Quiz - Cell Membrane

Part A: True/False Questions

- 1. Cell membrane is fully permeable.
- 2. Steroid is a major component of cell membrane bilayer.
- 3. Cell membrane is interspersed with cell membrane proteins.
- 4. Phospholipid is the primary building block of cell membrane.
- 5. Large molecules can pass through phospholipid bilayer without assistance.
- 6. Vesicle is a component of intracellular transport.
- 7. Ions and large polar molecules can be transported into the cell with the assistance of membrane proteins.
- 8. Receptors embedded in cell membrane induce signal transduction pathway.
- 9. Enzymes embedded in cell membrane catalyzes biochemical reactions in cells.
- 10. Cell membrane contains hydrophilic tail and hydrophilic head.

Part B: Multiple Choice Questions

- 1. Which of the following is the major function of cell membrane?
 - A. Facilitates compartmentalization
 - B. Separates cells from extracellular components
 - C. Both A and B
 - D. None of the above
- 2. Which of the following is a major components of cell membrane?
 - A. Cholesterol
 - B. Steroid
 - C. Trans-fat
 - D. None of the above
- 3. What is the major function of cholesterol in cell membrane?
 - A. Strengthens bilayer
 - B. Reduces permeability
 - C. Regulates integral membrane proteins
 - D. All of the above
- 4. How is head and tail in cell membrane held together?
 - A. Non covalent hydrophobic interactions
 - B. Metallic interactions
 - C. They are not held together
 - D. None of the above
- 5. Which of the following can pass through phospholipid bilayer without assistance?
 - A. Fat-soluble molecules
 - B. Ions

- C. Both A and B
- D. None of the above
- 6. How is large molecule pass through phospholipid bilayer?
 - A. Exocytosis
 - B. Endocytosis
 - C. Assistance of membrane proteins
 - D. All of the above
- 7. How are ions and large polar molecules transported into the cell via membrane proteins?
 - A. Facilitated diffusion
 - B. Active transport
 - C. Both A and B
 - D. None of the above
- 8. What method does channel protein adopt to transport ions?
 - A. Facilitated diffusion
 - B. Active transport
 - C. Both A and B
 - D. None of the above
- 9. What method does protein pump adopt to transport large polar molecules?
 - A. Facilitated diffusion
 - B. Active transport
 - C. Both A and B
 - D. None of the above
- 10. Apart from transportation, what is other major function(s) of membrane bound proteins?
 - A. Anchor protein
 - B. Enzyme
 - C. Receptor
 - D. All of the above