1. **From the VPL nucleus of the thalamus, fibers of the spino-thalamic tract reach the**
   A. Precentral gyrus
   B. Superior frontal gyrus
   C. Middle frontal gyrus
   D. Postcentral gyrus
   E. Superior temporal gyrus
2. **A 22-year-old truck driver suffers a crush injury to the left arm after. The mixed spinal nerves leaving the spinal cord at levels C5 and C6 are affected. The damage is limited to the peripheral nervous portions of these nerves only. Which is the most likely finding in this patient with regard to his Deep Tendon (Myotatic) Reflexes**
   A. Hypo-reflexia (diminished reflex) - Right Biceps Brachii muscle
   B. Hyper-reflexia (overactive reflex) - Left Biceps Brachii muscle
   C. Hyper-reflexia - Right Biceps Brachii muscle
   D. Hypo-reflexia - Left Biceps Brachii muscle
3. **A lesion at the level of the cerebral peduncle would affect descending fibers of the corticospinal tract. Disruption of these axons would result in which of the following**
   A. Flaccid paralysis
   B. Areflexia
   C. Positive Babinski sign
   D. Absent Babinski sign
4. **A 79-year-old man is experiencing peripheral nerve damage of his lower right limb. Which of the following is characteristic of lower motor neuron damage?**
   A. Hyperreflexia
   B. Increased tone
   C. Hyporeflexia
   D. Spastic paralysis
5. **A patient has an injury that results in damage to the lower motor neurons. Which of the following would you expect to see in the patient?**
   A. Spastic paralysis
   B. Hyperreflexia
   C. Increased muscle tone
   D. Positive Babinski sign
   E. Flaccid paralysis
6. **Which of the following would you primarily find in the lateral funiculus of the spina cord?**
   A. Alpha motor neurons
   B. Anterior Corticospinal tract
   C. Fasciculus cuneatus
   D. Medial Lemniscus
   E. Lateral Corticospinal tract
7. **A patient has an injury that results in damage to the ventral horn of the spinal cord. Which of the following would you expect to see in this patient?**
   A. Flaccid paralysis
   B. Spastic paralysis
   C. Hyperreflexia
   D. Increased muscle tone
   E. Positive Babinski sign

8. An upper motor neuron lesion can occur in any one of the following EXCEPT:

A. Internal capsule.
B. Pyramid of the medulla.
C. Primary motor area
D. Crus cerebri of the midbrain.
E. Ventral nerve root of the spinal nerve.

9. A lower motor neuron lesion is a lesion in the:

A. Anterior horn cells of the spinal cord.
B. Peripheral nerve.
C. Motor area of the cerebral hemisphere.
D. All of the above.
E. A and b only.

10. An upper motor neuron lesion is a lesion in the:

A. Anterior horn cells of the spinal cord.
B. Peripheral nerve.
C. Pyramidal and extrapyramidal tracts.
D. All of the above.
E. None of the above.

11. Tract/s which is/are important for maintaining the upright posture include:

A. Pontine (medial) reticulospinal tract.
B. Lateral vestibulospinal tract.
C. Medullary (lateral) reticulospinal tract.
D. All of the above.
E. A and b only

12. Signs of lower motor neuron lesion include all of the following EXCEPT:

A. Atrophy of muscles.
B. Fibrillation.
C. Flaccidity.
D. Clonus.
E. Hypotonia

13. Signs of upper motor neuron lesion include all of the following EXCEPT:

A. Spasticity.
B. Hypertonia.
C. Hyperreflexia.
D. Babinski sign.
E. Fasciculations.

14. Regarding the corticospinal tract, one of the following is INCORRECT:

A. It takes origin from both primary motor and general sensory areas.
B. It is supplied by the vertebrobasilar system throughout its course.
C. In the brainstem and the spinal cord, the cervical fibers are the most medial fibers.
D. Descends in the middle 3/5 of the crus cerebri.
E. Decussates in the lower part of the medulla.

15. Signs of Horner's syndrome include all of the following EXCEPT:

A. Ptosis.
B. Mydriasis.
C. Anhidrosis.
D. Enophthalmos.

16. Regarding the corticospinal tract:

A. It takes origin from both primary motor and general sensory areas.
B. Descends in the medial 1/5 of the crus cerebri.
C. Decussates in the upper part of the medulla.
D. Most of fibers cross to the opposite side in the spinal cord.
E. It is supplied by the vertebrobasilar system throughout its course.

17. One of the following not the signs of upper motor neuron lesion:

A. Hypertonia.
B. Hyperreflexia.
C. Spasticity.
D. Fasciculations.
E. Babinski sign.

18. One of the following not the signs of lower motor neuron lesion:

A. Atrophy of muscles.
B. Hypotonia
C. Fibrillation.
D. Flaccidity.
E. Clonus.

19. Tract/s which maintain the upright posture include:

A. Pontine (medial) reticulospinal tract.
B. Lateral vestibulospinal tract.
C. Medullary (lateral) reticulospinal tract.
D. All of the above.
E. A and b only.

20. Lower motor neuron lesion can occur in one of the following:

A. Ventral horn cells
B. Corticospinal tract.
C. Internal capsule.
D. Crus cerebri of the midbrain.

21. The corticospinal tract:

A. 40% of the fibers arise from area 4.
B. Descends in the external capsule.
C. Descends in the anterior limb of the internal capsule.
D. Broken into bundles in the tegmentum of the pons.
E. 15% of fibers cross to the opposite side in the lower part of the medulla.

22. The motor system:

A. The primary motor area is located in the postcentral gyrus.
B. The corticobulbar tract descends in the genu of the internal capsule.
C. The corticospinal tract descends in anterior limb of the internal capsule
D. The lower part of the facial nucleus receives fibers from the same side.
E. The extrapyramidal system forms a direct link with the spinal cord.

23. The pyramidal tracts include:

A. Rubrospinal tract.
B. Tectospinal tract.
C. Vestibulospinal tract.
D. Corticospinal tract.
E. Reticulospinal tract.

24. Which of the following is characteristic of damage to the corticospinal (pyramidal) system?

A. Babinski sign
B. flaccid paralysis and hypotonia
C. immediate muscle degeneration and atrophy
D. intention tremor
E. loss of deep tendon reflexes

25. Horner syndrome is sometimes seen in patients diagnosed with the lateral medullary syndrome. Which of the following is a characteristic feature of Horner syndrome?

A. atrophy of tongue musculature
B. mydriasis
C. paralysis of muscles of facial expression
D. profuse sweating
E. red blushing of the skin in the affected area