1. If a tree falls in the forest, does it make a sound if no one is present?
   __ A. Of course; sound is a physical phenomenon.
   __ B. Yes, because if you tape it on a recorder and play it later you will hear the noise.
   __ C. No, because sound is a fabrication of your brain.
   __ D. This is an unanswerable philosophical question.

Rationale:
p.38

2. Brain nomenclature can be very confusing. This is not because:
   __ A. all the terms are in Latin.
   __ B. many structures have several names.
   __ C. some structures are labeled by the wrong function.
   __ D. some structures were named for what color they appeared.

Rationale:
pp.39-40

3. The top of a structure is described as:
   __ A. lateral.
   __ B. ventral.
   __ C. medial.
   __ D. dorsal.

Rationale:
pp.40-41

4. The ventral portion of a structure is sometimes called:
   __ A. superior.
   __ B. inferior.
   __ C. dorsal.
   __ D. medial.

Rationale:
p.41
5. Afferent is to efferent as:
   _ A. out is to in.
   _ B. top is to bottom.
   _ C. in is to out.
   _ D. bottom is to top.

Rationale:
   p.41

6. Cerebrospinal fluid is found:
   _ A. between the arachnoid layer and the pia mater.
   _ B. between the dura mater and the arachnoid layer.
   _ C. between the dura mater and the pia mater.
   _ D. between all three layers.

Rationale:
   p.43

7. Sulci are:
   _ A. found only in the cerebellum.
   _ B. found only in the cerebrum.
   _ C. the cracks between the bumps on the brain.
   _ D. the bumps on the surface of the brain.

Rationale:
   p.43

8. Which of the following arteries does not act as a major supplier to the cerebrum?
   _ A. anterior
   _ B. superior
   _ C. middle
   _ D. posterior

Rationale:
   p.43

9. Cerebrospinal fluid is made:
   _ A. in the pia mater.
   _ B. in the dura mater.
   _ C. in the ventricles.
   _ D. in the arachnoid layer.

Rationale:
   p.44
10. What is the most unlikely function of cerebrospinal fluid?
   __ A. nourishes cells in the brain
   __ B. acts as a shock absorber
   __ C. allows certain compounds access to the brain
   __ D. helps the brain excrete metabolic wastes from the brain

Rationale:
p.44

11. Cutting the brain from front to back will give us:
   __ A. a coronal view.
   __ B. a frontal view.
   __ C. a horizontal view.
   __ D. a sagittal view.

Rationale:
p.44

12. The cranial nervous system:
   __ A. can control the spinal nervous system and the internal nervous system.
   __ B. can control the spinal nervous system but not the internal nervous system.
   __ C. can control the internal nervous system but not the spinal nervous system.
   __ D. has no effect on the peripheral nervous system.

Rationale:
p.49

13. There are:
   __ A. twelve cranial nerves.
   __ B. twenty-four cranial nerves.
   __ C. sixteen cranial nerves.
   __ D. eight cranial nerves.

Rationale:
p.50

14. The diencephalon is sometimes referred to as:
   __ A. the hindbrain.
   __ B. the midbrain.
   __ C. the between brain.
   __ D. the forebrain.

Rationale:
p.50
15. Which of the following is not a part of the hindbrain?
   __ A. pons
   __ B. tegmentum
   __ C. reticular formation
   __ D. medulla

   Rationale:
   p.52

16. Awaking from sleep is a function of:
   __ A. the pons.
   __ B. the medulla.
   __ C. the cerebellum.
   __ D. the reticular formation.

   Rationale:
   p.52

17. The superior and inferior colliculi have what respective functions?
   __ A. auditory and visual
   __ B. visual and auditory
   __ C. tactile and visual
   __ D. visual and tactile

   Rationale:
   p.53

18. Regulation of breathing and the cardiovascular system is primarily controlled by:
   __ A. the pons.
   __ B. the reticular activating system.
   __ C. the medulla.
   __ D. the cerebellum.

   Rationale:
   p.53

19. Which of the following is part of the tegmentum?
   __ A. tectum
   __ B. substantia nigra
   __ C. inferior colliculus
   __ D. superior colliculus

   Rationale:
   p.54
20. The hypothalamus is not primarily involved in:
   __ A. motor movements.
   __ B. sleeping.
   __ C. emotional behavior.
   __ D. sensory input.
   
   Rationale: 
   p.54

21. Thalamus is to hypothalamus as:
   __ A. sensory input is to body maintenance.
   __ B. body maintenance is to sensory input.
   __ C. sex behavior is to sleeping.
   __ D. feeding is to endocrine function.
   
   Rationale: 
   pp.54-55

22. The lateral geniculate nucleus deals with:
   __ A. touch.
   __ B. hearing.
   __ C. olfaction.
   __ D. vision.
   
   Rationale: 
   p.55

23. Sexual behavior is a primary function of:
   __ A. the thalamus.
   __ B. the hypothalamus.
   __ C. the gyrus fornicatus.
   __ D. the red nucleus.
   
   Rationale: 
   p.54

24. Which of the following is not part of the forebrain?
   __ A. cortex
   __ B. tectum
   __ C. basal ganglia
   __ D. limbic system
   
   Rationale: 
   p.55
25. Six layers of gray matter on top of a layer of white matter would describe:
   ___ A. the limbic cortex.
   ___ B. the basal ganglia.
   ___ C. the neocortex.
   ___ D. the cingulate cortex.
   
   **Rationale:**
   p.55

26. Cortical regions:
   ___ A. have the same density cell layers.
   ___ B. have different specific chemical characteristics.
   ___ C. when stained look the same across the various areas.
   ___ D. have very specific functions and rarely interrelate.
   
   **Rationale:**
   pp.56-57

27. Cognition is usually attributed to:
   ___ A. the limbic cortex.
   ___ B. the cingulate cortex.
   ___ C. the neocortex.
   ___ D. the parahippocampal cortex.
   
   **Rationale:**
   p.55

28. The caudate nucleus and the substantia nigra are part of:
   ___ A. the basal ganglia.
   ___ B. the limbic system.
   ___ C. the olfactory system.
   ___ D. the hindbrain.
   
   **Rationale:**
   p.57

29. The hippocampus and the amygdala are part of:
   ___ A. the basal ganglia.
   ___ B. the limbic system.
   ___ C. the olfactory system.
   ___ D. the hindbrain.
   
   **Rationale:**
   p.59
30. Lesions to the amygdala in cats leads to:
   __ A. changes in temperature regulation.
   __ B. sleep disruption.
   __ C. emotional changes.
   __ D. motor disruption.

Rationale:
  p.59

31. The hippocampus and the cingulate cortex have been implicated in:
   __ A. eating.
   __ B. emotion.
   __ C. sex.
   __ D. memory.

Rationale:
  p.59

32. The patellar reflex is controlled by:
   __ A. the internal nervous system.
   __ B. the cranial nervous system.
   __ C. the autonomic nervous system.
   __ D. the spinal nervous system.

Rationale:
  p.59

33. Dermatomes are associated with:
   __ A. the internal nervous system.
   __ B. the spinal nervous system.
   __ C. the autonomic nervous system.
   __ D. the cranial nervous system.

Rationale:
  p.60

34. Motor output from the spinal cord travels via:
   __ A. the dorsal root.
   __ B. the ventral root.
   __ C. the medial root.
   __ D. the lateral root.

Rationale:
  p.61
35. Sensory input to the spinal cord travels via:
   __ A. the dorsal root.
   __ B. the ventral root.
   __ C. the medial root.
   __ D. the lateral root.

Rationale:
p. 61

36. Increases in heart rate and inhibition of digestion are controlled by:
   __ A. the sympathetic nervous system.
   __ B. the parasympathetic nervous system.
   __ C. the spinal nervous system.
   __ D. the cranial nervous system.

Rationale:
p. 62

37. The vagus, facial, and oculomotor nerves are the primary component of:
   __ A. the cranial nervous system.
   __ B. the sympathetic nervous system.
   __ C. the parasympathetic nervous system.
   __ D. the spinal nervous system.

Rationale:
p. 63

38. The difference between sensory and motor pathways is least distinct in:
   __ A. the spinal cord.
   __ B. the thalamus.
   __ C. the colliculi.
   __ D. the cortex.

Rationale:
pp. 67-68

39. Ipsilateral is to contralateral as:
   __ A. opposite is to same.
   __ B. same is to opposite.
   __ C. down is to up.
   __ D. up is to down.

Rationale:
p. 68
40. The right eye projects to:
   __ A. the right hemisphere.
   __ B. the left hemisphere.
   __ C. both hemispheres.
   __ D. the dominant hemisphere.

Rationale:
   p.68

41. Language is usually localized:
   __ A. in the same place on both hemispheres.
   __ B. in different locations on each hemisphere.
   __ C. in the right hemisphere.
   __ D. in the left hemisphere.

Rationale:
   p.69

42. Which of the following statements regarding excitation and inhibition is incorrect?
   __ A. The sympathetic and parasympathetic systems illustrate excitation and inhibition.
   __ B. Neurons can pass on excitatory or inhibitory information.
   __ C. Sensory receptors can pass on both excitatory and inhibitory information.
   __ D. Brain nuclei can either excite or inhibit other nuclei.

Rationale:
   p.70

43. The notion of hierarchical control in the nervous system was postulated by:
   __ A. Richard Magendie.
   __ B. David Bell.
   __ C. John Hughlings-Jackson.
   __ D. Nige Toretle.

Rationale:
   p.70
44. If the brain is injured but the brainstem is still connected to the spinal cord and the forebrain is not functioning:
   __ A. the patient would have motorparalysis on the same side of the body as the lesion.
   __ B. the patient would have motorparalysis on the opposite side of the body from the lesion.
   __ C. the motorparalysis would be on both sides of the body.
   __ D. the patient would be able to move but the movements would be simple.

Rationale: p.71

45. The brain appears to have:
   __ A. mainly serial or hierarchical systems.
   __ B. mainly parallel systems.
   __ C. a combination of serial and parallel systems.
   __ D. parallel systems at lower levels and serial processing farther up.

Rationale: p.71

46. Memory seems to be located:
   __ A. in the cingulate gyrus.
   __ B. in the hippocampus.
   __ C. throughout the brain.
   __ D. in the temporal lobes.

Rationale: p.72

47. From superficial to deep layers, in what order are the meninges found?
   __ A. dura mater, arachnoid layer, pia mater
   __ B. pia mater, arachnoid layer, dura mater
   __ C. dura mater, pia mater, arachnoid layer
   __ D. pia mater, dura mater, arachnoid layer

Rationale: pp.41-43
48. What best characterizes the composition of cerebrospinal fluid?
   __ A. NaCl and other salts
   __ B. essential amino acids
   __ C. glucocorticoids
   __ D. simple sugars and small lipids

   Rationale: p.43

49. The large cavities inside the brain are known as:
   __ A. ventricles and are filled with CSF.
   __ B. ventricles and are filled with blood.
   __ C. the arachnoid layer and are filled with CSF.
   __ D. the arachnoid layer and are filled with blood.

   Rationale: p.44

50. When observing a sagittal brain section at the midline, what is the prominent feature composed of white matter?
   __ A. corpus callosum
   __ B. ventricles
   __ C. cingulate cortex
   __ D. hippocampus

   Rationale: p.44-45