# Chapter 23: The Nervous System (27 points)

## Structure of Nervous System

23.1

1. Name the two organ systems which control the body:

2. Describe the parts of the neuron and their primary function:

* Dendrite
* Cell Body
* Axon

\*\*Draw a neuron and label parts: cell body, axon, dendrite, synapse, synaptic gap, myelin sheath

3. Say where the nerve impulse is conducted in the following kinds of neurons:

* Sensory neurons
* Interneurons
* Motor neurons

4. What is a nerve impulse, and what is it caused by?

23.2

4. What functions/processes do the following parts of the brain control?

* Cerebrum
* Cerebellum
* Thalamus
* Hypothalamus
* Medulla oblongata

5. Which bodily functions do each of the following lobes of the brain control?

* Frontal
* Parietal
* Occipital
* Temporal

6. Name six nervous system disorders:

\*\*Draw and label the following parts of the brain: cerebrum, cerebellum, corpus callosum, thalamus, hypothalamus

## Sensory Organs

23.3

1. List the five cutaneous receptors:

23.4

2. What is the Eustachian tube, and what causes ear-popping?

What are the differences between the two types of deafness?

\*\*Draw and label the following parts of the ear: cochlea, tympanic membrane, semicircular canal, Eustachian tube

23.5

2. How is the amount of light that enters the eye regulated?

3. How do ciliary muscles and the iris help the eye focus?

Briefly describe:

* Myopia
* Hyperopia
* Cataracts
* Astigmatism

\*\*Draw and label the following parts of the eye: cornea, iris, pupil, retina, lens, optic nerve

# Vocabulary 23 (15 points)

Nerve impulse

Neurotransmitter

\*Reflex arc

Resting potential v. acting potential

Central Nervous System

\*4 Lobes of Brain: Parietal, Occipital, Temporal, Frontal

\*Peripheral Nervous System: Sensory division and Motor division

\*Autonomic Nervous System: Sympathetic v. Parasympathetic Nervous System

Medulla oblongata

Cerebrospinal fluid

Sensory receptor

Accommodation

Static v. Dynamic equilibrium

\*Photoreceptors: Rods v. Cones

Lacrimal Glands