

Archive 1 for physiology

Which of the following is true regarding simple diffusion across the cell membrane? Select one:

- a. The solutes would move against the concentration gradient
- 'b. The osmolarity and the volume would be the same after the equilibrium
- c. Cellular energy
- d. The osmolarity would be the same but the volume would be changed after the equilibrium

60-All the followings describe homeostasis EXCEPT? Select one:

- a. Allow baseline to be regained
- b. Negative Feedback mechanism
- c. Positive Feedback mechanism
- d. Feedforward mechanism
- e. Static equilibrium

Which of the following matched pairs are NOT describing the Fluid Mosaic Model? Select one:

- a. Cholesterol- Buffer
- b. Increasing unsaturated fatty acids - Increasing Fluidity
- c. Hydrophilic- Phosphates head
- d. Hydrophobic - Fatty acid tails
- e. Two phospholipids bilayers with phosphates head together

53-One of the following is NOT a part of a decreased body temperature Feedback Mechanism? Select one:

- a. Decrease sweat production from sweat gland
- b. Constriction of blood vessels in skin
- c. Skeletal muscle shivering
- d. Thermoreceptors sensors
- e. Positive feedback mechanism

39- If you added the following solutions to 1L of water which one would have INCORRECT osmolarity value? Select one:

- a. 4 millimole of KCl= 8 mosm/L
- b. 2 millimole CaCl₂- 8 mosm/L
- c. 5 millimole of glucose = 5mosm/L
- d.150 millimole of NaCl= 300mosm/L
- e.10 millimole of dextrose= 10mosm/L

37-Which of the following can dissolve in lipid layer of the cell membrane? Select one:

- a. H⁺
- b. glucose
- c. CO₂
- d. H₂O
- e. Na⁺

29-Which of the following is NOT consistent with Facilitated Diffusion? Select one:

- a. Channel mediated
- b. Carrier mediated
- c. simple diffusion
- d. Used by ions
- e. Used by very small water soluble compounds

25-Which of the followings would decrease the diffusion rate across the cell membrane according to Ficks law? Select one:

- a. The shorter the distance of diffusion
- b. The smaller the size of molecule
- c. Increasing the thickness of the cell membrane
- d. The larger the difference of the concentration gradient
- e. The larger the membrane surface area



24-All the followings are consistent with passive transport EXCEPT? Select one:

- a. Simple diffusion
- b. Osmosis
- c. Facilitated diffusion
- d. Filtration
- e. Cellular ATP

23-Which of the following is NOT related to the function of the protein on the cell membrane surface? Select one:

- a. Membrane buffer
- b. Surface Protein - Peripheral
- c. Channel down concentration gradient
- d. Carrier protein against concentration gradient
- e. Glycoprotein signaling

21-One of the following is related to Positive Feedback Mechanism? Select one:

- a. Osmoregulation
- b. Blood pH
- c. Generation of action potential
- d. Learning
- e. Blood pressure