1. Which of the following is a key reason why some states have enacted legislation allowing psychologists to prescribe medications for psychological symptoms?
   A) Allowing trained psychologists to prescribe medications may help many people who have been unable to gain access to mental health, especially people in rural areas underserved by mental health professionals care.
   B) It is the first step in the plan to make almost all medications for psychological symptoms available over-the-counter without a prescription.
   C) It may encourage greater competition between psychiatrists and clinical psychologists, which should help lower the cost of mental health care.
   D) North Dakota, Montana, and Alaska have unusually high rates of psychological disorders, especially major depression during the winter months.

2. The ethical requirement of informed consent means that:
   A) all participants must read and approve any written reports of the research results before they are published.
   B) participants must be completely informed about the purpose and conditions of the research, and must be free to withdraw from the research at any time.
   C) research participants must agree not to divulge any information about the nature of the study to any outside party.
   D) once the participants have agreed to participate in the study, they may not withdraw for any reason other than medical necessity.

3. A useful theory is one that does all of the following, EXCEPT:
   A) furthers the understanding of behavior.
   B) allows predictions to be made.
   C) ensures statistical significance in an experiment.
   D) stimulates new research.

4. In an experiment, the dependent variable is:
   A) always equivalent to zero.
   B) the factor that is measured for change and is influenced by the independent variable.
   C) measured only in the control group subjects.
   D) deliberately manipulated by the researcher.
5. Who said: “Now the immediate fact which psychology, the science of mind, has to study is also the most general fact. It is the fact that in each of us, when awake (and often when asleep), some kind of consciousness is always going on.”
   A) John B. Watson
   B) William James
   C) B. F. Skinner
   D) Mary Whiton Calkins

6. Dr. Kerrick has developed a training program for young children that will help the children learn to read at a quicker pace and with greater comprehension. What kind of psychologist is Dr. Kerrick?
   A) educational
   B) personality
   C) industrial/organizational
   D) clinical

7. When psychologists report the findings of a study in a scientific journal, it's important that they include a description of all of the following, EXCEPT:
   A) how the study participants were chosen.
   B) how the data were analyzed.
   C) how variables were operationally defined.
   D) how the journal reviewers responded to the findings.

8. Which of the following statements about prescribing medications for psychological symptoms is TRUE?
   A) In the United States, only psychiatrists can prescribe medications for psychological symptoms.
   B) Because there are so few psychiatrists in Alaska, it became the first state to allow clinical psychologists to prescribe a small number of medications for treating psychological disorders.
   C) Psychologists in New Mexico and Louisiana can qualify for prescription privileges if they complete additional coursework and a special training program supervised by a physician.
   D) As a matter of federal law, psychologists are prohibited from prescribing any type of medication in the United States.

9. Theory is to hypothesis as _____ is to _____.
   A) prediction; control
   B) chance; description
   C) control; model
   D) model; prediction
10. The founder of psychoanalysis was:
   A) American psychologist B. F. Skinner.
   B) American psychologist Carl Rogers.
   C) German psychologist Wilhelm Wundt.
   D) Austrian physician Sigmund Freud.

11. Edward Titchener is associated with which early approach or “school” of psychology?
   A) behaviorism
   B) structuralism
   C) functionalism
   D) psychoanalysis

12. Mary Whiton Calkins:
   A) founded the first psychology laboratory in America at Yale University.
   B) studied with Sigmund Freud and became the first female psychoanalyst in the United States.
   C) is best known for her pioneering research on comparative psychology and her book, *The Animal Mind*.
   D) conducted research on personality, dreams, and memory, and was the first woman elected president of the American Psychological Association.

13. Professor Diaz is studying the development of the human brain from infancy to early adulthood. She takes the _____ perspective and her specialty area is _____ psychology.
   A) humanistic; social
   B) evolutionary; cognitive
   C) behavioral; social
   D) biological; developmental

14. A collectivistic culture is one in which:
   A) individual achievements are highly valued.
   B) a person's social behavior is influenced more by individual preference than cultural values and norms.
   C) a person's individual preferences and goals are considered to be more important than the requirements and goals of his or her social group.
   D) great importance is placed on following established tradition and customs.
15. Evidence that is the result of observation, measurement, and experimentation is referred to as _____ evidence.
   A) empirical
   B) pseudoscientific
   C) operational
   D) dependent

16. Professor Wallace studied over 3,000 elderly individuals for a decade and found a statistically significant relationship between survival rate and number of close friends. Specifically, he found that elderly individuals with few close friends had a much higher death rate. To say that the results of his study are “statistically significant” means that:
   A) the finding has great practical value and significance.
   B) there is a cause-and-effect relationship between the two variables.
   C) the finding does not have to be replicated to be accepted by the scientific community.
   D) the results are unlikely to have occurred by chance.

17. Dr. Ginsburg wants to study possible gender differences in the willingness of young children to engage in risky behaviors. To gather data, Ginsburg and a co-researcher carefully observe the willingness of boys and girls to try risky behaviors at a local zoo, such as petting a burro or feeding different animals. Dr. Ginsburg is using _____ to gather data.
   A) naturalistic observation
   B) a survey
   C) the case study method
   D) a representative sample

18. In an online survey, people were asked if they would cheat on their partner if there was no chance of getting caught. Approximately 23,000 internet users responded to the survey. Almost half of those responding said they would not, while the other half said they probably would. What is a significant limitation with surveys like this one?
   A) Not enough people responded to the survey, which means the results are not valid.
   B) Because the survey involved respondents who volunteered to participate, it is not a representative sample.
   C) There is no experimental control group.
   D) The survey did not follow a double-blind procedure, which means that expectancy effects probably slanted the results.
19. Professor Karney administered a psychological test measuring shyness to a large number of undergraduate students. The students also completed a lengthy questionnaire on their social life and activities, including number of friends. Professor Karney conducted a statistical analysis of the responses and found a correlation coefficient of -0.80 between level of shyness and number of friends. This indicates that:
A) as number of friends increases, level of shyness increases.
B) as number of friends decreases, level of shyness increases.
C) there is no relationship between level of shyness and number of friends.
D) a cause-and-effect relationship exists between shyness and number of friends.

20. Correlational research is useful because it can:
A) provide compelling evidence of cause-and-effect relationships.
B) help identify the factors that play an important role in the behavior that is being investigated and rule out the factors that do not.
C) provide a detailed description of a single individual.
D) promote the acceptance of pseudosciences.

21. A cognitive psychologist decides to study the effects of chess practice on math abilities in middle school students. All students are tested on a standard math test at the beginning of the study. Students are then randomly assigned to a chess-group and a control group. Students in the chess group spend thirty minutes every school day learning chess strategy and playing chess. Students in the no-chess control group spend thirty minutes every school day watching educational television. At the end of three months, students take another standardized math test. The improvement or decline in their test score is computed and compared across the two groups. In this experiment, what is the DEPENDENT variable?
A) the change in math test scores
B) playing chess or watching educational television
C) improvement in chess-playing ability
D) the number of chess matches won

22. In Crum and Langer's hotel experiment the group of participants who were informed that housekeeping work was good exercise was the:
A) placebo control group.
B) experimental group.
C) extraneous group.
D) control group or control condition.
23. Ginkgo biloba is an herb that is thought to increase blood flow in the brain and enhance memory processes. In a carefully controlled study investigating this claim, young adults were assigned to one of three groups. Those in group 1 took a capsule containing 120 milligrams of ginkgo biloba once a day. Those in group 2 took a capsule that looked identical but was a fake. Those in group 3 did not take any capsules. The participants assigned to group 2 constituted the _____ in this study.
   A) dependent variable
   B) placebo control group
   C) extraneous group
   D) out-of-control group

24. When college students are enrolled in a class in which participation in psychological research is part of the course requirement:
   A) the researcher is not required to provide the student participants with information about the purpose of the research.
   B) their reactions and behavior in experimental situations can be videotaped without their consent.
   C) they should complain to the college administration because it is a violation of the ethical standards for psychological research to use students as research participants.
   D) students must be given the choice of an alternative activity to fulfill the course requirement or earn extra credit.

25. Which of the following is NOT one of the brain-imaging techniques discussed in the Focus on Neuroscience section in the text?
   A) magnetic resonance imaging (MRI)
   B) functional magnetic resonance imaging (fMRI)
   C) transcranial magnetic stimulation (TMS)
   D) positron emission tomography (PET)

26. Your pencil starts to roll off the desk and in a smooth, coordinated fashion you grab it just before it rolls off the edge. Your ability to perform this action involved which of the following brain areas?
   A) the cerebellum
   B) the hippocampus
   C) the amygdala
   D) Broca's area
27. Which structure helps relay information from higher brain regions to the cerebellum and helps coordinate and integrate movements on each side of the body?
   A) the substantia nigra
   B) the corpus callosum
   C) the amygdala
   D) the pons

28. Comparing the structure of the human brain to that of other animals reveals that:
   A) human brain organization bears little or no resemblance to that of lower animals, such as birds and fish.
   B) all animals have a cerebellum, but only humans and other primates have a cortex.
   C) the human cortex is much more complex than that of lower animals, which makes up for the absence of a cerebellum in the human brain.
   D) the basic structure of the human brain is similar to that of many other animals, but a higher proportion of the human brain is devoted to the cortex.

29. The hypothalamus exerts control over the endocrine system by directly triggering activity in the:
   A) amygdala
   B) thyroid
   C) pituitary gland
   D) hippocampus

30. Neurotransmitters:
   A) are chemical messengers that are secreted into the bloodstream primarily by endocrine glands.
   B) are present in extremely small quantities in the brain.
   C) are constantly changing their basic molecular shape as the human brain adapts to new experiences.
   D) compete with sodium and potassium ions for the receptor sites on the surrounding neurons.

31. What is a psycograph?
   A) a device worn on the head that measures the bumps on a person's skull
   B) an instrument that is used to ensure the precise placement of electrodes in the brain
   C) a device used to ensure precision when surgeons sever the corpus callosum during the split-brain operation
   D) a sophisticated imaging instrument that helps identify the cortical localization of certain cognitive and perceptual abilities
32. You can thank your _____ for your ability to appreciate music.
   A) hippocampus
   B) right hemisphere
   C) prefrontal association cortex
   D) left hemisphere

33. Which of the following statements is FALSE?
   A) The central nervous system is protected by bone.
   B) The brain is suspended in cerebrospinal fluid to help protect it.
   C) The peripheral nervous system consists of the brain and spinal cord.
   D) The spinal cord handles both incoming and outgoing messages.

34. Which of the following represents the largest region of the brain?
   A) the forebrain
   B) the hindbrain
   C) the cerebellum
   D) the midbrain

35. The chapter Prologue described the story of a young university professor named Asha who suffered a stroke. Even though some of Asha's language abilities were disrupted by the stroke, she was still able to appreciate music because her _____ was not damaged.
   A) corpus callosum
   B) left hemisphere
   C) right hemisphere
   D) amygdala

36. Messages from other neurons and sensory receptors are:
   A) collected by the synaptic vesicles.
   B) relayed by glial cells to the correct node of Ranvier.
   C) received by the dendrites.
   D) received by the axon terminals.

37. The resting potential is:
   A) the length of time that a neuron is incapable of activating after an action potential.
   B) the term used to describe how the sympathetic nervous system reduces arousal and conserves energy.
   C) a state in which a neuron has a negative electrical charge of about –70 millivolts.
   D) is a state in which a neuron has a positive electrical charge of +70 millivolts.
38. During the action potential:
   A) the electrical charge of the neuron changes from positive to negative.
   B) sodium ions rush into the interior of the axon.
   C) sodium ions rush out of the interior of the axon.
   D) potassium ions flow into the interior of the axon.

39. Reuptake occurs:
   A) when the brain shifts functions from damaged areas to undamaged areas.
   B) when sodium ion and potassium ion channels open.
   C) at the small gaps in the axon called the nodes of Ranvier.
   D) when neurotransmitter molecules are reabsorbed by the presynaptic neuron.

40. Reduced brain levels of the neurotransmitter called _____ are involved in the progressive memory loss that characterizes Alzheimer's disease.
   A) GABA
   B) serotonin
   C) dopamine
   D) acetylcholine

41. The terms autonomic and somatic refer to the two main subdivisions of the:
   A) sympathetic nervous system.
   B) central nervous system.
   C) peripheral nervous system.
   D) parasympathetic nervous system.

42. Epinephrine and norepinephrine are manufactured by the _____ in the _____.
   A) adrenal glands; endocrine system
   B) pineal gland; endocrine system
   C) thyroid gland; limbic system
   D) pituitary gland; limbic system

43. The _____ functions as the main link between the nervous system and the endocrine system.
   A) adrenal medulla
   B) adrenal cortex
   C) amygdala
   D) hypothalamus
44. The _____ lobe is involved in a person's ability to plan, initiate, and carry out voluntary movements and actions.
   A) frontal  
   B) occipital  
   C) parietal  
   D) temporal

45. Structural plasticity:
   A) refers to the brain's ability to shift functions from damaged to undamaged brain areas.
   B) occurs when neurotransmitters in the synaptic gap are blocked from being reabsorbed by the presynaptic neuron.
   C) refers to a phenomenon in which brain structures change in response to learning, active practice, or environmental influences.
   D) refers to the brain's ability to develop new neurons.

46. According to the Critical Thinking box “His' and 'Her' Brains?,” which of the following is FALSE?
   A) Men's brains tend to be much smaller than women's brains.
   B) Women and men have different proportions of gray to white matter in their brains.
   C) In general, the male brain is more asymmetrical and functions are more lateralized than in the female brain.
   D) Men's brains tend to be larger than women's brains.

47. Petro is unable to articulate ideas or understand spoken or written language because of brain damage. Petro suffers from:
   A) Parkinson's disease.
   B) Alzheimer's disease.
   C) the aftereffects of the split-brain operation.
   D) aphasia.

48. Psychologist Roger Sperry is best known for:
   A) his efforts to debunk the pseudoscientific claims of phrenology.
   B) the discovery of neurogenesis in the adult human brain.
   C) his studies of split-brain patients.
   D) identifying the specific brain areas involved in different forms of aphasia.
49. Karen is right-handed. A biopsychologist administers a PET scan of Karen's brain while Karen listens to one of her favorite pieces of music, Beethoven's *Third Symphony*. Which area of Karen's brain is likely to show the greatest activity on the PET scan?
   A) Broca's area  
   B) Wernicke's area  
   C) the cerebellum  
   D) the right hemisphere

50. Tom is a split-brain patient seated in front of a screen. As he focuses on the middle of the screen, the image of an apple is briefly flashed on the LEFT side of the screen. Tom will:
   A) be able to verbally name the object.  
   B) be able to use his right hand to reach under the screen and pick up the correct object.  
   C) verbally deny that any image appeared on the screen.  
   D) probably have an epileptic seizure.

51. Cones operate best under dim light conditions.
   A) True  
   B) False

52. Positive emotions, including laughter, can reduce the perception of pain.
   A) True  
   B) False

53. The degree to which muscles rotate one's eyes to focus on an object is referred to as convergence.
   A) True  
   B) False

54. Tiny bones in the outer ear, called the anvil, hammer, and stirrup, transmit vibrations to the eardrum, which in turn funnels sound waves to the cochlea in the middle ear.
   A) True  
   B) False

55. We tend to assume that the background moves while figures or objects remain stationery, a phenomenon called stroboscopic motion.
   A) True  
   B) False
56. The sensory receptors for vision are:
   A) found in the pupil.
   B) the rods and cones of the retina.
   C) found in the lens and cornea.
   D) distributed throughout the inner eye.

57. The three basic properties of color are:
   A) tone, brightness, and shade.
   B) hue, saturation, and brightness.
   C) black, white, and blue-green.
   D) saturation, primary hue, and secondary tone.

58. When activated, the taste receptors send messages to the:
   A) olfactory cortex.
   B) gustatory cortex.
   C) thalamus.
   D) hippocampus.

59. In contrast to sensation, the term perception is formally defined as:
   A) active mental process of integrating, organizing, and interpreting sensory data.
   B) the process of detecting a physical stimulus such as light, sound, heat, or pressure.
   C) active mental process of understanding the meaning of a difficult new concept.
   D) way in which different areas of the brain interact.

60. The blind spot is caused by:
   A) diabetes.
   B) the absence of rods or cones at the point where the optic nerve leaves the eye.
   C) malformation of the eyeball.
   D) degeneration of the optic nerve.

61. As you enter the locker room at the college gym, you notice the sharp, distinctive smell of chlorine from the adjacent swimming pool. The stimulation of special receptors in your nose by airborne molecules of chlorine is an example of _____, and your interpretation of the stimulation is an example of _____.
   A) gustation; transduction
   B) sensation; perception
   C) perception; sensation
   D) olfaction; transduction
62. As you enter the locker room at the gym, you notice the distinctive smell of chlorine from the adjacent swimming pool. But after a few minutes you're no longer aware of the odor. This is an example of:
   A) the mere exposure effect.
   B) sensory adaptation.
   C) accommodation.
   D) transduction.

63. Cones are concentrated in the _____ and specialized for _____.
   A) center of the retina; distance vision and feature detection
   B) fovea; color vision and visual acuity
   C) fovea; peripheral vision and vision in low-light conditions
   D) periphery of the retina; color vision and visual acuity

64. There are two theories of color vision. The _____ theory correctly describes color vision in the retina, while the _____ theory correctly explains color vision in the ganglion cells and visual cortex.
   A) frequency; place
   B) place; frequency
   C) opponent-process; trichromatic
   D) trichromatic; opponent-process

65. John was shocked when his doctor informed him that his condition was caused by extensive damage to his hammer, anvil, and stirrup. What condition is John suffering from?
   A) disequilibrium or vestibular disability
   B) vertigo, dizziness, and poor balance
   C) conduction deafness
   D) nerve deafness

66. When Isabel visited the children's zoo, she heard squeals coming from the baby pigs and loud grunts from the adult pigs. Her perception of the high-pitched squeals can be explained by the _____ theory of hearing, and her perception of the low-pitched grunts can be explained by the _____ theory of hearing.
   A) place; frequency
   B) frequency; place
   C) opponent process; trichromatic
   D) trichromatic; opponent process
67. You can easily distinguish between a tuna fish salad sandwich and a chicken salad sandwich by their smell, because airborne molecules from tuna salad and chicken salad:
   A) stimulate two different patterns of odor receptors in the nasal cavity.
   B) stimulate different sensory thresholds.
   C) each stimulates a different odor receptor in the nasal cavity.
   D) generate neural impulses along two different sensory pathways.

68. Taste is to _____ as pressure is to _____ and as body position is to _____.
   A) gustation; proprioceptor; sense of equilibrium
   B) taste bud; Pacinian corpuscle; proprioceptor
   C) olfaction; pain; vestibular
   D) taste bud; nociceptor; kinesthetic sense

69. What are nociceptors?
   A) sensory receptors that are found in the cochlea and involved in hearing
   B) microfine, hairlike receptor cells that are found in the muscles and joints that provide information about movement and position
   C) sensory nerve fibers that are found throughout the body and that are involved in producing the sensation of pain
   D) people with a high degree of ESP ability

70. Amy, an accomplished gymnast, has just learned how to do a cartwheel on the balance beam. Which two senses are especially involved in this accomplishment?
   A) sense of equilibrium and the vestibular sense
   B) proprioception and the kinesthetic sense
   C) kinesthetic sense and vestibular sense
   D) audition and vision

71. Look at the following two examples:

   (1) XXXXXXXXXX OOOOOOOOO
   (2) ZWX ZQX YZV QWX ZWQ

   You tend to perceive the elements in the first example as two units because of the law of _____. You tend to perceive the elements in the second example as five units because of the law of _____.
   A) proximity; closure
   B) figure/ground; closure
   C) closure; good continuation
   D) similarity; proximity
72. The “fallacy of positive instances” refers to the:
   A) ability to predict the future.
   B) tendency to misjudge the probability of an event occurring simply by chance.
   C) tendency to seek the simplest possible explanation for an unusual event.
   D) tendency to remember events that seem to confirm our beliefs and forget the events that contradict our beliefs.

73. Which of the following is a monocular cue involved in depth perception?
   A) convergence
   B) binocular disparity
   C) accommodation
   D) motion parallax

74. Which perceptual illusions involve size constancy?
   A) the moon illusion and the Shepard Tables illusion
   B) the Müller-Lyer illusion and the impossible figure illusion
   C) the moon illusion and the Müller-Lyer illusion
   D) the carpentered-world illusion and the Shepard Tables illusion

75. Jack is a fervent believer in the idea that ancient astronauts colonized the Earth. After seeing an exhibit of moon rocks, Jack became convinced that one rock had traces of ancient hieroglyphics carved on its side and that another showed a crude diagram of a spaceship. The most likely explanation for Jack's conclusion is:
   A) his use of positive self-talk.
   B) his perceptual set.
   C) his use of perceptual abilities such as aerial perspective and motion parallax.
   D) his extrasensory abilities.