Lecture 30 and 31 Review Questions:

1. What is the role of voltage sensitive Ca++ channels in regulating neurotransmitter release?

2. Describe the activities of the following neurotransmitters: acetylcholine, dopamine, serotonin, GABA. Why is cobra venom toxic?

3. Draw a diagram of a neuron and label the following parts: dendrites, axon, terminal end of axon. Explain the role of each in generating action potentials and communicating with other neurons. What is unique about the various parts of the neuron that allow them to have these functions? In your answer, explain where the voltage gated sodium and potassium channels are, where the voltage gated calcium channels are, where the neurotransmitter receptors are located, where the neurotransmitter is located, etc.

4. Explain the difference between central and peripheral nervous system.

5. What is the difference between nerves and neurons?