

The Endomembrane System Multiple Choice Test

Name: _____ Date: _____ Class: _____

Instructions: Choose the best answer for each question.

1. What is the main function of the endomembrane system?

- A. Producing energy for the cell
- B. Supporting movement in the cell
- C. Synthesizing, packaging, and transporting materials
- D. Controlling cell division

2. Which organelle is responsible for modifying and packaging proteins?

- A. Ribosome
- B. Golgi apparatus
- C. Nucleus
- D. Mitochondrion

3. The rough endoplasmic reticulum (RER) is covered with:

- A. Vacuoles
- B. Lysosomes
- C. Ribosomes
- D. Centrioles

4. What is the primary function of the smooth endoplasmic reticulum (SER)?

- A. Protein synthesis
- B. Lipid synthesis and detoxification
- C. ATP production
- D. DNA storage

5. Which organelle contains digestive enzymes used to break down waste?

- A. Vacuole
- B. Chloroplast
- C. Lysosome
- D. Ribosome

6. Ribosomes are responsible for:

- A. Lipid production
- B. Protein synthesis
- C. Waste storage
- D. Cell movement

7. Transport vesicles move materials from the:

- A. Cytoplasm to nucleus
- B. Golgi apparatus to mitochondria
- C. Endoplasmic reticulum to the Golgi apparatus
- D. Cell membrane to ribosomes

8. Which structure acts as the boundary of the cell and controls what enters and leaves?

- A. Cell membrane
- B. Nucleolus
- C. Cytoskeleton
- D. Chromosome

9. The Golgi apparatus receives proteins from the:

- A. Lysosome
- B. Smooth ER
- C. Rough ER
- D. Vacuole

10. Which organelle stores water, nutrients, and wastes?

- A. Vacuole
- B. Ribosome
- C. Centriole
- D. Chloroplast

11. Which part of the endomembrane system is directly involved in protein production?

- A. Smooth ER
- B. Ribosomes on rough ER
- C. Vacuoles
- D. Lysosomes

12. The endomembrane system is mainly found in:

- A. Prokaryotic cells only
- B. Eukaryotic cells
- C. Viruses
- D. Bacteria only

13. What is the function of vesicles?

- A. Produce DNA
- B. Break down glucose
- C. Transport substances within the cell
- D. Create ribosomes

14. Which organelle helps detoxify harmful substances in the cell?

- A. Smooth ER
- B. Ribosome
- C. Golgi apparatus
- D. Nucleus

15. Which organelle ships proteins to their final destination?

- A. Mitochondrion
- B. Golgi apparatus
- C. Nucleus
- D. Chloroplast

16. Lysosomes are most common in:

- A. Plant cells only
- B. Animal cells
- C. Bacterial cells
- D. Fungal cells only

17. Which statement best describes the rough ER?

- A. It stores water
- B. It lacks ribosomes
- C. It helps make and transport proteins
- D. It controls the cell

18. The cell membrane is made mainly of:

- A. Proteins and nucleic acids
- B. Lipids and proteins
- C. Sugars and DNA
- D. ATP and enzymes

19. Which organelle is responsible for sorting and packaging materials?

- A. Golgi apparatus
- B. Ribosome
- C. Nucleus
- D. Mitochondrion

20. What happens to proteins after they leave the Golgi apparatus?

- A. They are destroyed immediately
- B. They are sent to different locations in or outside the cell
- C. They return to the nucleus
- D. They become DNA