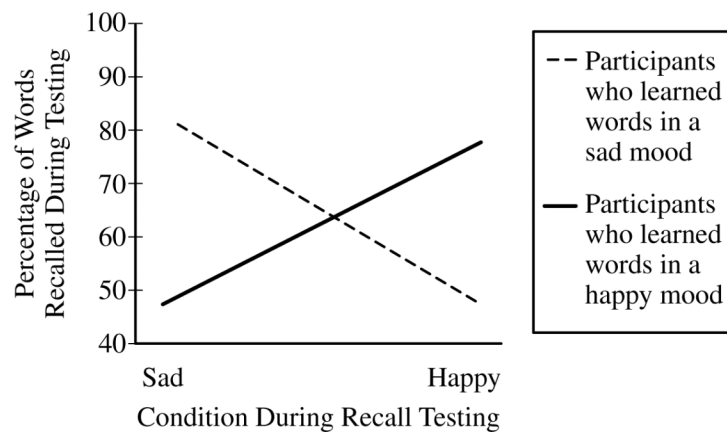


PSYCHOLOGY**SECTION I****Time—1 hour and 10 minutes****100 Questions**

Directions: Each of the questions or incomplete statements below is followed by five suggested answers or completions. Select the one that is best in each case and then fill in the corresponding circle on the answer sheet.

1. Which of the following methods best limits the influence of unknown variables in an experiment?
 - (A) Random assignment
 - (B) Correlational study
 - (C) Debriefing
 - (D) Stratified sampling
 - (E) Subject matching
2. Marissa is a good tennis player whose performance seems to improve as the crowd watching her gets larger. The best explanation for this phenomenon is
 - (A) the bystander effect
 - (B) misattribution
 - (C) social facilitation
 - (D) a social schema
 - (E) the self-serving bias
3. Sheila has a favorite book that she enjoys so much she has read it several times. This book is now assigned in her literature class, and students receive gift certificates for each chapter they read. As the class progresses through the book, Sheila finds she enjoys it less. This illustrates
 - (A) overjustification
 - (B) anchoring and adjustment
 - (C) habituation
 - (D) extinction
 - (E) cognitive dissonance
4. A patient with symptoms of depression is working with a psychologist and reports that he has no meaningful relationships and no skills that allow him to make friends. The psychologist determines that the patient's beliefs and lack of interpersonal skills are the primary contributors to his depression. Which of the following treatments is the psychologist most likely to use?
 - (A) Cognitive-behavioral therapy
 - (B) Electroconvulsive therapy (ECT)
 - (C) Psychoanalysis
 - (D) Repetitive transcranial magnetic stimulation (RTMS)
 - (E) Antidepressant medications
5. Dr. Lee is interested in the effect of lighting on people's ability to concentrate. Dr. Lee studies this by manipulating the amount of lighting while participants read and then measuring their scores on a reading comprehension test. Group 1 receives dim light, and group 2 receives bright light. Which of the following research methods is Dr. Lee using?
 - (A) A case study
 - (B) A survey
 - (C) A correlational study
 - (D) An experiment
 - (E) A simulation
6. Psychodynamic therapy has its roots in the theories of
 - (A) Sigmund Freud
 - (B) B. F. Skinner
 - (C) Abraham Maslow
 - (D) Carl Rogers
 - (E) John B. Watson

7. Which of the following is an example of a compulsion?
- (A) Having uncontrollable thoughts
 - (B) Having frequent daydreams
 - (C) Checking the doors twenty times before going to bed
 - (D) Refusing to leave the home because of worry about having a panic attack
 - (E) Believing that aliens are stealing thoughts
8. Samuel became ill after eating pepperoni pizza and refuses to eat it now. However, he still enjoys plain pizza. Samuel's eating behavior illustrates
- (A) negative reinforcement
 - (B) discrimination
 - (C) shaping
 - (D) generalization
 - (E) chaining
9. According to social psychologists, which of the following characteristics makes two people LEAST likely to develop a lasting romantic relationship?
- (A) Having very different personalities
 - (B) Being in four classes and three extracurricular clubs together
 - (C) Living on the same floor in a college dorm
 - (D) Being highly attracted to each other
 - (E) Having similar levels of physical attractiveness
10. Which of the following describes the correct order of information processing in vision?
- (A) Bipolar cells→rods and cones→ganglion cells→optic nerve
 - (B) Optic nerve→rods and cones→bipolar cells→ganglion cells
 - (C) Rods and cones→bipolar cells→ganglion cells→optic nerve
 - (D) Ganglion cells→bipolar cells→rods and cones→optic nerve
 - (E) Rods and cones→ganglion cells→bipolar cells→optic nerve



11. In an experiment, either a sad video or a happy video was shown to participants to influence their moods. The participants were then asked to memorize a list of words. Later, the participants were again shown either the same video they had seen before memorizing the words or they were shown the other video, and they were then asked to recall the words they had memorized previously. The results of the experiment, summarized in the chart above, best illustrate which psychological concept?
- (A) Episodic memory
 - (B) State-dependent memory
 - (C) Latent learning
 - (D) Observational learning
 - (E) Encoding failure

12. The brain's ability to adapt after it is damaged is known as

- (A) integration
- (B) plasticity
- (C) polarization
- (D) lateralization
- (E) specificity

13. Which of the following measures can be precisely located on the graph of a skewed distribution without doing any calculations?

- (A) Mode
- (B) Median
- (C) Mean
- (D) Standard deviation
- (E) Variance

14. Bailey and Marcus packed everything they thought they would need for a weekend camping trip. When it rained and they realized they had not brought rain gear, Bailey said, "I knew we should have packed raincoats!" Bailey's thinking illustrates which of the following concepts?

- (A) An algorithm
- (B) A flashbulb memory
- (C) Hindsight bias
- (D) The representativeness heuristic
- (E) Prospective memory

15. Michael states that his friend Scott is cheap. Michael does not realize he himself is cheap. If Scott is not cheap, which of the following defense mechanisms is Michael using?

- (A) Regression
- (B) Displacement
- (C) Identification
- (D) Projection
- (E) Reaction formation

16. Using a mathematical formula to find the solution to a problem is an example of
- (A) elaborative rehearsal
 - (B) a means-end analysis
 - (C) insight
 - (D) an algorithm
 - (E) divergent thinking
17. It is important for researchers to use precise operational definitions when
- (A) they want to ensure that conditions are assigned randomly
 - (B) they want to be able to replicate the experiment
 - (C) they want to organize the hypotheses appropriately
 - (D) they are conducting experimental research but not correlational research
 - (E) they are conducting an experiment with no independent and dependent variables
18. Research participants are randomly assigned to one of three groups. One group listens to a list of words, another group reads a list of words printed on paper, and the remaining group hears and reads the words. The researcher then tests the participants' memories to see how many words the members of each group can recall. The modality in which the words are presented (i.e., auditory, visual, or both) is which type of variable?
- (A) Confounding
 - (B) Dependent
 - (C) Independent
 - (D) Extraneous
 - (E) Control
19. The utterance "likes dog my swim to" does not sound correct because it violates the rules of
- (A) lexicon
 - (B) prosody
 - (C) syntax
 - (D) fast mapping
 - (E) morphemes
20. Which of the following are involved in regulating circadian rhythms?
- (A) Prefrontal cortex, occipital lobe, cerebellum
 - (B) Photoreceptors, hypothalamus, pineal gland
 - (C) Proprioceptors, thalamus, somatosensory cortex
 - (D) Medulla, thalamus, pituitary gland
 - (E) Cerebral cortex, motor cortex, adrenal glands
21. Which of the following treatments would reduce a drinker's dependence on alcohol by changing the positive effect of alcohol to a negative one?
- (A) Systematic desensitization
 - (B) Insight therapy
 - (C) Aversive conditioning
 - (D) Psychoanalysis
 - (E) A token economy
22. When Betty lost her job, she kept returning to work each morning because she did not remember that she had been fired. She saw a doctor, who found no brain injury or other neurological condition that would prevent her from remembering. Which psychological disorder is Betty most likely experiencing?
- (A) Bipolar disorder
 - (B) Schizophrenia
 - (C) Obsessive-compulsive disorder
 - (D) Dissociative amnesia
 - (E) Antisocial personality disorder

23. Damage to Wernicke's area is most likely to be associated with difficulty in

- (A) tasting
- (B) hearing
- (C) seeing
- (D) understanding language
- (E) moving arms and legs

24. Which of the following is most likely to be used as evidence against the concept of g ?

- (A) Mental age
- (B) Standardization
- (C) Insight
- (D) Savant syndrome
- (E) Imprinting

25. According to the diathesis-stress model of schizophrenia, which of the following is true of a person with a genetic predisposition for developing schizophrenia?

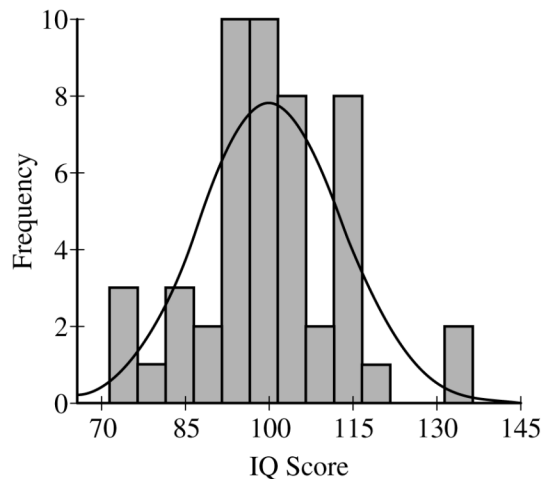
- (A) The person will definitely develop and show the disorder.
- (B) The person has a mother who has been diagnosed with schizophrenia.
- (C) The person will develop symptoms of the disorder during young adulthood.
- (D) The person has a high level of dopamine activity.
- (E) The person has an increased likelihood of developing the disorder during a period of major life changes.

26. Nick is smiling even though he does not feel happy. After a short time he feels happier. The best explanation for Nick's change in mood is

- (A) justification of effort
- (B) facial feedback
- (C) bottom-up processing
- (D) selective encoding
- (E) homeostasis

27. Children of authoritative parents tend to be

- (A) immature
- (B) indecisive
- (C) independent
- (D) withdrawn
- (E) aggressive



28. A psychologist administered the most recent edition of the Stanford-Binet IQ test to 50 students and their scores are shown in the chart above. How many students earned scores higher than two standard deviations above the mean?

- (A) 2
- (B) 3
- (C) 8
- (D) 10
- (E) 20

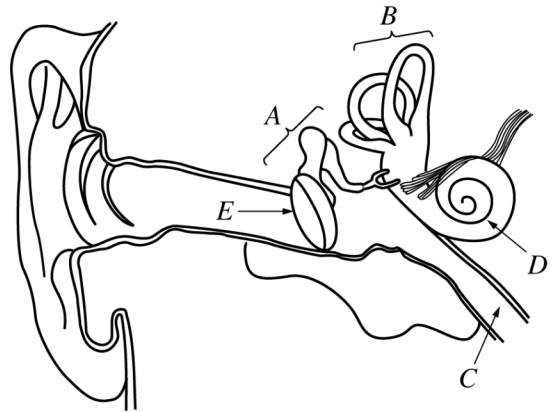
Questions 29-32 are based on the following.

Karl goes to see Dr. Norton to help him overcome his fear of cats. Karl's fear began in childhood when he petted a cat and someone slammed a door. Every time Karl petted the cat, the door slammed. Now whenever Karl sees a cat, he becomes very anxious.

29. Karl's fear of cats is classified as
- (A) obsessive-compulsive disorder
 - (B) panic disorder
 - (C) a specific phobia
 - (D) generalized anxiety disorder
 - (E) conversion disorder
30. In the development of Karl's fear of cats, what was the unconditioned stimulus (UCS) ?
- (A) Fear
 - (B) The cat
 - (C) The slamming of the door
 - (D) The person who slammed the door
 - (E) The room in which the door slamming took place
31. Dr. Norton puts a cat in the room with Karl and prevents Karl from avoiding or escaping the cat until Karl's anxiety naturally dissipates. The treatment is called
- (A) systematic desensitization
 - (B) participant modeling
 - (C) aversion therapy
 - (D) counterconditioning
 - (E) flooding
32. Karl may have been reluctant to try therapy to change his fear because he believes that his efforts to change are ineffective. This would indicate that Karl has low
- (A) self-esteem
 - (B) self-regulation
 - (C) self-perception
 - (D) self-efficacy
 - (E) self-concept
33. Which of the following scenarios best exemplifies practical intelligence as suggested by Robert Sternberg's triarchic theory?
- (A) A child becomes an accomplished dancer.
 - (B) A student achieves high scores on the math and language portions of a standardized exam.
 - (C) A club president devises a way to publicize important upcoming events.
 - (D) A student composes a new song.
 - (E) A child has few social skills but an unusually strong memory.
34. Which of the following is NOT a product of learning?
- (A) Slowing down to avoid getting a ticket
 - (B) Squinting in bright light
 - (C) Doing chores in order to receive money
 - (D) Getting acclimated to the frequent sound of trains going past one's house
 - (E) Becoming afraid of dogs after being bitten by a dog
35. The process of converting incoming physical energy into a neural code that can be processed is called
- (A) transduction
 - (B) sensory threshold
 - (C) sensory adaptation
 - (D) parallel processing
 - (E) transferred excitation
36. Jorgas struggles with meeting new people. He is very shy and does not approach people at social events. Because of this, people assume he does not want to talk to them and they avoid him, which in turn reinforces Jorgas' anxiety about approaching people. Jorgas' situation illustrates which of the following principles?
- (A) Locus of control
 - (B) Reciprocal determinism
 - (C) Implicit personality theory
 - (D) Learned helplessness
 - (E) Modeling

37. The type of intelligence that Howard Gardner described as individuals' abilities to understand themselves and to be aware of their talents and limitations is
- (A) naturalistic
 - (B) interpersonal
 - (C) kinesthetic
 - (D) intrapersonal
 - (E) g
38. Janie is successful with word games that require her to create words out of a series of letters. Which of the following combinations most likely contributes to her success?
- (A) Linguistic intelligence and a mental set
 - (B) Linguistic intelligence and heuristics
 - (C) Spatial intelligence and functional fixedness
 - (D) Spatial intelligence and heuristics
 - (E) Spatial intelligence and a mental set
39. Steve's cat used to run away from loud music. Over time the cat stopped running away from the sound. Which of the following processes has occurred?
- (A) Classical conditioning
 - (B) Habituation
 - (C) Generalization
 - (D) Operant conditioning
 - (E) Sensitization
40. The Barnum effect in psychological assessment refers to
- (A) when there is insufficient statistical support to confirm a test's reliability
 - (B) the tendency of individuals to accept vague personality descriptions as accurate
 - (C) when an interviewee demonstrates a consistently negative response set
 - (D) the influence of an interviewer's personal bias on the outcome of an interview
 - (E) the influence of distracting test conditions on a test taker's performance

Questions 41-42 are based on the following.



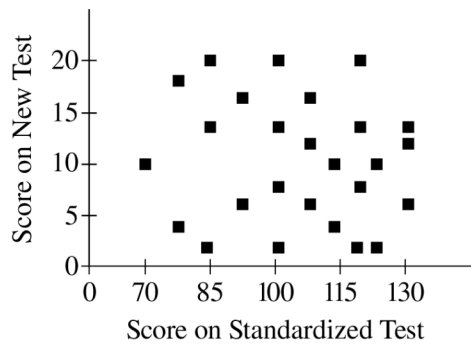
41. Which of the following structures is part of the vestibular system?
- (A) A
 - (B) B
 - (C) C
 - (D) D
 - (E) E
42. The area labeled A contains the
- (A) auditory nerves
 - (B) pinna
 - (C) ossicles
 - (D) cochlea
 - (E) semi-circular canals

43. Jack performed well on the most recent math test. When asked why he performed well, Jack said it was because of his high level of ability. Jerry performed poorly on the same test. When asked why, Jerry said that the test was unfair. These attitudes illustrate
- (A) the self-serving bias
 - (B) self-efficacy
 - (C) learned helplessness
 - (D) the fundamental attribution error
 - (E) role-playing
44. During her psychotherapy sessions, Justine finds that her therapist often paraphrases what she has said, asks for clarification, and seems to understand her feelings. The therapist's approach is most consistent with that of
- (A) Carl Rogers
 - (B) Sigmund Freud
 - (C) Albert Ellis
 - (D) Erik Erikson
 - (E) Fritz Perls
45. In the 1800s, the activist Dorothea Dix led a movement in support of
- (A) using introspection as a therapeutic procedure
 - (B) eliminating the policy of deinstitutionalization
 - (C) adopting the belief that mental disorders occur when people fail to conform to society's expectations
 - (D) outlawing the practice of surgical lobotomy
 - (E) improving the treatment of patients with mental disorders who were housed in asylums
46. Which of the following regions of the body has the largest area of sensory cortex devoted to it?
- (A) Trunk
 - (B) Arm
 - (C) Shoulder
 - (D) Leg
 - (E) Face
47. Dora alternates between periods of extreme euphoria, when she is very talkative, overconfident, and hyperactive, and times of profound sadness, when she experiences feelings of hopelessness. Which of the following disorders is Dora most likely exhibiting?
- (A) Borderline personality
 - (B) Major depressive
 - (C) Bipolar
 - (D) Generalized anxiety
 - (E) Schizophrenia
48. A four-year-old child frequently pulled on the dog's tail to gain attention. To reduce this undesirable behavior, the parent took away one hour of television viewing every time the child pulled the dog's tail. Within one week, the undesirable behavior was significantly reduced.
- The above scenario illustrates
- (A) positive reinforcement
 - (B) negative reinforcement
 - (C) negative punishment
 - (D) positive punishment
 - (E) extinction

49. Even though Eli prefers romantic comedy movies, he often goes to action-adventure movies to fit in with his friends. Eli's behavior can best be explained by
- (A) the reciprocity norm
 - (B) obedience
 - (C) normative social influence
 - (D) informational social influence
 - (E) companionate love
50. The network of structures involved in emotion, motivation, and memory is the
- (A) limbic system
 - (B) pons
 - (C) corpus callosum
 - (D) occipital lobe
 - (E) parietal lobe
51. Initially, intelligence quotients were calculated on the basis of a person's mental and chronological ages. Using that approach, a person with a mental age of 12 and an intelligence score of 120 would have a chronological age of
- (A) 10
 - (B) 12
 - (C) 14
 - (D) 16
 - (E) 18
52. Which of the following neurotransmitters is most closely associated with schizophrenia?
- (A) Norepinephrine
 - (B) Acetylcholine
 - (C) Glutamate
 - (D) Dopamine
 - (E) Serotonin
53. Which of the following structures is most closely associated with communication between the central nervous system and the endocrine system?
- (A) Cerebellum
 - (B) Amygdala
 - (C) Medulla
 - (D) Reticular activating system
 - (E) Hypothalamus

Questions 54-56 are based on the following.

A group of psychologists wanted to develop an intelligence test that would be quicker to administer than the one they were using, which was a standardized test that required answering as many questions correctly as possible in a given time. The existing test was considered valid and reliable. In the psychologists' new test, participants had to find an image hidden in a visual display as quickly as possible. The psychologists collected data to determine the relation between the number of items the participants answered correctly on the original standardized test and the time it took them to spot the hidden image on the new test. The graph below displays the results.



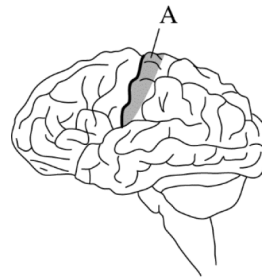
54. Based on the graph, which of the following would most likely be used to assess the relation between the participants' scores on the two tests?
- (A) A t test
 - (B) A correlation
 - (C) Analysis of variance
 - (D) Descriptive statistics
 - (E) Factor analysis
55. Which of the following values best represents the value of the statistic associated with the graph?
- (A) -0.50
 - (B) 0.00
 - (C) 1.00
 - (D) 1.96
 - (E) 3.00
56. Which of the following is a valid conclusion that the researchers could have drawn from the data?
- (A) The measurement from the new test is likely to be better than the measurement from the original test.
 - (B) The new test provides information on intelligence that is highly comparable to that provided by the original test.
 - (C) The new test produces scores that are generally unrelated to those produced by the original test.
 - (D) The new test is likely to be biased in favor of disadvantaged groups.
 - (E) Intelligence is too abstract a concept to measure accurately.

57. Which of the following perspectives suggests that depression is due to the unconscious conflicts and hostile feelings that originate in early childhood?

- (A) Biological
- (B) Behavioral
- (C) Psychoanalytic
- (D) Cognitive
- (E) Sociocultural

58. Which of the following is a disease in which the immune system attacks the myelin of neurons in the central nervous system?

- (A) Parkinson's disease
- (B) Multiple sclerosis
- (C) Schizophrenia
- (D) Epilepsy
- (E) Rett syndrome



59. Which part of the brain represented above is indicated by A?

- (A) Cerebellum
- (B) Prefrontal cortex
- (C) Somatosensory cortex
- (D) Wernicke's area
- (E) Broca's area

60. Isaac's father offers to give him five dollars for every good grade he earns on his report card. Which of the following is a type of motivation being used by Isaac's father?

- (A) Drive reduction
- (B) Instinct
- (C) Intrinsic
- (D) Incentive
- (E) Humanistic

61. During the high-wire act, Grace walks along a rope suspended 30 feet above the circus floor. Which of the following is most involved in helping Grace coordinate her movements and maintain her balance during the performance?

- (A) Cerebellum
- (B) Hypothalamus
- (C) Hippocampus
- (D) Sympathetic nervous system
- (E) Parasympathetic nervous system

62. Of the following, which would most commonly be used to treat a phobia?

- (A) Antipsychotic medication
- (B) Aversive conditioning
- (C) Systematic desensitization
- (D) Token economy
- (E) Group therapy

63. Which of the following psychological approaches suggests that jealousy might serve an adaptive function in protecting a sexual relationship from threats?

- (A) Cognitive
- (B) Behavioral
- (C) Psychodynamic
- (D) Evolutionary
- (E) Humanistic

64. Laura is in transition from Erik Erikson's industry versus inferiority stage into the identity versus role confusion stage. Which of the following is most likely what Laura is experiencing?

- (A) She is less affected by self-esteem and more interested in initiative.
- (B) She is more concerned with autonomy than feelings of guilt.
- (C) She is less interested in accomplishing things and more interested in defining herself.
- (D) She is more affected by matters of trust and is not spending much time thinking, "Am I good or bad?"
- (E) She is more interested in doing things for herself than relying on others.

65. After listening to a radio station play the same set of songs every three hours, Ivan grows to like them. Ivan's reaction can be best explained by

- (A) frequency theory
- (B) functional fixedness
- (C) the central route to persuasion
- (D) the mere-exposure effect
- (E) the phi phenomenon

Questions 66-67 are based on the following.

In a two-phase study, participants were randomly assigned to either group A or group B. All participants were subjected to a series of irritating air puffs directed at the face. In the first phase of the study, participants in group A pressed a button that stopped the air puffs. Participants in group B pressed a button that had no effect on the air puffs. In the second phase of the study, both groups had buttons that, if pressed, would stop the air puffs.

66. The study most directly explores the concept of

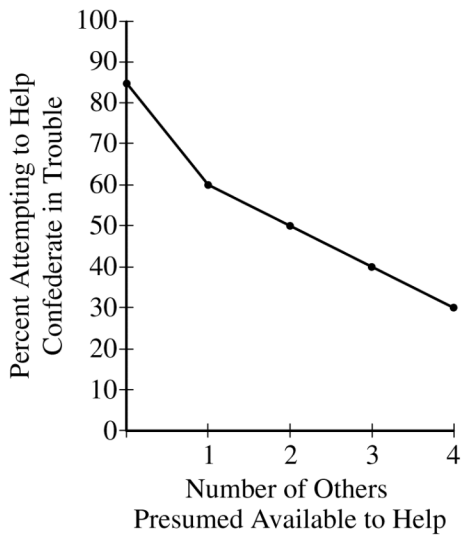
- (A) learned helplessness
- (B) social facilitation
- (C) retrograde amnesia
- (D) the mere-exposure effect
- (E) regression to the mean

67. Which of the following disorders is hypothesized to result most frequently from real-world conditions that are similar to those used in the study?

- (A) Autism spectrum
- (B) Bipolar
- (C) Dependent personality
- (D) Major depressive
- (E) Obsessive-compulsive

68. In order to get more audience participation, a radio show offers a prize to the first person to call the show at the beginning of every hour. The show is using which of the following schedules of reinforcement?

- (A) Continuous
- (B) Fixed ratio
- (C) Fixed interval
- (D) Variable ratio
- (E) Variable interval



69. The above diagram illustrates which of the following psychological concepts?

- (A) Fundamental attribution error
- (B) Reciprocity norm
- (C) Deindividuation
- (D) Social trap
- (E) Bystander effect

70. The Thematic Apperception Test (TAT) is based on the hypothesis that when a person interprets an ambiguous picture, that person is

- (A) expressing unique sensory processes
- (B) generating objective measurements that are more effective than subjective measures in assessing personality
- (C) projecting an internal psychological state onto an external stimulus
- (D) showing the effects of patterns of positive and negative reinforcement
- (E) providing information regarding one's own level of creativity

71. Harry Harlow's experiments with rhesus monkeys and surrogate mothers demonstrate the importance of

- (A) socialization to neural development
- (B) environmental stimulation to cognitive development
- (C) contact comfort to attachment
- (D) imprinting to observational learning
- (E) instincts to reproductive habits

72. Denny does not have wrapping paper to use to wrap a birthday present, and so he decides to use colorful newspaper comics instead. Denny's solution demonstrates that he has overcome

- (A) functional fixedness
- (B) the fundamental attribution error
- (C) cognitive dissonance
- (D) egocentrism
- (E) a self-serving bias

73. The fovea has the greatest visual acuity in bright light primarily because the fovea is

- (A) near the center of the visual field
- (B) close to the lens
- (C) not close to the blind spot
- (D) an extension of the frontal lobe
- (E) made up of only cones

74. When Amy was seven years of age, she had a babysitter from France. During this time Amy learned to speak a little French. Years later, when Amy got to college, she signed up for a beginning French class. Amy learned the material in her French class much more quickly than her classmates did. Amy's rapid learning was most likely due to

- (A) implicit memory
- (B) episodic memory
- (C) spontaneous recovery
- (D) deductive reasoning
- (E) fluid intelligence

75. After Sharon stares at a patch of saturated green color for a brief period of time, she looks at a white surface and sees a red patch of color. This perceptual phenomenon is best explained by
- (A) retinal disparity
 - (B) color constancy
 - (C) selective attention
 - (D) trichromatic theory
 - (E) opponent-process theory
76. Which of the following relates most to the lowest level of Abraham Maslow's hierarchy of needs?
- (A) Social affiliation
 - (B) Self-actualization
 - (C) Fight-or-flight response
 - (D) Intrinsic motivation
 - (E) Drive reduction
77. A common psychological effect of alcohol intake is
- (A) reduced inhibition
 - (B) anxiety
 - (C) enhanced memory
 - (D) psychosis
 - (E) heightened creativity
78. A child whose family owns a dog may refer to any four-legged animal as "dog." In learning theory, such behavior is known as
- (A) stimulus generalization
 - (B) operant conditioning
 - (C) classical conditioning
 - (D) ecological validity
 - (E) shaping
79. Which of the following is an individual more likely to do when working in a group?
- (A) Provide needed help to a stranger
 - (B) Increase effort on a project
 - (C) Endorse an opinion with low popularity among group members
 - (D) Make a cautious, low-risk decision
 - (E) Show a decline in work output
80. A 40-year-old man and his 7-year-old son move to a country where they have to learn a new language. Compared with his son, the 40-year-old man will
- (A) have more difficulty learning to produce phonemes that do not exist in his native language
 - (B) require less active processing to acquire the syntax of the new language
 - (C) overregularize more often
 - (D) learn the grammar of the new language more slowly but ultimately acquire the language better
 - (E) learn new vocabulary at a faster rate by using techniques such as fast mapping
81. Lisa is a college English major. She believes all math majors are analytical, logical, and serious. Lisa seems to be demonstrating
- (A) group polarization
 - (B) ingroup bias
 - (C) the actor-observer effect
 - (D) outgroup homogeneity bias
 - (E) stereotype threat

82. Because he is afraid of public speaking, Scott withdraws from a class that requires an oral presentation and enrolls in another class without a presentation requirement. He continues the pattern, switching classes each semester to avoid giving presentations. Scott's behavior has been
- (A) positively reinforced
 - (B) negatively reinforced
 - (C) punished
 - (D) weakened
 - (E) classically conditioned
83. Which of the following behaviors best demonstrates an emotional response associated with the short route from the thalamus to the amygdala, as described by Joseph LeDoux?
- (A) Sherry receives a high score on an exam and jumps up and down in celebration.
 - (B) Miguel jumps up on a chair because he thinks he sees something moving along the wall. When he realizes it was just a dust ball, he gets off the chair.
 - (C) Hannah has seen her mother crying at greeting card commercials, so now Hannah always cries whenever she sees a greeting card commercial.
 - (D) As Charulata approaches her front door, she hears a rustle in the bushes. She sees the tail of a cat sticking out of the bushes, so she calmly walks into the house.
 - (E) While waiting for a concert to begin, the crowd gets rowdy, so Anna joins in the rowdy behavior and begins to shout.
84. Which of the following is the best evidence that social interaction is preprogrammed in humans and does not need to be learned?
- (A) Newborns turn their heads if their cheeks are stroked.
 - (B) Newborns prefer sweet over bitter tastes.
 - (C) Newborns are born with the Moro reflex.
 - (D) Newborns focus longer on pictures of typical faces than on ones that show faces with jumbled features.
 - (E) Newborns' development is proximodistal.
85. Eleven-month-old Jason drops a toy from his crib. He immediately looks over the side of the crib to search for the toy. Jason's behavior demonstrates that he has acquired
- (A) conservation
 - (B) habituation
 - (C) dishabituation
 - (D) object permanence
 - (E) a zone of proximal development
86. Melinda went skydiving. As soon as she landed, a handsome man helped her gather her parachute. Melinda's heart was beating quickly and her hands were perspiring. Melinda inferred that she must be attracted to him. Which of the following is a theory of emotion that would best explain the relationship between Melinda's physiological state and her apparent attraction to the man that helped her?
- (A) Cannon-Bard
 - (B) James-Lange
 - (C) Arousal
 - (D) Schachter two-factor
 - (E) Social exchange
87. The difficulty many people have recalling the details of common objects such as pennies can best be explained by
- (A) interference
 - (B) memory decay
 - (C) repression
 - (D) a lack of encoding
 - (E) amnesia

88. Four-year-old Craig understands that birds build nests in trees. In his front yard, Craig notices an unusually large nest. He is scared to go near it, fearing that some large bird may attack him. Craig's father explains to him that squirrels also build nests and that the nest in the front yard is that of a squirrel. Craig changes his thinking to now include the fact that squirrels build nests. Jean Piaget would say that Craig's new way of thinking about nests is an example of
- (A) insight
 - (B) accommodation
 - (C) an algorithm
 - (D) a heuristic
 - (E) conservation
89. Nervousness can result in faster and more shallow breathing as well as a racing heart. This is due to activation of the
- (A) somatic nervous system
 - (B) parasympathetic nervous system
 - (C) sympathetic nervous system
 - (D) corpus callosum
 - (E) cerebellum
90. Which of the following brain regions is the part of the cerebral cortex that is most responsible for the processing of visual stimuli?
- (A) Parietal lobe
 - (B) Temporal lobe
 - (C) Frontal lobe
 - (D) Occipital lobe
 - (E) Medulla
91. In Stanley Milgram's classic studies of obedience, teachers in a staged experiment were instructed to administer shocks to learners when they made mistakes. A large percentage of the teachers obeyed the experimenter and administered strong levels of shock to the learners. When this experiment is described, most people judge the obedient participants to be aggressive, cold, and unappealing, and they fail to recognize the role of social forces in behavior. The mistaken judgment is due to
- (A) deindividuation
 - (B) the fundamental attribution error
 - (C) a self-serving bias
 - (D) groupthink
 - (E) psychological reactance
92. Petunia experiences distress every time she leaves her house and goes out into a crowd. The most likely diagnosis for her would be which of the following types of disorders?
- (A) Anxiety
 - (B) Somatic symptom and related
 - (C) Neurodevelopmental
 - (D) Schizophrenia spectrum and other psychotic
 - (E) Personality

93. During a political debate, Candidate A expresses detailed facts on an important issue. Candidate B responds with an emotional appeal on the same issue. Which method of persuasion is each of the candidates using?
- (A) Candidate A is using the peripheral route, and Candidate B is using the central route.
 - (B) Candidate A is using the peripheral route, and Candidate B is using the door-in-the-face technique.
 - (C) Candidate A is using the central route, and Candidate B is using the peripheral route.
 - (D) Candidate A is using the central route, and Candidate B is using the foot-in-the-door technique.
 - (E) Candidate A is using the foot-in-the-door technique, and Candidate B is using the peripheral route.

94. The argument over the relative contributions of heredity and environment in the development of various behaviors and personality traits is known as which of the following controversies?

- (A) Continuous versus discrete
- (B) Nature versus nurture
- (C) Active versus passive
- (D) Critical period versus sensitive period
- (E) Ages versus stages

95. In legal cases, Elizabeth Loftus' research on the misinformation effect is most often used to cast doubt on which of the following?

- (A) The knowledge of expert witnesses
- (B) The judgment of jurors
- (C) The memory of eyewitnesses
- (D) The impartiality of judges
- (E) The intelligence of attorneys

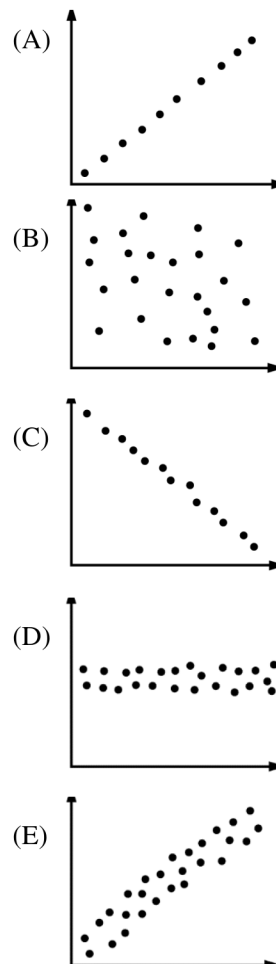
96. While attending a concert, Anthony finds that he can clearly recognize the melody coming from the lead violin above all the other instruments playing in the orchestra, even though the other instruments may be louder. Gestalt psychologists would explain Anthony's ability using the principle of

- (A) figure-ground
- (B) closure
- (C) simplicity
- (D) constancy
- (E) proximity

97. When Joe arrives at the library, he can choose from any of several strategies that might help him find the book he needs. He could examine all the books on every shelf, and be certain that he would eventually find the book he wants, but this strategy would take too long. Joe decides instead to ask a librarian to direct him to the appropriate section of the library. Joe is using

- (A) fixation
- (B) a mental set
- (C) a prototype
- (D) a heuristic
- (E) an algorithm

98. Which of the following is an example of a strong negative correlation?



99. James takes an IQ test when he is in third grade and receives a score of 112. When he is tested again in sixth grade with an alternate version of the same test, his score is 114. The fact that the two scores are very similar most directly indicates that the IQ test is
- (A) valid
 - (B) reliable
 - (C) biased
 - (D) standardized
 - (E) accurate

100. Which of the following techniques will a person-centered therapist most likely use?
- (A) Systematic desensitization
 - (B) Free association
 - (C) Unconditional positive regard
 - (D) Dream analysis
 - (E) Rational-emotive behavior therapy

END OF SECTION I

**IF YOU FINISH BEFORE TIME IS CALLED, YOU MAY
CHECK YOUR WORK ON THIS SECTION.**

DO NOT GO ON TO SECTION II UNTIL YOU ARE TOLD TO DO SO.

MAKE SURE YOU HAVE DONE THE FOLLOWING.

- **PLACED YOUR AP NUMBER LABEL ON YOUR ANSWER SHEET**
- **WRITTEN AND GRIDDED YOUR AP NUMBER CORRECTLY ON YOUR ANSWER SHEET**
- **TAKEN THE AP EXAM LABEL FROM THE FRONT OF THIS BOOKLET AND PLACED IT ON YOUR ANSWER SHEET**

AP[®] Psychology Exam

SECTION II: Free Response

2018

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

At a Glance

Total Time

50 minutes

Number of Questions

2

Percent of Total Score

33.3%

Writing Instrument

Pen with black or dark blue ink

Weight

The questions are weighted equally.

IMPORTANT Identification Information

PLEASE PRINT WITH PEN:

1. First two letters of your last name

First letter of your first name

2. Date of birth

Month

Day

Year

3. Six-digit school code

4. Unless I check the box below, I grant the College Board the unlimited right to use, reproduce, and publish my free-response materials, both written and oral, for educational research and instructional purposes. My name and the name of my school will not be used in any way in connection with my free-response materials. I understand that I am free to mark "No" with no effect on my score or its reporting.

No, I do not grant the College Board these rights. ☐

Instructions

The questions for Section II are printed in this booklet. You may use page 3 and the unlined pages of this booklet to organize your answers and for scratch work, but you must write your answers on the lined pages provided for each question. Begin each answer on the lined page facing the question. The questions are repeated for your convenience.

Write clearly and legibly. Do not skip lines. Cross out any errors you make; crossed-out work will not be scored.

Manage your time carefully. Divide your time about equally between the two questions. You may proceed freely from one question to the next. You may review your responses if you finish before the end of the exam is announced.

Form I
Form Code 40BP4-S

85

THIS PAGE MAY BE USED FOR TAKING NOTES AND PLANNING YOUR ANSWERS.
NOTES WRITTEN ON THIS PAGE WILL NOT BE SCORED.
WRITE ALL YOUR RESPONSES ON THE LINED PAGES.

Question 1 begins on page 4.

Question 2 begins on page 12.

PSYCHOLOGY

SECTION II

Time—50 minutes

Percent of total score— $33\frac{1}{3}$

Directions: You have 50 minutes to answer BOTH of the following questions. It is not enough to answer a question by merely listing facts. You should present a cogent argument based on your critical analysis of the questions posed, using appropriate psychological terminology.

1. Max is making a holiday meal this year for his three sisters and himself because their parents will be out of town. He is trying to cook the special dishes his mother makes each year, but with his own unique style.

Part A

Explain how each of the following could help Max in making the meal.

- Divergent thinking
- Intrinsic motivation
- Episodic memory
- Olfactory bulb

Part B

Explain how each of the following could hinder Max in making the meal.

- Divided attention
- Difference threshold
- Gender roles

THIS PAGE MAY BE USED FOR TAKING NOTES AND PLANNING YOUR ANSWERS.

NOTES WRITTEN ON THIS PAGE WILL NOT BE SCORED.

WRITE ALL YOUR RESPONSES ON THE LINED PAGES.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Question 1 is reprinted for your convenience.

1. Max is making a holiday meal this year for his three sisters and himself because their parents will be out of town. He is trying to cook the special dishes his mother makes each year, but with his own unique style.

Part A

Explain how each of the following could help Max in making the meal.

- Divergent thinking
- Intrinsic motivation
- Episodic memory
- Olfactory bulb

Part B

Explain how each of the following could hinder Max in making the meal.

- Divided attention
- Difference threshold
- Gender roles

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

[illegible]

-7-

Question 1 is reprinted for your convenience.

1. Max is making a holiday meal this year for his three sisters and himself because their parents will be out of town. He is trying to cook the special dishes his mother makes each year, but with his own unique style.

Part A

Explain how each of the following could help Max in making the meal.

- Divergent thinking
- Intrinsic motivation
- Episodic memory
- Olfactory bulb

Part B

Explain how each of the following could hinder Max in making the meal.

- Divided attention
- Difference threshold
- Gender roles

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

[illegible]

-9-

Question 1 is reprinted for your convenience.

1. Max is making a holiday meal this year for his three sisters and himself because their parents will be out of town. He is trying to cook the special dishes his mother makes each year, but with his own unique style.

Part A

Explain how each of the following could help Max in making the meal.

- Divergent thinking
- Intrinsic motivation
- Episodic memory
- Olfactory bulb

Part B

Explain how each of the following could hinder Max in making the meal.

- Divided attention
- Difference threshold
- Gender roles

[illegible]

[illegible]

-11-

2. Mr. Smith is a new high school math teacher. Before the school year begins, he asks his colleagues to review a list of students in his class in an attempt to gather information about his incoming students. As he begins teaching, Mr. Smith struggles with managing student behavior in the classroom. In particular, he has difficulty helping his students focus on their assignments and cooperate during group work.

Part A

Explain how each of the following concepts might hinder Mr. Smith's success in this scenario.

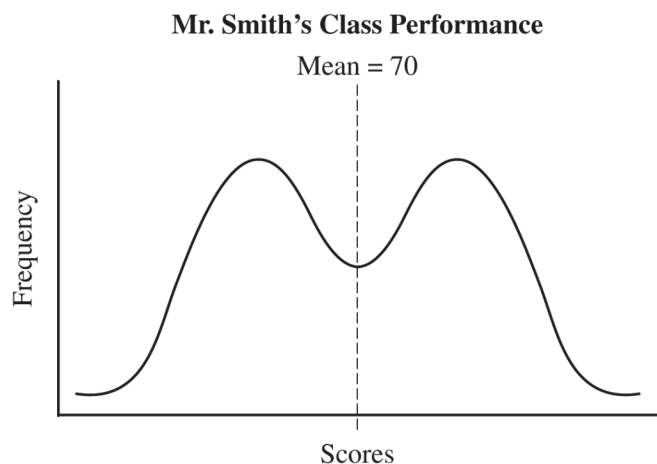
- Self-fulfilling prophecy
- Big Five trait of neuroticism

Part B

Explain how Mr. Smith might use each of the following to be more successful in managing his students' behavior.

- Superordinate goals
- Metacognition
- Token economy

Part C



The statewide results of a standardized math test had a normal distribution and a mean of 70. Mr. Smith's students took the same test and the graph above depicts their results.

- What does the mean score of Mr. Smith's class suggest about how well his students are performing relative to the state scores?
- What does the distribution of scores in Mr. Smith's class suggest about how well his students are performing relative to the state scores?

THIS PAGE MAY BE USED FOR TAKING NOTES AND PLANNING YOUR ANSWERS.

NOTES WRITTEN ON THIS PAGE WILL NOT BE SCORED.

WRITE ALL YOUR RESPONSES ON THE LINED PAGES.

[illegible]

-13-

Question 2 is reprinted for your convenience.

2. Mr. Smith is a new high school math teacher. Before the school year begins, he asks his colleagues to review a list of students in his class in an attempt to gather information about his incoming students. As he begins teaching, Mr. Smith struggles with managing student behavior in the classroom. In particular, he has difficulty helping his students focus on their assignments and cooperate during group work.

Part A

Explain how each of the following concepts might hinder Mr. Smith's success in this scenario.

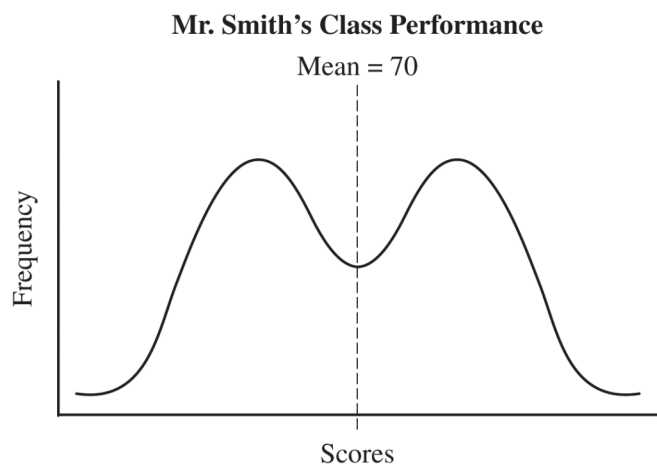
- Self-fulfilling prophecy
- Big Five trait of neuroticism

Part B

Explain how Mr. Smith might use each of the following to be more successful in managing his students' behavior.

- Superordinate goals
- Metacognition
- Token economy

Part C



The statewide results of a standardized math test had a normal distribution and a mean of 70. Mr. Smith's students took the same test and the graph above depicts their results.

- What does the mean score of Mr. Smith's class suggest about how well his students are performing relative to the state scores?
- What does the distribution of scores in Mr. Smith's class suggest about how well his students are performing relative to the state scores?

[illegible]

-15-

Question 2 is reprinted for your convenience.

2. Mr. Smith is a new high school math teacher. Before the school year begins, he asks his colleagues to review a list of students in his class in an attempt to gather information about his incoming students. As he begins teaching, Mr. Smith struggles with managing student behavior in the classroom. In particular, he has difficulty helping his students focus on their assignments and cooperate during group work.

Part A

Explain how each of the following concepts might hinder Mr. Smith's success in this scenario.

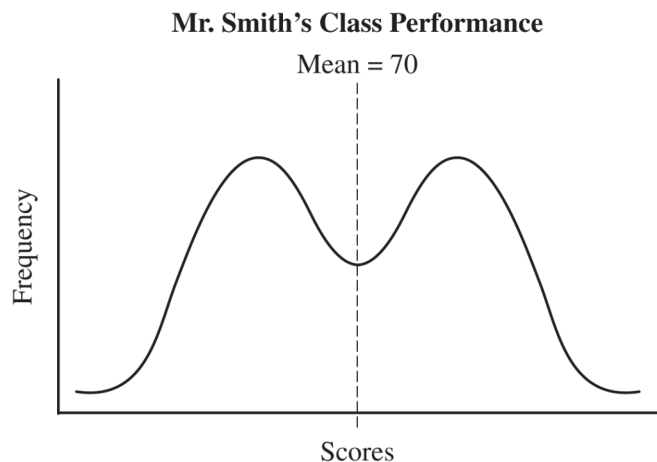
- Self-fulfilling prophecy
- Big Five trait of neuroticism

Part B

Explain how Mr. Smith might use each of the following to be more successful in managing his students' behavior.

- Superordinate goals
- Metacognition
- Token economy

Part C



The statewide results of a standardized math test had a normal distribution and a mean of 70. Mr. Smith's students took the same test and the graph above depicts their results.

- What does the mean score of Mr. Smith's class suggest about how well his students are performing relative to the state scores?
- What does the distribution of scores in Mr. Smith's class suggest about how well his students are performing relative to the state scores?

AP Psychology

2018

APPENDIX - ANSWERS

Matching multiple-choice answers and free-response scoring follow.

Answer Key for AP Psychology Practice Exam, Section I

Question 1: A	Question 35: A	Question 69: E
Question 2: C	Question 36: B	Question 70: C
Question 3: A	Question 37: D	Question 71: C
Question 4: A	Question 38: B	Question 72: A
Question 5: D	Question 39: B	Question 73: E
Question 6: A	Question 40: B	Question 74: A
Question 7: C	Question 41: B	Question 75: E
Question 8: B	Question 42: C	Question 76: E
Question 9: A	Question 43: A	Question 77: A
Question 10: C	Question 44: A	Question 78: A
Question 11: B	Question 45: E	Question 79: E
Question 12: B	Question 46: E	Question 80: A
Question 13: A	Question 47: C	Question 81: D
Question 14: C	Question 48: C	Question 82: B
Question 15: D	Question 49: C	Question 83: B
Question 16: D	Question 50: A	Question 84: D
Question 17: B	Question 51: A	Question 85: D
Question 18: C	Question 52: D	Question 86: D
Question 19: C	Question 53: E	Question 87: D
Question 20: B	Question 54: B	Question 88: B
Question 21: C	Question 55: B	Question 89: C
Question 22: D	Question 56: C	Question 90: D
Question 23: D	Question 57: C	Question 91: B
Question 24: D	Question 58: B	Question 92: A
Question 25: E	Question 59: C	Question 93: C
Question 26: B	Question 60: D	Question 94: B
Question 27: C	Question 61: A	Question 95: C
Question 28: A	Question 62: C	Question 96: A
Question 29: C	Question 63: D	Question 97: D
Question 30: C	Question 64: C	Question 98: C
Question 31: E	Question 65: D	Question 99: B
Question 32: D	Question 66: A	Question 100: C
Question 33: C	Question 67: D	
Question 34: B	Question 68: C	

Free-Response Scoring Guidelines

The following contains the scoring guidelines
for the free-response questions in this exam.

AP[®] PSYCHOLOGY

2018 SCORING GUIDELINES

Question 1

Max is making a holiday meal this year for his three sisters and himself because their parents will be out of town. He is trying to cook the special dishes his mother makes each year, but with his own unique style.

Part A

Explain how each of the following could help Max in making the meal.

- Divergent thinking
- Intrinsic motivation
- Episodic memory
- Olfactory bulb

Part B

Explain how each of the following could hinder Max in making the meal.

- Divided attention
- Difference threshold
- Gender roles

General Considerations

1. Answers should be presented in sentences and must be cogent enough for the meaning of the response to come through. Spelling and grammatical mistakes do not reduce the score of a response, but spelling must be close enough that the reader is convinced of the word.
2. Do not score any notes made on the question section of the booklet. Score only what has been written in the blanks provided in the booklet.
3. Definitions alone will not score, but they may be used to enhance the application.
4. Within a point, a student will not be penalized for misinformation unless it directly contradicts correct information that would otherwise have scored a point. A correct application with an incorrect definition is not considered a direct contradiction and should score the point.
5. Rubric examples provided for each point are not to be considered exhaustive.
6. Responses that simply parrot or repeat the terms from the question will not score.
7. A response can score a point only if it clearly conveys what part of the question is being answered. It is possible to infer what part of the question is being answered if it is consistent with the order of the question.

AP[®] PSYCHOLOGY

2018 SCORING GUIDELINES

Question 1 (continued)

Part A

Each response must indicate how the concept facilitates or otherwise helps Max in any stage of meal preparation.

Point 1: Divergent thinking

Response must include text about Max being able to think of at least one specific novel alternative to some aspect of making the meal.

- Score: “Max bought sweet potatoes to make a casserole. But he bought too many sweet potatoes and uses the extras to make ice cream, a smoothie, and salsa.”
- Score: “Max uses a meat thermometer to stab open a can of olives, ventilate the potatoes before sticking them in the oven, and to pop a balloon to scare his sisters.”
- Do NOT score “creativity” or “adding his own unique twist” without explicit mention of an unconventional use of some aspect of making the meal.

Point 2: Intrinsic motivation

Response must emphasize that Max is making the meal for reasons that cannot be considered external to Max.

- Score: “Max enjoys cooking for internal reasons rather than external reasons.”
- Score: “Max likes to cook because it is a naturally enjoyable activity to him.”
- Do NOT score the overjustification effect.
- Do NOT score extrinsic motivation.

Point 3: Episodic memory

Response must include text about a memory of an event in Max’s life that he was present for and that applies to this situation.

- Score: “Max remembers watching his mom always puts bacon in the mashed potatoes, so he decides to do so as well.”
- Score: “Having seen his sister get sick from yams last year, Max decides to make turnips for the side dish.”
- Do NOT score semantic memory, implicit memory/nondeclarative memory, procedural memory
- Do NOT score explicit memory unless it illustrates episodic memory specifically

Point 4: Olfactory bulb

Response must indicate that the olfactory bulb allows Max to smell, which helps him prepare the meal.

- Score: “When Max smells the bacon starting to burn, he turns it over to cook on the other side.”
- Score: “Max sniffs the milk to make sure it is still fresh. When it smells OK, he uses it in the mashed potatoes.”
- Do NOT score other sensory experiences.

AP[®] PSYCHOLOGY

2018 SCORING GUIDELINES

Question 1 (continued)

Part B

Each response must indicate how the concept works to the detriment of or otherwise hurts Max's cooking in any stage of meal preparation.

Point 5: Divided attention

Response must include something going wrong with the meal preparation because Max is paying attention to something other than what he needs to be paying attention to in order to make a quality meal.

- Score: "His sisters are talking to Max so much that he accidentally sets the timer for 55 minutes instead of 25 minutes and the apple pie burns in the oven."
- Score: "Max is trying to multitask by baking a pie while he cooks bacon so he fails to pay close enough attention to the bacon frying on the stove so it ends up burning to a crisp."
- Do NOT score selective attention.

Point 6: Difference threshold

Response must indicate that Max has difficulty distinguishing between two stimuli. Response can refer to the just noticeable difference.

- Score: "Max has a tough time tasting the difference between a little and a lot of sugar, so he ends up putting too much into the sweet potato pie and it ends up tasting awful."
- Score: "Max chose an under ripe banana because he could not tell a green banana from a yellow banana."
- Do NOT score absolute threshold.
- Do NOT score anything to do with signal detection theory.
- Do NOT score Weber's law without an example of a difference threshold in Max's cooking.

Point 7: Gender roles

Response must mention how behaviors expected from men and/or women create problems for Max in making the meal.

- Score: "Max's sisters tease him, saying only girls are supposed to cook. The teasing angers him so he puts salt and pepper in their apple pie."
- Score: "Max realizes that his dad never does the holiday cooking, so he is afraid to ask for help making the meal because he thinks he will be laughed at for cooking."
- Do NOT score gender identity.
- Do NOT score stereotype threat alone.

AP[®] PSYCHOLOGY
2018 SCORING GUIDELINES

Question 2

Mr. Smith is a new high school math teacher. Before the school year begins, he asks his colleagues to review a list of students in his class in an attempt to gather information about his incoming students. As he begins teaching, Mr. Smith struggles with managing student behavior in the classroom. In particular, he has difficulty helping his students focus on their assignments and cooperate during group work.

Part A

Explain how each of the following concepts might hinder Mr. Smith's success in this scenario.

- Self-fulfilling prophecy
- Big Five trait of neuroticism

Part B

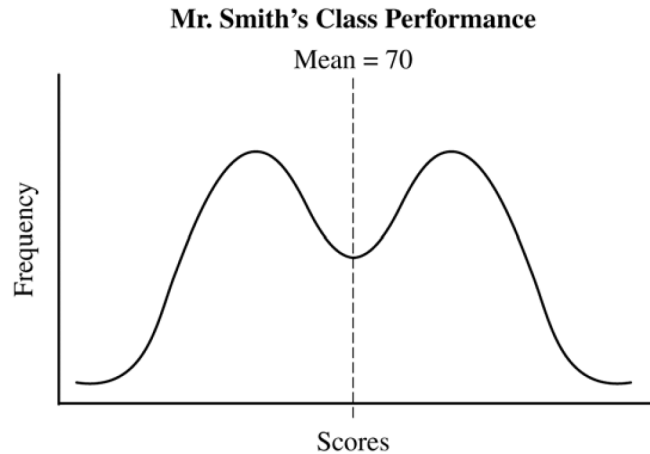
Explain how Mr. Smith might use each of the following to be more successful in managing his students' behavior.

- Superordinate goals
- Metacognition
- Token economy

AP[®] PSYCHOLOGY
2018 SCORING GUIDELINES

Question 2 (continued)

Part C



The statewide results of a standardized math test had a normal distribution and a mean of 70. Mr. Smith's students took the same test and the graph above depicts their results.

- What does the mean score of Mr. Smith's class suggest about how well his students are performing relative to the state scores?
- What does the distribution of scores in Mr. Smith's class suggest about how well his students are performing relative to the state scores?

General Considerations

1. Answers should be presented in sentences and must be cogent enough for the meaning of the response to come through. Spelling and grammatical mistakes do not reduce the score of a response, but spelling must be close enough that the reader is convinced of the word.
2. Do not score any notes made on the question section of the booklet. Score only what has been written in the blanks provided in the booklet.
3. Definitions alone will not score, but they may be used to enhance the application.
4. Within a point, a student will not be penalized for misinformation unless it directly contradicts correct information that would otherwise have scored a point. A correct application with an incorrect definition is not considered a direct contradiction and should score the point.
5. Rubric examples provided for each point are not to be considered exhaustive.
6. Responses that simply parrot or repeat the terms from the question will not score.
7. A response can score a point only if it clearly conveys what part of the question is being answered. It is possible to infer what part of the question is being answered if it is consistent with the order of the question.

AP[®] PSYCHOLOGY

2018 SCORING GUIDELINES

Question 2 (continued)

Part A

Each response must indicate how the concept works to HINDER Mr. Smith’s teaching OR student success in the class.

Point 1: Self-fulfilling Prophecy

Response must include all three components:

- (1) a belief or expectation about another person or group
 - (2) an action or behavior consistent with that belief
 - (3) AND leads to an outcome in that other person or group
- Score: “Mr. Smith heard that Drew is a terrible student. So, Mr. Smith never asks Drew questions in class. This leads Drew to start skipping school.”
 - Score: “Mr. Smith thinks girls perform poorly in math. He is less attentive to the girls in his math class and the girls stop asking questions in math class.”
 - Do NOT score confirmation bias, hindsight bias, or availability heuristic without extension into the self-fulfilling prophecy.

Point 2: Big Five Trait of Neuroticism

Response must include a description of neuroticism for either Mr. Smith OR his students that interferes in some way with the class.

Some acceptable words meaning neuroticism: unstable, emotional, unpredictable, anxious, volatile, insecure, worried, self-pitying, irritable, moody.

- Score: “Mr. Smith’s anxiety about talking in front of students forces him to leave class suddenly, so the students start behaving unruly without a teacher present.”
- Score: “Some of the students in Mr. Smith’s class are emotionally unstable, which makes it difficult for other students to pay attention in class.”

Part B

Each response must indicate how the concept makes Mr. Smith’s teaching more successful.

Point 3: Superordinate Goals

Response must describe a task assigned by Mr. Smith that requires joint rather than individual effort, which leads to better cooperation in the classroom.

- Score: “Mr. Smith has students complete problems in groups, with each group member having to do one part of each problem. He finds students talk with each other about math more using this technique than with him lecturing.”
- Score: “Mr. Smith says that if everyone gets at least 80% on the next quiz, he will cancel the final exam. So, the class studies together for the quiz, after which they start hanging out together after school and doing their homework together.”