plant cells?
17. What organic macromolecules are found in cytoplasm?
18. Reorder the following from smallest to largest – cell, organ, organism, tissue, atom, molecule, system, organelle
19. If prokaryotic cells such as bacteria do not have organelles, how do they function?
20. How has technology advanced cell knowledge?