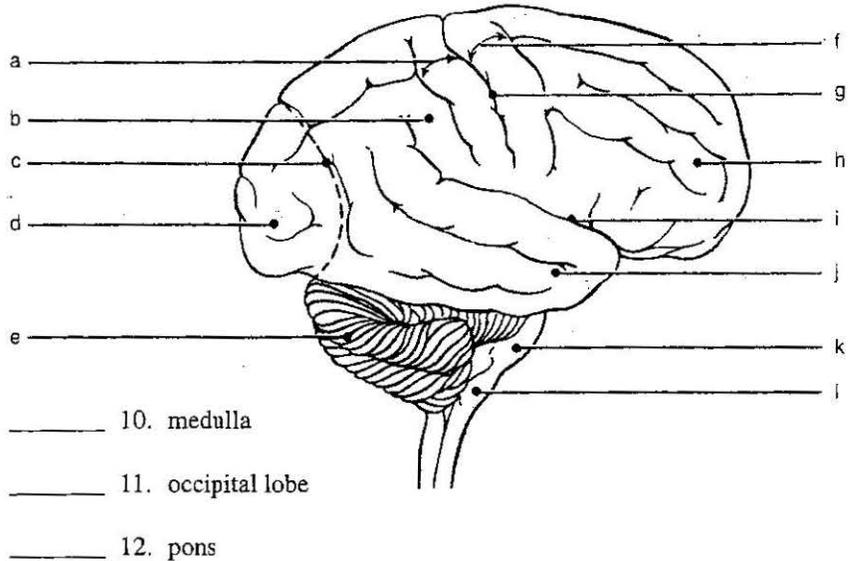


This section of the exam is equal in value to all multiple choice questions. **It will also count as the TIE BREAKER (TB), by entire section.** TB1= Q.1, TB2= Q.2, TB3= Q3, TB4= Q4, TB5= Q5

1. Match the letters on the diagram of the human brain (right lateral view) to the appropriate terms listed at the left.

- \_\_\_\_\_ 1. frontal lobe
- \_\_\_\_\_ 2. parietal lobe
- \_\_\_\_\_ 3. temporal lobe
- \_\_\_\_\_ 4. precentral gyrus
- \_\_\_\_\_ 5. parieto-occipital sulcus
- \_\_\_\_\_ 6. postcentral gyrus
- \_\_\_\_\_ 7. lateral sulcus
- \_\_\_\_\_ 8. central sulcus
- \_\_\_\_\_ 9. cerebellum



- \_\_\_\_\_ 10. medulla
- \_\_\_\_\_ 11. occipital lobe
- \_\_\_\_\_ 12. pons

2. In which of the cerebral lobes are the following functional areas found?

- auditory cortex: \_\_\_\_\_
- primary motor cortex: \_\_\_\_\_
- primary sensory cortex: \_\_\_\_\_

- olfactory cortex: \_\_\_\_\_
- visual cortex: \_\_\_\_\_
- Broca's area: \_\_\_\_\_

3. Match each statement with a response chosen from the key.

- |                           |                      |                              |
|---------------------------|----------------------|------------------------------|
| Key: a. afferent neuron   | e. interneuron       | i. nuclei                    |
| b. central nervous system | f. neuroglia         | j. peripheral nervous system |
| c. efferent neuron        | g. neurotransmitters | k. synapse                   |
| d. ganglion               | h. nerve             | l. tract                     |

- \_\_\_\_\_ 1. the brain and spinal cord collectively
- \_\_\_\_\_ 2. specialized supporting cells in the CNS
- \_\_\_\_\_ 3. junction or point of close contact between neurons
- \_\_\_\_\_ 4. a bundle of nerve processes inside the CNS
- \_\_\_\_\_ 5. neuron serving as part of the conduction pathway between sensory and motor neurons
- \_\_\_\_\_ 6. ganglia and spinal and cranial nerves
- \_\_\_\_\_ 7. collection of nerve cell bodies found outside the CNS
- \_\_\_\_\_ 8. neuron that conducts impulses away from the CNS to muscles and glands
- \_\_\_\_\_ 9. neuron that conducts impulses toward the CNS from the body periphery
- \_\_\_\_\_ 10. chemicals released by neurons that stimulate or inhibit other neurons or effectors

4. Match the following anatomical terms (column B) with the appropriate description or function (column A).

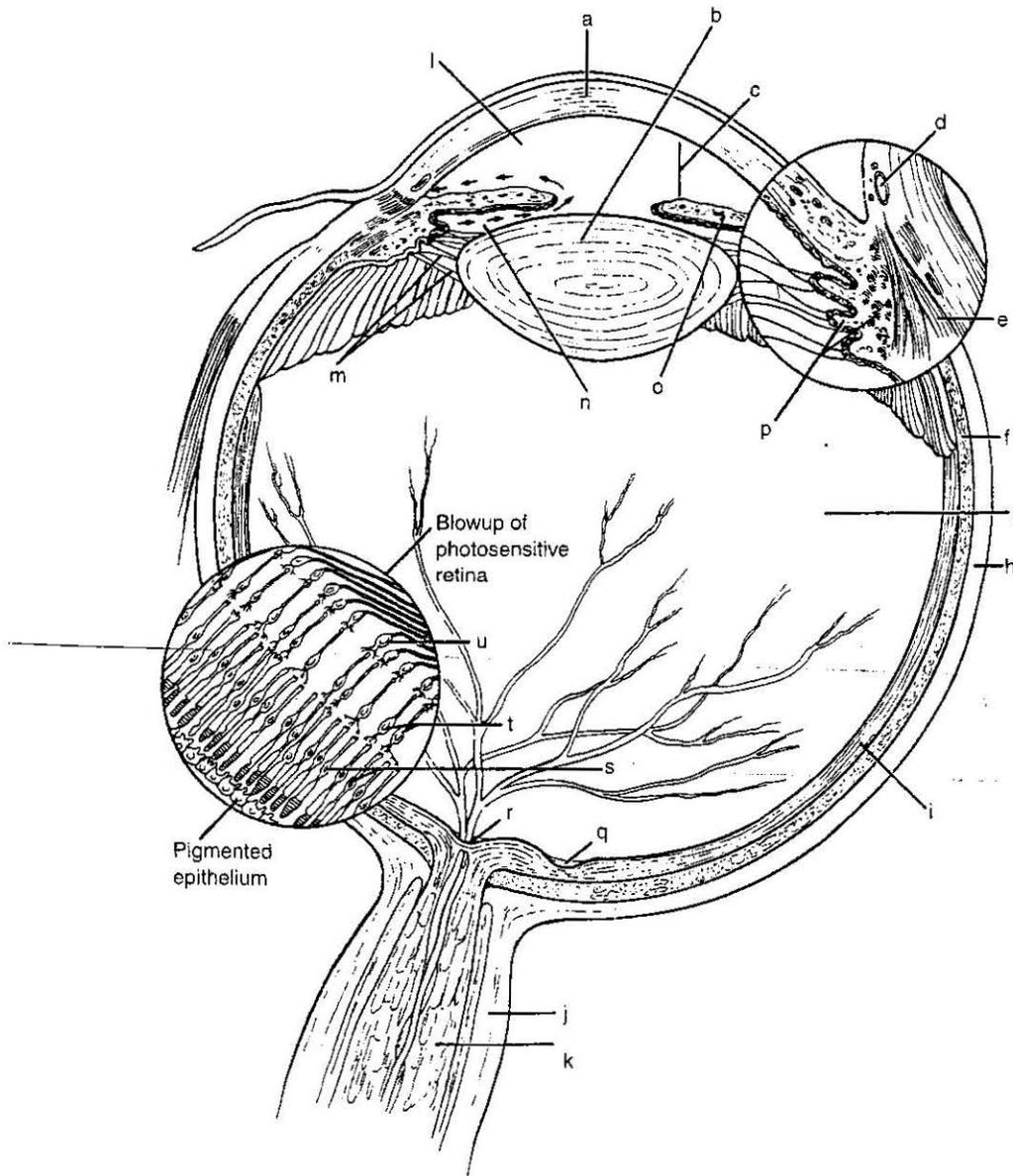
Column A

- \_\_\_\_\_ 1. region of the cell body from which the axon originates
- \_\_\_\_\_ 2. secretes neurotransmitters
- \_\_\_\_\_ 3. receptive region of a neuron
- \_\_\_\_\_ 4. insulates the nerve fibers
- \_\_\_\_\_ 5. site of the nucleus and most important metabolic area
- \_\_\_\_\_ 6. may be involved in the transport of substances within the neuron
- \_\_\_\_\_ 7. essentially rough endoplasmic reticulum, important metabolically
- \_\_\_\_\_ 8. impulse generator and transmitter

Column B

- a. axon
- b. axon terminal
- c. axon hillock
- d. dendrite
- e. myelin sheath
- f. neurofibril
- g. neuronal cell body
- h. Nissl bodies

5. Correctly identify each lettered structure in the diagram by writing the letter next to its name in the numbered list.



- \_\_\_\_\_ 1. anterior chamber
- \_\_\_\_\_ 2. anterior segment
- \_\_\_\_\_ 3. bipolar neurons
- \_\_\_\_\_ 4. choroid
- \_\_\_\_\_ 5. ciliary body and processes
- \_\_\_\_\_ 6. ciliary muscle
- \_\_\_\_\_ 7. cornea
- \_\_\_\_\_ 8. dura mater
- \_\_\_\_\_ 9. fovea centralis
- \_\_\_\_\_ 10. ganglion cells
- \_\_\_\_\_ 11. iris
- \_\_\_\_\_ 12. lens
- \_\_\_\_\_ 13. optic disc
- \_\_\_\_\_ 14. optic nerve
- \_\_\_\_\_ 15. photoreceptors
- \_\_\_\_\_ 16. posterior chamber
- \_\_\_\_\_ 17. retina
- \_\_\_\_\_ 18. sclera
- \_\_\_\_\_ 19. scleral venous sinus
- \_\_\_\_\_ 20. suspensory ligaments (ciliary zonule)