

NAME _____

DATE _____

SPMD 201 – Human Anatomy for Sports Medicine
Spinal Cord and Spinal Nerves
Chapter 12

Multiple Choice

- _____ 1. The Roman numerals assigned to each cranial nerve reflect:
- A. the order of discovery.
 - B. the sequence in which the nerves emerge from the brain.
 - C. their importance, with the highest numbers being the most important.
 - D. the complexity of each nerve, with complex nerves having higher numbers.
- _____ 2. All spinal nerves from C2 to L5 exit through the vertebral column through a(n):
- A. vertebral foramen.
 - B. spinal foramen.
 - C. dorsal root ganglion.
 - D. intervertebral foramen.
- _____ 3. There are _____ cervical spinal nerves.
- A. eight
 - B. twelve
 - C. six
 - D. five
- _____ 4. Spinal nerves C5-T1 make up the _____ plexus.
- A. sacral
 - B. lumbar
 - C. brachial
 - D. cervical
- _____ 5. If a ventral root of a spinal nerve were cut, the regions innervated by that spinal nerve would experience complete loss of:
- A. sensation.
 - B. movement.
 - C. sensation and movement.

_____6. Which of the following nerves is part of the brachial plexus?

- A. peroneal
- B. ansa cervicalis
- C. ischiadic (sciatic)
- D. musculocutaneous

_____7. Damage to the phrenic nerve would result in:

- A. the loss of motor activity in the arms.
- B. and increased heart rate.
- C. an inability to swallow.
- D. difficulty breathing.

_____8. The ischiadic (sciatic) nerve is composed of the:

- A. femoral nerve and tibial nerve.
- B. tibial nerve and common fibular nerve.
- C. femoral nerve and the obturator nerve.
- D. common fibular nerve and the pudendal nerve.

_____9. Which nerve is involved when a dancer points her toes?

- A. tibial
- B. femoral
- C. obturator
- D. pudendal

_____10. The femoral nerve supplies the _____ thigh.

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

_____11. The obturator nerve supplies the _____ thigh.

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

- _____12. The median nerve arises from the _____ cord.
- A. lateral
 - B. medial
 - C. posterior
 - D. A and B
- _____13. There are _____ enlargements of the spinal cord where nerves supplying the extremities enter and leave.
- A. two
 - B. three
 - C. four
 - D. five
- _____14. The conus medullaris:
- A. anchors the spinal cord to the coccyx.
 - B. is a tapered, cone-like region at the inferior end of the cord.
 - C. marks the exit of nerves to the upper extremity.
 - D. is located adjacent to the foramen magnum.
- _____15. Cerebrospinal fluid fills the:
- A. subarachnoid space.
 - B. subdural space.
 - C. dural sinuses.
 - D. epidural space.
- _____16. The most superficial meningeal layer is the:
- A. pia mater.
 - B. arachnoid layer.
 - C. dura matter.
 - D. epidural sinus.
- _____17. Which of the following is false?
- A. The dorsal root of the cord conveys afferent nerve impulses to the spinal cord.
 - B. The posterior horn of the cord contains the cell bodies or motor neurons.
 - C. The ventral root is formed by the axons in the lateral and anterior horns.
 - D. The dorsal and ventral roots unite to form spinal nerves.

Alternate Choice

1. The connective tissue that anchors the spinal cord to the coccyx is called the cauda equina / filum terminale (circle one).
2. The cervical / brachial (circle one) plexus innervates the muscles and skin of the shoulder.
3. Nerves which innervate most of the deep muscles of the back and are responsible for the movement of the vertebral column arise from the dorsal / ventral (circle one) rami.
4. Cranial nerves are named using the Roman numerals I through XII going from anterior-to posterior / posterior-to-anterior (circle one).
5. The tibial nerve supplies the anterior / posterior (circle one) thigh.
6. The tibial / common fibular (circle one) nerve supplies the anterior and lateral leg.
7. The coccygeal / sacral (circle one) plexus supplies the pelvic floor.
8. The phrenic nerve, which supplies the diaphragm, arises from the brachial / cervical (circle one) plexus.
9. The intercostal nerves arise from the dorsal / ventral (circle one) rami.
10. The radial nerve arises from the lateral / medial / posterior (circle one) cord.
11. The connective tissue that anchors the spinal cord to the coccyx is called the conus medullaris / filum terminale (circle one).
12. The thalamus / hypothalamus (circle one) is the major control center for maintaining homeostasis and regulating endocrine function.
13. Motor areas of the cerebrum are located in the frontal / parietal (circle one) lobe(s).
14. Nerve fiber tracts in the white matter are myelinated / non-myelinated (circle one).
15. Ventral roots of the spinal cord consist of motor / sensory (circle one) neurons.

Fill-In

1. The “horse’s tail” consisting of the conus medullaris and the nerves extending inferior from the spinal cord is called the _____.
2. There are _____ pairs of *cervical* nerves.

3. There are _____ pairs of *cranial* nerves.
4. The _____ plexus receives contributions from C5 to T1.
5. The tibial and common fibular nerves are bound together for the length of the thigh as the _____ nerve.
6. The _____ nerve supplies the posterior leg.
7. The various divisions of the brachial plexus join to form the lateral, medial, and posterior _____.

Short Answer

1. LABEL the cranial nerves.
2. LABEL the brachial plexus.
3. LIST the functions of the cranial nerves.
4. LIST the five (5) peripheral nerve plexuses and the spinal nerves from which they arise.

Multiple Choice

- | | | | |
|------|-------|-------|-------|
| 1. B | 6. D | 11. D | 16. C |
| 2. D | 7. D | 12. D | 17. B |
| 3. A | 8. B | 13. A | |
| 4. C | 9. A | 14. B | |
| 5. B | 10. A | 15. A | |

Alternate Choice

- | | | |
|--------------------------|-------------------|---------------------|
| 1. filum terminal | 6. common fibular | 11. filum terminale |
| 2. cervical | 7. coccygeal | 12. hypothalamus |
| 3. dorsal | 8. cervical | 13. frontal |
| 4. anterior-to-posterior | 9. ventral | 14. myelinated |
| 5. posterior | 10. posterior | 15. motor |

Fill-In

- | | | |
|-----------------|--------------|----------|
| 1. cauda equina | 4. brachial | 7. cords |
| 2. 8 | 5. ischiadic | |
| 3. 12 | 6. tibial | |