Stage 2 Biology Organisms

Communication Assignment

1. Outline two key differences between a typical nervous response and a typical endocrine (hormonal) response to a stimulus.

(2)

1. Explain how the nervous system is often linked to the endocrine system in bodily communication. Use an example to help explain.

(4)

1. Contrast how a peptide vs a steroid hormone typically triggers a desired response in a given cell.

(4)

1. Examine the diagram of a typical synapse (where two nerve cells meet).



1. Identify and describe the steps of the process whereby the neurotransmitter molecules are released into the synapse.

(4)

1. Give two clear reasons why there is a higher than normal concentration of mitochondria in this part of the nerve cell.

(4)

1. Explain how the neurotransmitter molecules came to find themselves within the synaptic vesicles.

(4)

1. Using the diagram as an aid, explain how a pain killing type of drug may work at a molecular level by interrupting nerve impulses. Be specific in your explanation.

(4)