

1. The primary advantage to differential recording (recording between two points) is:

- A. electrode placement is not critical.
- B. greater specificity of activity.
- C. improved signal to noise ratio.
- D. the cancelation of the reference electrode activity

2. The auditory brainstem pathways course ___ to the proprioceptive input from the extremities.

- A. medial
- B. lateral
- C. anterior
- D. posterior

3. The anatomical separation of the Afferent and Efferent systems is ___ respectively.

- A. distal and proximal
- B. medial and lateral
- C. left and right
- D. posterior and anterior

4. The term "Lemniscal" typically refers to structures that are responsible for:

- A. Motor axonal transmission
- B. Motor neuronal activation
- C. Sensory axonal transmission
- D. Sensory neuronal activation

5. An inhibitory transmitter-receptor interaction makes the resting membrane potential of the post synaptic neuron:

- A. play a critical role in the development of the myelin sheath.
- B. more negative
- C. resist the effect of muscle relaxants
- D. more positive

6. A right middle fossa surgical approach for resection of a tumor involving the parietal surface of the brain could result in changes to:

- A. Left median nerve SSEPs.
- B. Right median nerve SSEPs.
- C. Left posterior tibial SSEPs
- D. Right posterior tibial SSEPs.

7. During a carotid Endarterectomy, a decrease in cerebral perfusion to below 15 cc/mi/100 grams on the left side of the head would most likely result in a decline in the SSEPs to:

- A. left limb stimulation
- B. right limb stimulation
- C. lower limb stimulation
- D. upper limb stimulation

8. A Strength score of 3/5 for the deltoid muscle indicates the patient can or cannot do which of the following:

- A. lift the arm against gravity
- B. extend the hand against resistance
- C. press on the "gas-peddle"
- D. flex the arm against gravity

9. It is generally accepted that the TcMEPs reflect the:

- A. descending activity of the dorsal columns.
- B. ascending activity of the dorsal columns.
- C. descending activity of the corticospinal tract or lateral corticospinal tract.
- D. ascending activity of the corticospinal tract or lateral corticospinal tract.

10. A CMAP response from the Tibialis Anterior to a low current (less than 5 mA) applied to a pedicle screw placed in the pedicle of the L5 vertebral body indicates:

- A. normal function of the S1 nerve root
- B. high probability of a medial breach to the pedicle
- C. low probability of a medial breach to the pedicle
- D. abnormal function of the L3 nerve root

Answers: 1.B., 2.B., 3.D., 4.C., 5.B., 6.A., 7.B., 8.A., 9.C., 10.B.