

## **Week 4 – Questions – Glutamatergic Synapses**

1. What are the two most important types of ionotropic glutamate receptors?
2. What are the key differences in their functional properties?
3. Explain why EPSPs decay more slowly than the EPSCs.
4. Why does the time-course of an EPSP differ in dendrites compared to the soma?
5. How do glutamate receptors get to the synapse?
6. What is LTP?
7. What is LTD?
8. What is STDP?
9. How big is a dendritic spine?
10. What purposes might dendritic spines serve?