**GL - Neuroanatomy of Pain: Peripheral & Central Nervous System I – Frank H. Willard, Ph.D.**

1. **All of the following substances are secreted from the PAN (Primary Afferent Nerves) EXCEPT** 
   1. Substance P
   2. Bradykinin
   3. Calcitonin gene-related polypeptide
   4. Somatostatin
2. **Which of the following statements is True regarding the action of Substance P in the Spinal Cord** 
   1. Substance P has hormone-like activity on the dorsal horn neurons
   2. Substance P is considered an excitatory amino acid
   3. Substance P is considered a “fast transmission” neurotransmitter
3. **With injury in the peripheral tissue and activation of the Primary Afferent Nerves (PAN), the PAN cell body will make new Sodium Channel Receptors that** 
   1. Have a longer recovery rate
   2. Have the same recovery rate but respond to now to Calcium
   3. ave a shorter recovery rate
4. **A key element of spinal facilitation involves** 
   1. Phosphorylation of calcium channels leading to conformation change
   2. Influx of magnesium into the second order neuron leading to sensitization
   3. Endocytosis of glutamate in the second order neuron leading changes in cell transcription