1. What is not supplied by PICA (Posterior inferior cerebellar artery)?
   a. the lateral medulla
   b. the choroid plexus of the IV ventricle
   c. the inferior surface of the posterior cerebellum
   d. the cerebral peduncles

2. The inferior horn of the lateral ventricle is found in which lobe?
   a. insula
   b. frontal
   c. temporal
   d. parietal

3. The floor of the body of the lateral ventricle is formed by the
   a. hypothalamus
   b. thalamus and caudate nucleus
   c. hippocampus
   d. corpora quadrigemina

4. Which structure is not a part of the choroid plexus?
   a. ependyma
   b. pia
   c. endothelial cells of capillaries
   d. oligodendroglia

5. The lamina terminalis is a good landmark because it represents the
   a. caudal part of the neural tube
   b. rostral part of the neural tube
   c. dorsal part of the neural tube
   d. none of the above

6. The thalamus is part of the diencephalon which distributes most of its afferent fibers to the
   a. cerebellum
   b. quadrigeminal bodies
   c. cerebral cortex
   d. pons
7. The CSF in the interventricular foramen flows into the
   a. inferior horn of the lateral ventricle
   b. IV ventricle
   c. III ventricle
   d. Aqueduct

8. A degenerative lesion in the anterior horn of the spinal
cord such as is seen in acute anterior poliomyelitis would
give the following symptom?
   a. loss of sensation in the feet
   b. loss of temperature sensations in the hands
   c. loss of motor activity or paralysis
   d. loss of proprioception

9. Which is not a branch of the basilar artery?
   a. posterior cerebral
   b. labyrinthine or internal auditory
   c. pontine
   d. opthalmic

10. What brain region is not supplied by the vertebral or its
    branches?
    a. head of caudate
    b. cerebellum
    c. medulla
    d. superior colliculus

11. The atrium or collateral trigone is found between the
    a. anterior horn and the body of the lateral ventricle
    b. posterior horn, body and inferior horn
    c. third ventricle and aqueduct
    d. none of the above

12. What is correct about a fasciculus?
    a. it is the same as a funiculus
    b. it is a collection of nerve fibers of like function
    c. it is found only in grey matter
    d. it carries only pain fibers

13. The dorsal root ganglia most commonly reside in the
    a. intervertebral foramen
    b. dural foramen
    c. vertebral canal
    d. sacral canal
14. The dorsal or posterior roots only carry
   a. somatic motor fibers
   b. recurrent axons
   c. somatic sensory fibers
   d. somatic sensory to the posterior horn and visceral sensory fibers to the lateral horn

15. The dural sac which ends at ____ is not a reasonable place to make a spinal tap to obtain CSF.
   a. T12
   b. L1
   c. S1
   d. S2

16. The dura covering over the pituitary gland is called the
   a. diaphragma cisterna
   b. tentorium cerebelli
   c. pituitary falx
   d. diaphragma sellae

17. Which is not correct about a cerebral cortical pyramidal cell?
   a. it is a Golgi I type cell
   b. it is a multipolar cell
   c. it is a Golgi type III cell
   d. it has basal dendrites which receive intracortical input

18. If we eliminated every neuron, astrocyte or oligodendrocyte, which cell would not be in the brain?
   a. endothelial cell
   b. microglia
   c. ependymal cell
   d. alveolar cell

19. Which is not correct about Nissl?
   a. it is found in the axon
   b. it is found in dendritic spines
   c. it is dispersed throughout the normal soma
   d. it is rough endoplasmic reticulum

20. Which is incorrect about the pia matter?
   a. pia closely invests the brain and spinal cord
   b. pia provides a bed for blood vessels
   c. pia adheres to dura to form denticulate ligaments
   d. pia surrounds all blood vessels
21. What is a distinguishing feature of the transverse section of the spinal cord at the thoracic level?
   a. wide dorsal horns
   b. wide ventral horns
   c. narrow dorsal and ventral horns with a lateral horn
   d. no lateral horn

22. Cerebral spinal fluid reaches the superior sagittal (longitudinal) sinus through the
   a. superior cerebral veins
   b. middle cerebral arteries
   c. arachnoid villi projections with subarachnoid space
   d. inferior cerebral veins

23. An epidural hematoma caused by a skull fracture is found between
   a. arachnoid and the dura
   b. periosteal dura and the scalp
   c. perisoteal dura and the meningeal dura
   d. meningeal dura and the arachnoid

24. The cervical vertebrae are the smallest and the lightest. So most fractures of the vertebral column occur here. Which vertebra would not be injured?
   a. C1
   b. C3
   c. C7
   d. C8

25. Which structure has no choroid plexus?
   a. interventricular foramen
   b. roof of third ventricle
   c. inferior horn of lateral ventricle
   d. cerebral aqueduct of Sylvius

26. The neuronal soma of the cerebral peduncles are found in the
   a. thalamus
   b. basal ganglia
   c. cerebral cortex
   d. caudate nucleus
27. The common carotid artery bifurcates at the
   a. inferior border to the thyroid gland
   b. superior border of the thyroid cartilage
   c. foramen magnum
   d. medial aspect of the clinoid process

28. The division of the diencephalon which controls the ANS is the
   a. thalamus
   b. hypothalamus
   c. epithalamus
   d. subthalamus

29. A choked disc or a papilledema indicates
   a. decrease in CSF pressure
   b. an increase in capillary blood pressure
   c. an increase in CSF pressure
   d. a decrease in capillary blood pressure

30. Nociceptors
   a. wrap around the lower end of a hair follicle
   b. are the most complicated type of receptor
   c. terminate in the epithelial layer of the skin
   d. are pressure receptors

31. Which is not correct about Meissner's corpuscles?
   a. are free nerve endings
   b. are found in the dermis
   c. have an encapsulated ending
   d. deal with epicritic touch

32. Pacinian corpuscles are primarily concerned with
   a. vibratory sense
   b. heat
   c. cold
   d. itching

33. Peritricheal endings
   a. are found in the palms of the hand and soles
   b. are only found in hairless areas
   c. surround a hair follicle and are sensitive to touch
   d. are encapsulated

34. Schwann cells
   a. surround dendrites
   b. originate from the neural tube
   c. are mesodermal in origin
   d. play an important role in regeneration
35. Which function is not associated with astrocytes?
   a. initiates the formation of the blood brain barrier
   b. plays a role in the formation of synapses
   c. helps form the protective pial-glial membrane
   d. assists the ependymal cell cilia in moving CSF

36. Which structure is part of the mesencephalon?
   a. caudate nucleus
   b. pineal gland
   c. inferior colliculus
   d. optic nerve

37. Which cranial nerve arises from the metencephalon?
   a. XII
   b. II
   c. VII
   d. III

38. The thalamus and hypothalamus are associated with which ventricle?
   a. inferior horn of lateral ventricle
   b. superior horn of lateral ventricle
   c. aqueduct of Sylvius
   d. III ventricle

39. Which structure(s) is(are) not derived from the neural crest?
   a. autonomic nervous system ganglia
   b. dorsal root ganglia
   c. adrenal medulla
   d. anterior horn cells

40. The neural retina is derived from the
   a. telencephalon
   b. diencephalon
   c. mesencephalon
   d. myelencephalon

41. Which is not true about the basal plate of the neural tube?
   a. it is ventral to the central canal
   b. it gives rise to cells concerned with motor function
   c. the ventral/anterior horn is derived from it
   d. it deals only with autonomic functions
42. The largest component arising from the diencephalon is
   a. the hypothalamus
   b. the group of structures called the basal ganglia
   c. the thalamus
   d. the pituitary gland

43. Which structure is not derived from the neural tube?
   a. cerebral cortex
   b. adrenal cortex
   c. superior colliculus
   d. medulla oblongata

44. If the anterior neuropore at the cranial end of the neural tube does not close at one month, what is the resulting deficit?
   a. a normal brain does not form
   b. pyramidal cells proliferate
   c. oligodendrocytes proliferate
   d. microglia proliferate

45. What is not true about a radial glial cell?
   a. it serves as a scaffold for migrating neurons
   b. it is found only in adult brains
   c. NCAMS are essential for normal neuronal migration
   d. it connects to internal and external limiting membranes

46. What landmarks delineate the boundaries of the occipital lobe of the cerebral cortex?
   a. the central sulcus
   b. the calcarine fissure
   c. the parietooccipital fissure and the preoccipital notch
   d. the lateral fissure and the parietooccipital fissure

47. The insular cortex grows relatively slowly so which lobe does not ultimately cover it?
   a. frontal
   b. temporal
   c. parietal
   d. occipital

48. What is not true about white matter in the CNS?
   a. consists for the most part of myelinated fibers
   b. makes up most of the volume of the cerebral hemispheres
   c. contains only astrocytic glial cells
   d. forms the ascending and descending tracts in the spinal cord
49. Which is the correct order of structures going from ventral to dorsal in the midbrain?
   a. cerebral peduncles, tegmentum, quadrigeminal bodies
   b. tegmentum, cerebral peduncles, quadrigeminal bodies
   c. superior colliculus, aqueduct, tegmentum, peduncles
   d. inferior colliculus, aqueduct, tegmentum, peduncles

50. The cisterna magna is found
   a. below the conus medullaris
   b. below T 11
   c. inferior to the cerebellum; superior to the medulla
   d. superior to the cerebellum; inferior to the cerebrum

A FEW WORDS OF WISDOM (I think):

EVERY DAY HAVE SELF RESPECT
EVERY DAY HAVE SELF CRITICISM
EVERY DAY DO SOMETHING GOOD FOR SOMEONE ELSE