

1-Which of the following matched pairs are NOT consistent with resting membrane potential?

Select one:

- a. Sodium and Potassium leakage channels - More potassium diffuse out than sodium diffuse in
- b. The Interior of the cell - More negative compared to the outside
- c. The action of sodium Potassium pump - Restore the resting membrane potential
- d. Sodium and Potassium leakage channels - Active transport
- e. Sodium Potassium pump - Requires 40°

of body energy

answer:D

2-which one is NOT correct regarding

action potential? Select one:

- a. Short events in which membrane potential not dramatically changes
- b. Short lasting reversal in the electrical polarity of the excitable cell
- c. Only muscle and nerve cells can exhibit a reversal in electrical polarity
- d. Starting point where it goes for being positive to negative outside
- e. Starting point acts like a signal that can be conducting along the nerve and muscle fibers

answer: A

3-One of the following factors is NOT consistent with resting membrane potential? Select one:

- A. Pumps of Sodium and Potassium
- B. Gibbs and Donnan Potential
- c. Leakage Sodium and Potassium channels
- d. Ligand sodium channels

answer : D

4-which of the following matched pairs are not correct Select one:

- a. Supra-threshold Stimulate more than action potential in nerve bundle
- b. Voltage gated sodium channels - Closed, Open, Inactivated conformation
- c. Voltage gated sodium channels - Closed and inactivated states are ion impermeable
- d. Activation/deactivation of Na⁺ voltage gated channels - The activation gates open
- e. Inactivation of Na⁺ voltage gated channels - Open the inactivation gates

answer : E

5-Which of the following regarding the myelinated nerve fiber and the propagation along the myelinated fiber is NOT correct? Select one:

- a. The action potential is 100m/sec in thickest myelinated nerve cell
- b. The myelin sheath would decrease the myelinated nerve area thus decrease the velocity of action potential
- c. Oligodendrocytes in CNS
- d. Schwann cells are motor and sensory nerves in the peripheral CNS
- e. The action potential along the myelinated nerve fiber is only occurring at the nodes of Ranvier

answer : B

6-Which of the following matched pairs are NOT correct? Select one:

- a. Depolarization - Opening of voltage gated sodium channels
- b. Repolarization - Closure of sodium and opening of K⁺ voltage gated channels



c. Hyperpolarization - Voltage gated K^+ Channels remains open after the potential reaches resting level

d. Threshold - Maximum point where the nerve fiber is enough to be stimulated

e. Subthreshold - Opening enough voltage gated Na^+ channels to start action potential

answer : E