1. The cerebellum, pons, and medulla are all subdivisions of the:

A) reticular formation

B) hindbrain

C) spinal cord

D) cerebral cortex

2. One of the three main bulges or zones of expansion in a vertebrate brain is the:

A) cerebellum

B) pons

C) forebrain

D) cerebral cortex

3. The pons is \_\_\_\_\_ to the medulla but \_\_\_\_\_ to the midbrain.

A) superior; inferior  
B) anterior; posterior  
C) medial; lateral  
D) proximal; distal

4. The anatomical word for "toward the tail end" is:

A) rostral  
B) caudal  
C) dorsal  
D) ventral

5. The frontal lobe is \_\_\_\_\_ to the occipital lobe

A) rostral  
B) caudal  
C) dorsal  
D) ventral

6. To view the top and bottom of a structure running inferior to superior requires a \_\_\_\_\_ slice.

A) axial  
B) transverse  
C) coronal  
D) sagittal

7. Electrical activity in the motor neuron causes a release of signaling chemicals called:

A) hormones  
B) neurotoxins  
C) messenger proteins  
D) neurotransmitters

8. The lumbar spine is between the:

A) pons and medulla  
B) cerebellum and brain stem  
C) neck and cervical spine  
D) rib cage and pelvis

9. The body's "rest-and-regenerate" mode is called the \_\_\_\_\_ mode.

A) sympathetic  
B) reflexive  
C) parasympathetic  
D) somatic

10. The neurons in the dorsal layers of spinal cord gray matter are mostly \_\_\_\_\_ neurons.

A) sensory  
B) motor  
C) output  
D) dorsal

11. The superior colliculus is located in the:

A) forebrain  
B) midbrain  
C) hindbrain  
D) thalamus

12. The midbrain's local inputs and outputs come mostly from the:

A) ears  
B) eyes  
C) nose  
D) skin

13. Humans have \_\_\_\_\_ pairs of cranial nerves.

A) 6  
B) 24  
C) 32  
D) 12

14. The neurotransmitter \_\_\_\_\_ has diverse functions in mood, sleep, and social behavior.

A) serotonin  
B) norepinephrine  
C) acetylcholine  
D) dopamine

15. Damage to the \_\_\_\_\_ cranial nerve would affect our sense of smell.

A) optic  
B) olfactory  
C) trigeminal  
D) oculomotor

16. The gray matter of the cerebellum is densely packed into leaflike structures called:

A) dendrites  
B) folia  
C) axons  
D) Purkinje cells

17. A disruption in circadian rhythms may be caused by damage to the:

A) amygdala  
B) lateral geniculate nucleus  
C) hippocampus  
D) hypothalamus

18. The \_\_\_\_\_ relays information from the retina to the primary visual cortex.

A) red nucleus  
B) medial geniculate nucleus  
C) lateral geniculate nucleus  
D) hypothalamus

19. Attention, awareness, and consciousness all critically depend on the information-conveying capacity of the:

A) thalamus  
B) hippocampus  
C) parietal lobe  
D) forebrain

20. The central sulcus separates the \_\_\_\_\_ and \_\_\_\_\_ lobes.

A) frontal, parietal  
B) temporal, occipital  
C) frontal, occipital  
D) parietal, temporal

21. The long strip of areas that controls movements of individual body parts is the:

A) prefrontal cortex  
B) primary motor cortex  
C) orbitofrontal cortex  
D) primary somatosensory cortex

22. The \_\_\_\_\_ represents the state of the internal organs and registers internal bodily states like pain, fatigue, hunger, and sexual arousal.

A) amygdala  
B) insula  
C) hippocampus  
D) medulla oblongata

23. The \_\_\_\_\_ system is central to motivation and emotion.

A) endocrine  
B) decision-making  
C) limbic  
D) affective

24. Beyond simple spinal reflexes, \_\_\_\_\_ allow for more complex, coordinated movements such as locomotion.

A) sensory neurons  
B) myotomes  
C) motor neurons  
D) central pattern generators

25. Two functions of the sympathetic nervous system are:

A) fight and flight  
B) sleep and wake  
C) rest and recover  
D) eat and digest

**Answer Key**

1. B

2. C

3. A

4. B

5. A

6. C

7. D

8. D

9. C

10. A

11. B

12. B

13. D

14. A

15. B

16. B

17. D

18. C

19. A

20. A

21. B

22. B

23. C

24. D

25. A