

Assigned-11/06/2023. Due-11/10/2023, by 3:35 pm! Homework will not be accepted at the end of class!

-Dr. DeCoster

Student Name: _____

Instructions: Short answers may be indicated on this sheet; add additional sheets for longer answers.

1. Clusters of neuronal cell bodies in the peripheral nervous system are called:
2. Clusters of neuronal cell bodies in the central nervous system are called:
3. Sensory information enters the spinal cord a) laterally; b) dorsally; c) slowly; or d) ventrally?
4. Pain and thermal sensations would include which one best choice: a) mechanoreceptors; b) proprioceptors; c) exteroceptors; or d) chemoreceptors ?
5. True or false, if a stimulus is strong enough it can activate several kinds of fibers?
6. True or false, stimulus intensity is encoded by the intensity of the action potentials in sensory nerves rather than by the frequency.
7. True or false, all sensory receptors adapt to constant stimulation.
8. Define DRG
9. Which type of nerve ending would be most likely sensitive to thermal sensations?: a) encapsulated nerve endings or b) bare nerve endings?
10. At constant temperatures, thermal receptors are: a) silent, or b) fire at a steady state?
11. Which type of muscle fibers are connected to bone by fibrous tissue extensions: a) intrafusal muscle fibers or b) extrafusal muscle fibers?
12. True or false, the function of most anterior motor neurons does not need integration by interneurons.

13. True or false, the golgi tendon organ provides positive feedback to recruit excess muscle loads beyond the normal tension and stimulation limits.
14. Which type of muscle sensory receptors are distributed throughout the belly of the muscle: a) Pacinian corpuscles; b) golgi tendon organs; c) muscle spindles; or d) oligodendrocytes.
15. True or false, the semicircular canals are located at angles of 90 degrees to each other, representing 2 dimensions in space.
16. True or false, all sensory pathways pass through the thalamus.
17. Name the major excitatory neurotransmitter used in the cortex of the brain: Name the major inhibitory neurotransmitter used in the same structure:
18. Name the brain structure used to facilitate communication between the cortical hemispheres.
19. True or false, the cortical hemispheres are equal in amount and type of function.
20. true or false: short-term memory cannot be converted to long-term memory.
21. Which of the following is an adrenal hormone: a) glutamate; b) serotonin; c) nicotine; or d) norepinephrine.
22. Which system tends to have the shortest postganglionic fibers: a) parasympathetic or b) sympathetic?
23. An alternative name for epinephrine is: a) dopamine; b) tyrosine; c) glutamate; d) adrenalin, or e) nicotine?
24. In regard to neurotransmission, acetylcholinesterase would cause a) positive feedback or b) negative feedback?
25. True or false, norepinephrine, after release, can be taken back up into adrenergic nerve endings?