

# PSYCH 260 Quiz 4

April 17, 2017

Answer the questions using the Scantron form.

Name: \_\_\_\_\_

# 1 Main

1. Visual acuity is \_\_\_\_\_ at the \_\_\_\_\_.
  - A. highest; fovea**
  - B. highest; LGN
  - C. lowest; fovea
  - D. lowest; ventral stream
2. Gilmore says that the retina is *physiologically* backwards because the photoreceptors \_\_\_\_\_.
  - A. are located adjacent to the vitreous humor.
  - B. release more neurotransmitter in darkness.**
  - C. project axons in a backward direction.
  - D. send action potentials from the axon to the dendrites.
3. The rod photoreceptors are \_\_\_\_\_ numerous than the cones and are located largely in the \_\_\_\_\_ portions of the human retina.
  - A. less; central
  - B. less; peripheral
  - C. more; central
  - D. more; peripheral**
4. Which of the following describes the main waystations in the projection of visual information to the cerebral cortex?
  - A. retina - lateral geniculate nucleus - occipital lobe**
  - B. retina - suprachiasmatic nucleus - pineal gland.
  - C. retina - medial geniculate nucleus - temporal lobe
  - D. superior colliculus - lateral geniculate nucleus - occipital lobe
5. One theory about how visual information processing is functionally segregated suggests that information about an object's location and motion is routed to the \_\_\_\_\_ stream.
  - A. retino-tectal
  - B. retino-hypothalamic
  - C. dorsal**
  - D. ventral
6. With the exception of one sense modality, all types of sensory information are relayed through the \_\_\_\_\_ before it arrives in the cerebral cortex.
  - A. Hippocampus
  - B. Thalamus**
  - C. Amygdala
  - D. Cerebellum

7. Primary auditory cortex, located in the \_\_\_\_\_ lobe, receives input from the \_\_\_\_\_ nucleus of the thalamus.
- A. **temporal; medial geniculate**
  - B. temporal; lateral geniculate
  - C. occipital; pulvinar
  - D. occipital; ventral postero-lateral
8. The in-class demo showed that this part of the auditory system most influences the perception of the *vertical* direction of sound
- A. tympanic membrane
  - B. ossicles
  - C. oval window
  - D. **pinnae**
9. The ventral striatum contains the \_\_\_\_\_, a structure that plays an important role in the brain's reward circuitry.
- A. dorsal tegmentum
  - B. **nucleus accumbens**
  - C. hypothalamus
  - D. pineal gland
10. Muscle spindle axon fibers conveying information about muscle stretch/length are \_\_\_\_\_ and \_\_\_\_\_ heavily myelinated than fibers conveying pain or temperature.
- A. thinner; less
  - B. thinner; more
  - C. thicker; less
  - D. **thicker; more**

## 2 Bonus

11. Dr. Ramachandran could evoke sensations in his patient's 'phantom limb' by stroking what part of the body?
- A. **face**
  - B. opposite arm
  - C. leg
  - D. palm
12. Retinal ganglion cells have \_\_\_\_\_-shaped center-surround receptive fields with \_\_\_\_\_ zones.
- A. **circular; excitatory and inhibitory**
  - B. square; modulatory
  - C. oval; only inhibitory
  - D. stripe; excitatory and inhibitory