## Barron's Practice Exam #2 - Answers Explained

- 1. (C) Wundt set up the first psychological laboratory and his empirical, replicable experiments are the reason he is called the father of the science of psychology.
- 2. (C) Skinner focused on operant conditioning within the perspective of behaviorism, which specifically addresses the impact of reinforcers and punishers on behavior. The other theorists listed did not specifically focus on operant conditioning in their research.
- 3. (B) Choosing participants at random for a study is random sampling. Assignment occurs when participants are assigned to control and experimental groups. Representative sampling and assignment involve purposefully making groups that represent a larger population.
- 4. (B) A double blind study controls for both experimenter and subject bias since neither the researchers nor the participants know who is assigned to the experimental and the control groups while the study is taking place. The other concepts listed as possible answers do not relate directly to both experimenter and subject bias.
- 5. (D) Impulses from the eyes travel to the occipital lobe where they are perceived as vision. If the occipital lobe is damaged, vision would most likely be affected.
- 6. (A) Low levels of serotonin are associated with clinical depression, so a medication prescribed to treat depression will most likely affect serotonin levels, rather than any of the other neurotransmitters or other options listed.
- 7. (A) MRI and CAT scans provide detailed information about the structure of the brain (and other body parts). These scans would reveal any structural brain damage caused by the car crash. The PET, EEG, and fMRI scans are primarily used to detect brain function, not structure (although the fMRI would also provide structural details). An EKG scan is unrelated to brain function.
- 8. (B) The sympathetic nervous system is responsible for the "fight or flight" response—mobilizing our body in response to stress (such as surprise or shock). The other terms in the question do not relate to this response.
- 9. (E) Dendrites grow more quickly in children, so brains of younger people are more "plastic," or changeable. A young person who suffers brain damage is more able to make new connections in nondamaged parts of the brain and regain lost functions. The other brain-related concepts listed are not related to brain plasticity.
- 10. (D) PET scans provide information about which parts of the brain are most active, which would reveal that all parts of the brain are used (although different areas of the cerebral cortex are more active than others on different tasks). CAT and MRI scans only provide information on the structure of the brain, not brain activity. An EEG scan does provide information about brain wave activity, but does not tie this activity to specific areas of the brain. And EKG is a scan of heart function, not related to brain activity.
- 11. (D) Although all the structures listed are involved in vision (including color vision), cones are uniquely involved. Cones are cells in the retina that respond to wavelengths of light that we perceive as color.
- 12. (C) Vision, hearing, and touch can be categorized as energy senses, since they gather energy (in the form of either light or sound waves). Taste and smell can be categorized as chemical senses since they gather chemicals (through the mouth or nose) and turn them into smell and taste perceptions
- 13. (A) Volume is determined by the amplitude (height) of the sound wave. Wave frequency determines the pitch of the sound.
- 14. (B) The absolute threshold represents the minimum amount of stimulus we can usually detect, such as the minimum amount of salt we can taste in water.
- 15. (D) Detecting the difference between two very similar pitches depends on the difference threshold, the minimum difference between two stimuli that we can perceive.
- 16. (C) Depth perception depends on monocular cues (like linear perspective) and binocular cues (like retinal disparity).
- 17. (B) People deprived on REM sleep have difficulty with memory tasks. REM sleep deprivation does not increase stage 3 and 4 sleep (in fact, people deprived of REM sleep more easily slip into sleep onset and REM sleep, not deeper sleep stages like stage 3 and 4). REM deprivation is not related to sleep apnea, night terrors, or manifest dream content.
- 18. (B) Role theory explains that hypnosis works because people play the "role" of a hypnotized person. Highly suggestible people are more easily hypnotized and have richer fantasy lives. Dissociation theory explains that hypnosis works by actually dividing our consciousness. One part of our consciousness can be aware and respond to the hypnotist while another level maintains awareness of reality. The other concepts mentioned as answers are not related to hypnosis.

- 19. (C) Classical conditioning always starts with pairing a conditioned stimulus (like a bell) with an unconditioned stimulus (like food). All the other possible answers involve reinforcements and punishments, which are involved in operant conditioning, not classical conditioning.
- 20. (B) A course grade is a secondary reinforcer because (most of us) learn to value high course grades. We do not need to learn to value primary reinforcers because they are related to basic needs and are rewarding (e.g., food, water, sleep)
- 21. (C) Observational learning theorists, like Albert Bandura, were primarily concerned with how we learn through observing the actions of others (rather than learning through direct rewards and punishments).
- 22. (D) In the three-box model, sensations are stored first in sensory memory. Sensations are only stored in sensory memory for a split second and then are either encoded into short term memory or are forgotten.
- 23. (B) Long-term potentiation is the process of strengthened connections between brain neurons. After repeated firings, the connection is strengthened, and the receiving neuron becomes more sensitive to the neurotransmitters from the sending neuron.
- 24. (D) The average capacity of short-term memory is about seven items. Grouping items into groups (chunking) increases the capacity of short-term memory.
- 25. (B) Recognition is the process of matching a current stimuli to something already in memory (e.g., seeing someone and recognizing whether you've ever seen her or him before). Recall is retrieving information from memory with an external cue (e.g., looking at someone and remembering her or his name).
- 26. (C) Researchers (like Elizabeth Loftus) demonstrated that leading questions can cause us to incorporate false details into our memories of events. For example, a question like "How fast was the car going when it went through the red light?" might cause a person to incorporate a red light into the memory even if a red light wasn't actually present.
- 27. (B) Maslow's hierarchy of needs predicts that people are motivated to achieve the next step in the hierarchy of needs. The order of the hierarchy is physiological needs, safety needs, love needs, esteem needs, and finally self-actualization.
- 28. (D) Stimulation of the lateral hypothalamus causes an organism to be hungry, and stimulation of the ventromedial hypothalamus causes an organism to stop eating. The other brain structures listed are not centrally involved in hunger motivation.
- 29. (D) Intrinsic motives (such as enjoyment or satisfaction) are associated with behaviors that continue over a long period of time. Extrinsic motivations (e.g., rewards, such as money) are effective in the short term, but behaviors slow down or stop after some time since most extrinsic rewards are temporary.
- 30. (D) Cross-sectional studies use groups of subjects of different ages in order to infer the impact of age on a variable. Longitudinal studies follow one group of people over a long period of time in order to infer the impact of age on a variable.
- 31. (E) Infants are born with the rooting reflex, which causes baby to turn her or his head toward something that touches the cheek. This reflex can help a baby find the mother's nipple in order to eat.
- 32. (D) Ainsworth categorized three different types of attachment (secure, avoidant, and anxious/ambivalent) by observing infant reactions after parents left and returned while the infant was in a "strange situation" (a room the infant had not been in before).
- 33. (B) Erikson examined the major social experiences at all stages of life and theorized how these major experiences (which he described in eight stages) impact personality.
- 34. (C) Children in the concrete operational stage of development understand concepts of conservation (that the physical properties of object, such as number, area, and volume) do not change when objects are rearranged or reshaped. Children in the pre-operational stage do not understand these concepts and will perform differently on related tasks.
- 35. (C) Freud believed that unconscious conflicts (such as fixations and defense mechanisms) determined our personalities.
- 36. (A) Many current personality trait theorists believe that our personalities can be described through a combination of the Big Five personality traits: extraversion, agreeableness, conscientiousness, openness to experience, and emotional stability.
- 37. (B) Trait theorists believe that personalities can be described through a combination of a small number of factors, or traits. Trait theorists often use pencil and paper tests to assess personality, and the results of these tests indicate that the person falls in a specific personality categories.
- 38. (C) Maslow and the humanists believed that all people are working toward self-actualization and will become more mentally healthy if they are given the right environment. Maslow and the humanistic therapists provided unconditional positive regard to their clients in order to help clients discover for themselves how to best move toward self-actualization.

- 39. (D) Psychoanalysts might use a projective test in order to try to uncover unconscious conflicts and motive. The theory of the projective test is that a person will "project" their unconscious conflicts and desires on to vague and ambiguous stimuli (such as ink blots).
- 40. (B) Achievement tests measure what a person has learned, either knowledge or skill. IQ tests and most entrance exams are aptitude tests, measuring ability or potential (such as the potential to complete law school successfully). Personality tests and projective tests are neither aptitude or achievement tests: they both measure aspects of a person's personality (either conscious or unconscious).
- 41. (A) Fluid intelligence is the ability to solve novel, abstract problems. A new logic-based computer game probably depends on this kind of intelligence, rather than crystallized intelligence, which is the ability to use previously acquired knowledge to solve problems.
- 42. (B) IQ tests are standardized. Test items and test administration are kept standard for different groups of test takers and IQ test results are compared to a norm group (a standardization sample).
- 43. (E) The symptoms described best match post-traumatic stress disorder, which is a kind of anxiety disorder.
- 44. (E) Somatoform disorders, like hypochondriasis and conversion disorder, are manifestations of psychological stresses/problems through physical problems.
- 45. (D) Psychogenic amnesia and fugue states are both categorized as dissociative disorders. All dissociative disorders involve disruptions in our consciousness, such as the loss of memory that occurs during amnesia and fugue.
- 46. (D) People with depression often have low levels of serotonin, and drugs used to treat depression usually affect the serotonin system in the brain.
- 47. (C) Schizophrenia is associated with hallucinations and delusions. Both schizophrenia and dissociative disorders involve splits from reality, and both disorders are very disruptive and may interfere with a career and jobs.
- 48. (A) Psychotherapies all involve talk therapy, rather than behavioral or biomedical (somatic) treatments.
- 49. (D) Psychoanalysts, like Sigmund Freud, feel that dreams consist of symbols that reveal unconscious conflicts. This kind of analysis is seen as useful because psychotherapists believe that personality and personality difficulties are caused by unconscious conflicts.
- 50. (E) Somatic therapists view psychological disorders as biomedical issues, caused by either genetic or brain chemistry issues. Somatic therapists are likely to use chemotherapies (using psychoactive medications) rather than any of the behavioral or cognitive therapies listed.
- 51. (E) Lobotomies were used at one time to treat a variety of disorders, but this kind of serious psychosurgery was stopped when drug therapies became more common and precise.
- 52. (B) Psychiatrists are required to train for a medical degree and can prescribe medication. The other kinds of therapists listed do not necessarily receive medical training and are less likely to be able to prescribe medication.
- 53. (C) Including the free address labels is an example of norm of reciprocity, one of the compliance strategies. People are more likely to help if they feel someone has done them a favor, such as including a gift in a letter asking for contributions.
- 54. (B) Self-fulfilling prophecies occur when our preconceived ideas about someone influences the ways we act toward them, which may increase the likelihood that our preconceived ideas about the person may seem to be confirmed.
- 55. (B) When people commit the fundamental attribution error, they ignore the situational factors that may influence another person's behavior and instead attribute the person's behaviors to their inner disposition.
- 56. (D) We tend to see members of our own group (the in-group) as more diverse and more favorable than people outside our group (the out-group). This bias could contribute to discrimination and prejudice.
- 57. (A) Superordinate goals (goals that all groups need to work together on to accomplish) reduce tensions between groups. The other concepts listed do not relate to group tensions.
- 58. (D) Milgram's participants believed they were delivering shocks to strangers during his obedience studies. Some researchers think the participants were are serious risk for potential psychological harm because the study indicated they would have harmed a stranger by obeying an authority figure.
- 59. (A) Psychoanalysis is based on the study of the unconscious mind, a part of our consciousness that we are not consciously aware of. The other possible answers are not unique to psychoanalysis as compared to the other perspectives.

- 60. (C) The median is the measure of central tendency least affected by extreme scores (or outliers). Outliers can dramatically impact the mean. Standard deviation and range are measures of variability of the distribution. The normal curve is a graph of a normally distributed set of scores.
- 61. (B) Inferential statistics are used to examine distributions of scores in order to find statistically significant differences. Descriptive statistics (like standard deviation) describe sets of scores, but used alone cannot help make judgments about the significance of differences between sets of scores. Field experiments and counterbalancing are terms related to research methodology and aren't relevant to the question.
- 62. (C) Chemicals (neurotransmitters) move between neurons. These neurotransmitters either increase the likelihood the next neuron will fire (excitatory neurotransmitters) or decrease the chance the next neuron will fire (inhibitory neurotransmitters).
- 63. (C) Broca's area of the brain (located in the left frontal lobe in most people) helps control the muscles in the jaw, throat, and tongue needed to produce speech. Wernicke's area is also involved in spoken language but is involved with meaning and interpretation of language. The hippocampus and amygdala areas of the brain are not involved in spoken language. Gage's area is not an area of the brain (Phineas Gage was a famous case study in brain function, but is not related to a specific area of the brain).
- 64. (E) The medulla is located at the top of the spinal cord where it enters the brain. This is the area of the brain that controls blood pressure, heart rate, and breathing, and it is in one of the most protected parts of the brain.
- 65. (B) The doctors who treated Phineas Gage documented what areas of the brain were damaged and how Gage's physical and emotional characteristics changed after the accident. This was one of the first cases to tie a specific brain area to a specific function.
- 66. (E) Only monocular depth cues (like linear perspective) can be used in a pencil drawing, since binocular depth cues (like retinal disparity and convergence) depend on the different sensations we receive from two eyes.
- 67. (D) Generalization occurs in classical conditioning when an organism responds to any stimuli similar to the conditioned stimuli, such as salivating to any sound similar to a bell.
- 68. (B) Garcia and Keolling's research in learned taste aversions established that when any organism becomes nauseous, they are very likely to associate the nausea with what they just ate or drank, and will avoid that food or drink in the future.
- 69. (E) Organisms trained using variable ratio schedules of reinforcements will continue to perform the desired behavior for a long time after reinforcement is stopped (i.e., extinction of the behavior is delayed).
- 70. (B) Semantic memories are general knowledge about the world. Procedural memories are memories of skills and how to perform them, and episodic memories are memories of specific events. Eidetic and mnemonic are not specific kinds of long-term memories.
- 71. (B) Explicit memories are memories of facts and events. Implicit memories (or nondeclarative memories) are memories of procedures or skills that we may not even realize we have, such as the skill of tying a tie.
- 72. (C) Research indicates that biological factors, such as hormones released to the developing fetus in the womb, may influence later sexual orientation. Research indicates that the other factors listed as possible answers do not influence sexual orientation.
- 73. (E) Theory Y managers believe that workers want to do good work and set policies in order to support worker efforts to improve and do quality work. Theory X managers believe that workers will only produce if given rewards and punishments. The other options listed as answers are not associated with management style theory.
- 74. (C) Motor development occurs in predictable stages, and developed as brain neurons mature and are further myelinated (thus improving communication between neurons).
- 75. (C) Authoritative parents set and enforce rules for children, but they talk about the reasons behind and the importance of the rules and help children understand the rules and participate in discussions about good and bad behavior.
- 76. (B) Kohlberg's theory dealt with the development of moral thinking. He would have been interested in how children of difference ages responded to this question about the ethics of lying.
- 77. (E) Freud's theory was built on case studies from his psychoanalytic practice and was not tested empirically. In fact, his claims about the unconscious could not be tested experimentally because the unconscious by definition is not accessible to conscious investigation.
- 78. (A) A person who buckles down and studies more after failing an exam must believe that her studying will benefit her and that she will do better on the next exam because of her efforts. This is the definition of an internal locus of control: the belief that our actions have impact and that we are in control of what happens to us.

- 79. (D) 100 is the average score on IQ tests, with a standard deviation of 15. A score of 145 is three standard deviations above the average, and is a very high IQ score.
- 80. (B) In order to be diagnosed with a psychological disorder, a person's behavior is maladaptive (harmful to themselves or others), disturbing (disturbs others), unusual (atypical, not common), and irrational (not based in reality).
- 81. (B) In order to be diagnosed with major depression a person has to have a depressed mood that lasts for longer than two weeks without an obvious cause.
- 82. (B) Groupthink occurs when a group makes a bad decision because members of the group did not want to contradict each other (often due to mutual admiration of group members). Any techniques used to encourage contrary opinions within the group will work against this groupthink tendency.
- 83. (D) Asch found that conformity increased if the group was made up of three or more people.
- 84. (D) This psychologist is advising the patient to examine her or his own thinking (cognitive perspective) and prescribing a psychoactive medication (biopsychology perspective).
- 85. (B) Experiments use experimental and control groups to isolate what happens when a specific variable (independent variable) is changed and to measure the impact on the variable that changes as a result (dependent variable). The other options listed are either not true about the experimental method or are not unique to the experimental method.
- 86. (D) This study would most likely be done by comparing the average amount spent on organic food between people who own hybrid cars and people who don't. This study could not be performed as an experiment (there is no practical way to randomly assign people to "own hybrid cars" and "don't own hybrid cars" groups). The other research methods listed would not allow researchers to conclude about the likelihood of spending money on organic food.
- 87. (B) The doctors who treated Phineas Gage documented what areas of the brain were damaged and how Gage's physical and emotional characteristics changed after the accident. This was one of the first cases to tie a specific brain area to a specific function.
- 88. (E) According to gate-control theory, higher-priority touch sensations (e.g., vigorous itching) will be perceived instead of lower-priority touch sensations (e.g., low-level pain related to the skin rash). So this person does not perceive the low-priority rash pain sensations while she is itching vigorously (a higher-priority sensation), but the pain returns after she stops scratching.
- 89. (A) Most drugs produce increased tolerance with repeated uses—the need for increasing amounts of a drug in order to produce the same physiological effects. This tolerance gradually changes the levels of specific neurotransmitters in the brain, so when a person stops using the drug, withdrawal symptoms occur as the body and brain readjust and compensate for altered levels of these neurotransmitters. The other concepts listed in the answers are not related to the tolerance-withdrawal cause-effect cycle.
- 90. (B) Classical conditioning involves pairing conditioned stimuli with unconditioned stimuli, producing a conditioned response. Operant conditioning involves providing a stimuli (a reinforcer or a punishment) after a specific response is performed. The other possible answers provided about classical and operant conditioning are not accurate.
- 91. (E) Punishments are defined as stimuli that decrease the likelihood that an organism will perform the behavior that preceded the punishments. Negative reinforcements reinforce a behavior, increasing the likelihood the behavior will be repeated. They reinforce the behavior by taking away an aversive stimulus (e.g., an aspirin takes away a headache, which makes the person more likely to take an aspirin in the future).
- 92. (D) Chomsky and Skinner disagreed about how children acquire language. Skinner's behaviorist theory held that children learn language like they learn everything else: through rewards and punishments. Chomsky pointed out that language acquisition occurs too quickly to be explained by reward and punishment. Chomsky hypothesized that humans must be born with a language acquisition device that enables us to learn language quickly during a certain window of opportunity during childhood.
- 93. (C) Drive Reduction theory states that we are motivated by primary drives (like hunger) and secondary drives, and that we act to satisfy these drives until we regain a state of homeostasis (balance—in this case, we are no longer hungry). The other options each relate to a different motivation theory.
- 94. (E) Options A and B describe James-Lange's and Cannon-Bard's theories of emotion, respectively. Schacter's two-factor theory holds that a combination of biological changes and mental interpretations (cognitive labels) combined are what we call "emotion."
- 95. (A) Piaget described schemas (the ways we think about the world) as going through a process of assimilation and accommodation. When we encounter something new in the world, we first try to use our existing schemas to understand it (assimilation). If that doesn't work, we may have to change or expand our schemas in order to deal with the new object, event, or idea (accommodation). We learn through accommodation, as our schemas change and become more sophisticated.

- 96. (D) The social cognitive theorists described personality through reciprocal determinism, meaning that our personality traits interact with our environment, and these both interact with our behaviors. Each of these factors influences the others, and our personality is a result of these interactions.
- 97. (D) Test-retest reliability is a measure of a tests ability to deliver similar results each time it is administered to the same person.
- 98. (E) A test can be reliable (can provide the same results each time it is administered) but may not be valid (those consistent results may not accurately measure what the test claims to measure).
- 99. (C) The DSM lists the official names of diagnoses and exact symptoms associated with these diagnoses so that psychologists and psychiatrists can reliably diagnose patients. The DSM does not address causes of psychological disorders.
- 100. (E) Patients using systematic desensitization try to replace anxiety with relaxation. Patients place themselves in somewhat stressful situations and use relaxation techniques (calming thoughts, deep breathing, etc.) to reduce their stress reactions until they are no longer stressed in this situation. Patients then move up to the next level of the "fear hierarchy" and place themselves in a slightly more stressful situation and use the relaxation techniques. The other therapies listed are either strictly behavioral (counterconditioning) or cognitive (rational emotive behavior therapy).