Quiz C

Cogs 17 Fall 2009

1. ____________ is the tendency of molecules to move from areas of high concentration to lower concentration; _______________ refers to the attraction of opposite-polarity molecules. (2pts)

2. The action potential moves along myelinated axons by ________________ (2 words) in which the impulse “jumps” from node to node. (1pt)

3. For an action potential to occur, the membrane must be depolarized to the ______________ potential. (1pt)

4. The period when the neuron can generate another action potential only if the stimulus is greater than normal is called the ____________ period. (1pt)
   a) Absolute refractory
   b) marginal refractory
   c) relative refractory
   d) strongly refractory

5. Depolarization of the postsynaptic membrane produces an ____________, whereas hyperpolarization produces an ____________. (1pt)
   a) IPSP, EPSP
   b) EPSP, IPSP
   c) action potential, inhibitory potential
   d) autoimmune response, autoimmune inhibition

6. Metabotropic channels are opened quickly by the direct action of a neurotransmitter. True / False. (1pt)

7. Voltage gated ________ channels control the release of neurotransmitters. (1pt EC)

8. Please describe the three forces that affect the membrane potential: (3pts)