1. State the function of the cytoplasmic membrane in bacteria.

A. It determines what goes into and out of a cell.

B. It prevents osmotic lysis.

C. It does both of the above.

2. A process whereby the cell uses both transport proteins and metabolic energy to transport substances across the membrane against the concentration gradient.

A. passive diffusion

B. active transport

C. group translocation

D. facilitated diffusion

3. The net movement of gases or small uncharged polar molecules across a phospholipid bilayer membrane from an area of higher concentration to an area of lower concentration is called:

A. passive diffusion

B. active transport

C. osmosis

D. facilitated diffusion

4. Transport proteins that simultaneously transport two substances across the membrane in the same direction.

A. uniporters

B. antiporters

C. symporters

D. channel proteins

5. When a cell is in a hypotonic environment, the solute concentration is higher:

A. inside the cell

B. outside the cell

6. If the net flow of water is into a cell, the cell must be in a _____ environment.

A. isotonic

B. hypotonic

C. hypertonic

7. Bacteria divide by:

A. mitosis
B. meiosis
C. budding
D. binary fission

8. Fts proteins interact to form a ring at the cell division plane. These proteins form the bacterial cell division apparatus known as the:

A. Mitotic spindle.

B. Nucleoid.

C. Meiosis apparatus.

D. Divisome.