Practice Questions Ch Ch 4, part 2: Updated 3/8/2021

1. Which of the following statements about the precentral gyrus is true?
   
   A. It is involved in motor control of the body.  
   B. It is involved in sensory perception in the body.  
   C. It is located in the frontal lobe.  
   D. answers A and B  
   E. answers B and C  
   F. answers A and C

2. Which of the following produce dopamine in the midbrain, and help with muscle motor control?

   A. Caudate nucleus  
   B. Red nucleus  
   C. Substantia nigra  
   D. Amygdala  
   E. Putamen  
   F. Claustro  
   G. Paraventricular nucleus  
   H. Suprachiasmatic nucleus

3. The reticular activating system
   
   A. is located in the brain stem.  
   B. functions to arouse the cerebral cortex to incoming “important” information.  
   C. involves neurotransmitters ACh, epinephrine, GABA, and hypocretin-1  
   D. is described correctly by all of these.

4. Which hypothalamic neuron is important in regulating body temperature?

   A. Preoptic.  
   B. Supraoptic.  
   C. Suprachiasmatic.  
   D. Lateral.  
   E. Ventromedial  
   F. Paraventricular.

5. Which of the following would occur with damage to Broca’s area of the left cerebral hemisphere?

   A. Inability to feel touch, pressure, or pain on the right half of your body.  
   B. Inability to move the right half of your body.  
   C. Poor language comprehension with fluent, but meaningless, speech.  
   D. Good language comprehension, but slow and difficult motor speech ability.

6. Which of the following would occur with damage to Wernike’s area of the left cerebral hemisphere?

   A. Inability to feel touch, pressure, or pain on the right half of your body.  
   B. Inability to move the right half of your body.  
   C. Poor language comprehension with fluent, but meaningless, speech.  
   D. Good language comprehension, but slow and difficult motor speech ability.

7. The superior colliculi are twin bodies within the midbrain that are involved in

   A. visual reflexes.  
   B. auditory reflexes.  
   C. regulating pituitary hormones.  
   D. control of respiratory rate and depth.

8. The brain regions with autonomic control over breathing, heart rate, sneezing, swallowing, and gagging.

   A. Cerebrum  
   B. Cerebellum  
   C. Midbrain  
   D. Medulla  
   E. Diencephalon  
   F. Pons

9. Hypothalamic nucleus is involved in circadian rhythm?

   A. Preoptic.  
   B. Supraoptic.  
   C. Suprachiasmatic.  
   D. Lateral.  
   E. Ventromedial  
   F. Paraventricular.
10. Which cerebral lobe receives and interprets auditory information, and has parts of the Wernike’s and Gnostic area?
   A. Frontal  D. Parietal
   B. Occipital  E. Insula
   C. Temporal

11. Which structure within the diencephalon has autonomic sympathetic control of adrenal medulla norepinephrine and epinephrine release?
   A. Pineal gland  E. Hypothalamus
   B. Pituitary gland  F. Optic chiasm
   C. Fornix  G. Mammillary body
   D. Thalamus

12. Which brain region has a pneumotaxic and apneustic area for autonomic control of breathing?
   A. Cerebrum  D. Diencephalon
   B. Pons  E. Cerebellum
   C. Midbrain

13. The dorsal horn of the spinal cord handles neural information about motor control of muscles and glands.
   A. TRUE  B. FALSE

14. Which nerve pair is involved in parasympathetic regulation of heart rate and breathing?
   A. Vagus nerves  C. Lumbar nerves
   B. Sacral nerves  D. Thoracic nerves

15. Which nerve pair is involved in sympathetic regulation of urination and bowel movement?
   A. Vagus nerves  C. Lumbar nerves
   B. Sacral nerves  D. Thoracic nerves
Ch 4 part 2. Answers:
1. F
2. C
3. D
4. G
5. D
6. C
7. A
8. D
9. C
10. C
11. E
12. B
13. B
14. A
15. C

How did you do?