

PSYCH 260-BBH 203 Quiz 2

February 25, 2016

Answer the questions using the Scantron form.

Name: _____

1 Main

1. The ventral _____ area contains neurons that release _____.
 - A. striatum; oxytocin
 - B. tegmental; dopamine**
 - C. tectal; glycine
 - D. substantia nigra; serotonin
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. The nerve gas sarin 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 neurotransmitter in the CNS. It typically binds to a/an _____ receptor and has a/an _____ effect.
 - A. GABA; metabotropic; excitatory
 - B. ACh; metabotropic; inhibitory.
 - C. Glutamate; ionotropic; excitatory.**
 - D. Dopamine; metabotropic; modulatory.
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 is the primary output neurotransmitter of the CNS?
 - A. Dopamine.
 - B. Norepinephrine.
 - C. Acetylcholine.**
 - D. Melatonin.

7. _____ receptors contain both chemical (ligand) binding sites and an ion channel.
- A. Reuptake
 - B. Serotonin
 - C. Glutamate
 - D. Ionotropic**
8. The inward flow of _____ across the neural membrane creates an _____.
- A. Cl^- ; EPSP
 - B. Na^+ ; EPSP**
 - C. Glutamate; IPSP
 - D. GABA; IPSP
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. In a typical adult neuron near or above its resting potential the concentration of Cl^- ions is _____ outside the cell. This means that Cl^- ions will flow _____ when a channel opens to permit it.
- A. lower; out
 - B. lower; in
 - C. higher; out
 - D. higher; in**
12. You are examining an _____ synapse and based on where it connects guess that it is _____ and involves the release of _____.
- A. axodendritic; modulatory; norepinephrine
 - B. axosomatic; inhibitory; GABA**
 - C. axoaxonic; excitatory; adenosine
 - D. axodendritic; inhibitory; glutamate