

PSYCH 260 Quiz 2

February 17, 2017

Answer the questions using the Scantron form.

Name: _____

1 Main

1. The _____ contains neurons that release _____.
 - A. striatum; oxytocin
 - B. ventral tegmental area; serotonin
 - C. tectal; glycine
 - D. substantia nigra; dopamine**
2. A reuptake inhibitor has what effect on neurotransmitters?
 - A. Reduces extracellular levels.
 - B. Accelerates their reuptake.
 - C. Increases extracellular levels.**
 - D. Causes neurotransmitters to bind to ionotropic receptors.
3. Botulinum toxin (BoTox) causes paralysis by impeding the normal function of which neurotransmitter system?
 - A. Glutamate
 - B. GABA
 - C. Dopamine
 - D. Acetylcholine**
4. _____ is the most commonly released inhibitory neurotransmitter in the CNS. It typically binds to a/an _____ receptor.
 - A. GABA; ionotropic**
 - B. ACh; metabotropic
 - C. Glutamate; ionotropic
 - D. Dopamine; metabotropic
5. Which of these hormones is released by the *posterior* pituitary?
 - A. Oxytocin.**
 - B. Cortisol.
 - C. Melatonin.
 - D. Adrenocorticotrophic hormone (ACTH).
6. Which of these acts as both a neurotransmitter and a hormone?
 - A. Dopamine.
 - B. Glutamate.
 - C. Acetylcholine.
 - D. Melatonin.**

7. _____ receptors contain both chemical (ligand) binding sites and an ion channel.
- A. Metabotropic
 - B. Serotonin
 - C. Glutamate
 - D. Ionotropic**
8. The outward flow of _____ across the neural membrane creates an _____.
- A. Cl⁻; IPSP
 - B. K⁺; IPSP**
 - C. Glutamate; EPSP
 - D. GABA; EPSP
9. Auditory information from the *medial* geniculate nucleus in the thalamus projects to this part of the brain.
- A. Temporal lobe**
 - B. Occipital lobe
 - C. Raphe nucleus
 - D. Hippocampus
10. When the action potential arrives at the axon terminal, _____ open and the influx of _____ triggers exocytosis.
- A. voltage-gated Na⁺ channels; Na⁺
 - B. voltage-gated Ca⁺⁺ channels; Ca⁺⁺**
 - C. metabotropic channels; K⁺
 - D. transporters; Ca⁺⁺

2 Bonus

11. With one exception, the monoamine neurotransmitters bind to _____ receptors.
- A. ionotropic
 - B. voltage-gated
 - C. nicotinic
 - D. metabotropic**
12. You are examining an axosomatic synapse and based on where it connects guess that it is _____ and involves the release of _____.
- A. inhibitory; glutamate
 - B. inhibitory; GABA**
 - C. excitatory; adenosine
 - D. excitatory; glycine