

Name: _____

Date: _____

**Psychology 101 Final
Rice University, Spring 2008**

"On my honor, I have neither given nor received aid on this exam."

Part I: Multiple Choice (60 questions worth 1 point each; answer all of them using your Scantron)

- 1) The first psychology laboratory was established by _____.
 - a) William James
 - b) Wilhelm Wundt
 - c) Max Wertheimer
 - d) Charles Darwin
 - e) Sigmund Freud

- 2) The Structuralists were important in the history of psychology because they
 - a) began the cognitive revolution.
 - b) realized the limits of introspection and focused on the structure of behaviors.
 - c) were the first to use brain-scanning techniques to learn about the structure of the brain.
 - d) examined consciousness and the structure of mental processes.
 - e) were strongly influenced by Charles Darwin.

- 3) According to the textbook, the cognitive revolution came into "full flower" during which time frame?
 - a) 1920s
 - b) 1930s
 - c) 1940s
 - d) 1970s
 - e) 1960s

- 4) The three levels of analysis discussed in your text are the _____, the _____, and the _____.
 - a) person; group; culture
 - b) brain; person; group
 - c) person; family; group
 - d) brain; body; person
 - e) neuron; brain; person

- 5) According to the authors of your text, what step follows "specifying a problem"?
 - a) forming a theory
 - b) testing the theory
 - c) forming a hypothesis
 - d) testing the hypothesis
 - e) observing events

- 6) The key difference between an experimental and a quasi-experimental study is that the quasi-experimental study _____.
 - a) does not appear to be an experimental study, but it has all of the characteristics of one
 - b) contains an independent variable

- c) does not feature random assignment
 - d) does not compare groups of individuals
 - e) has multiple dependent variables
- 7) The dependent variable is so named because _____.
- a) most researchers view it to be a dependable and reliable measure
 - b) it usually involves a measure that pertains to one's level of dependency
 - c) its value may depend on the value of the independent measure
 - d) it is a variable that tends to almost always produce important results
 - e) the value of the independent variable depends on the value of the dependent variable
- 8) The fact that the horse Clever Hans was able to tap out the correct answer (with his hoof) to basic arithmetic problems is generally attributed to _____.
- a) psychic powers
 - b) unique learning techniques
 - c) experimenter expectancy effects
 - d) reasons that are still not fully understood
 - e) Hans' genius
- 9) The two halves of the brain are connected by the _____.
- a) corpus callosum
 - b) cerebral hemisphere
 - c) cerebral cortex
 - d) sulcus
 - e) gyrus
- 10) A(n) _____ is a brain cell.
- a) neuron
 - b) axon
 - c) ion
 - d) dendrite
 - e) synapse
- 11) The term "fire" when referring to neural transmission indicates that a neuron:
- a) has released chemicals from its terminal buttons.
 - b) has become less positive in charge.
 - c) has become more negative in charge.
 - d) is able to receive information from another neuron.
 - e) is unable to transmit information to another neuron.
- 12) The frontal lobes are involved in all of the following EXCEPT:
- a) reasoning
 - b) comprehension
 - c) emotions
 - d) search of specific memories
 - e) speech
- 13) According to your authors, visual perception occurs in _____ broad phases.
- a) four
 - b) one
 - c) three
 - d) countless

- e) two
- 14) Which of the following eye structures has the highest density of cones and, consequently, allows for the highest resolution of information?
- a) pupil
 - b) optic nerve
 - c) retina
 - d) fovea
 - e) iris
- 15) The three types of wavelength referred to in the trichromatic theory of color vision are _____.
- a) long, medium, and short
 - b) hue, lightness, and brightness
 - c) opponent, afterimage, and mixing
 - d) high, moderate, and low
 - e) brilliant, dull, and reflection
- 16) Bottom-up processing is initiated by _____.
- a) expectation
 - b) knowledge
 - c) belief
 - d) the stimulus
 - e) any of the above
- 17) If you are awakened from sleep and you feel as though you had not even been asleep, then you were most likely in which stage of sleep?
- a) Stage 3
 - b) hypnogogic
 - c) Slow wave sleep
 - d) REM sleep
 - e) Stage 2
- 18) All of the following are adversely affected by sleep deprivation EXCEPT:
- a) learning of information
 - b) one's immune system
 - c) performing brief mental tasks
 - d) performing tasks requiring sustained attention
 - e) one's mood
- 19) Which of the following factors is correlated with hypnotizability?
- a) heart rate
 - b) emotionality
 - c) inattentiveness
 - d) shyness
 - e) openness to experience
- 20) When Joe thinks about his sorely missed girlfriend, he drinks alcohol, which helps dull his pain. This best illustrates:
- a) positive reinforcement
 - b) negative punishment
 - c) negative reinforcement

- d) moderate reinforcement
 - e) positive punishment
- 21) The _____ occurs without requiring prior learning.
- a) USC
 - b) US
 - c) CR
 - d) CS
 - e) UR
- 22) In classical conditioning, the key factor that allows for learning to occur is:
- a) punishment of the conditioned response.
 - b) explaining the nature of a stimulus.
 - c) reinforcement of the conditioned response.
 - d) the pairing of a neutral stimulus with an unconditioned stimulus.
 - e) ignoring the behavior.
- 23) Emitting the same response to a novel but similar stimulus relative to the original stimulus illustrates _____.
- a) shaping
 - b) spontaneous recovery
 - c) generalization
 - d) extinction
 - e) discrimination
- 24) The auditory form of sensory memory is called _____ memory.
- a) hearing
 - b) implicit
 - c) echoic
 - d) explicit
 - e) declarative
- 25) The storage capacity of long-term memory _____.
- a) averages approximately 5,000-10,000 characters
 - b) is actually not greater than that of short-term memory
 - c) averages approximately 2,000-3,000 characters
 - d) is potentially unlimited
 - e) varies from 100-200 characters to several thousand depending on the individual
- 26) In depth of processing, "depth" refers more to _____ than _____.
- a) degree; meaning
 - b) number; learned
 - c) amount; understanding
 - d) meaning; degree
 - e) number; degree
- 27) Problems in the ability to understand the meaning conveyed by words, phrases, and sentences are _____.
- a) Phonology disruption
 - b) Propositional representation failure
 - c) Language acquisition failure
 - d) Language comprehension problems
 - e) Language production problems

- 28) Behaviorist views of language are to Nativist views as _____.
- a) specific is to general
 - b) inborn is to taught
 - c) learning is to innate
 - d) genetic is to biological
 - e) hearing is to learning
- 29) A patient with Broca's aphasia is likely to _____.
- a) have difficulty producing speech
 - b) have problems reading
 - c) exhibit empty speech
 - d) have posterior temporal lobe damage
 - e) always speak in rhymes
- 30) Riley has figured out how to unlock his bedroom door with a paper clip. What has he most likely overcome in his new use of the paper clip?
- a) functional fixedness
 - b) incubation
 - c) the confirmation bias
 - d) the representational problem
 - e) the representative heuristic
- 31) Norming a test involves setting two measures, the _____ and _____, to 0 and 1, respectively.
- a) mean and the total distribution
 - b) population mean and the sample mean
 - c) mean and the standard deviation
 - d) mean and the average score
 - e) the standard deviation and mean deviation
- 32) Today's IQ tests include several subtests. Scores on these different subtests are _____.
- a) very modestly correlated with each other if at all
 - b) uncorrelated
 - c) positively correlated
 - d) negatively correlated
 - e) unrelated
- 33) Crystallized intelligence is to fluid intelligence as _____.
- a) knowing facts is to creating novel solutions
 - b) optional is to essential
 - c) essential is to optional
 - d) novel solutions is to knowing facts
 - e) strong is to weak
- 34) The correlation between speed of processing and IQ _____.
- a) is extremely high
 - b) may reflect a person's effective use of working memory
 - c) may reflect body size as well
 - d) is not reliable enough to make an explanation
 - e) is negative
- 35) Which of the following statements is true?
- a) The amygdala plays a direct role in producing the emotional "feel" of fear.

- b) There are distinct biological events associated with feelings of fear.
 - c) Fear can only occur as the result of cognitive interpretation.
 - d) Fear cannot be classically conditioned.
 - e) Fear can only occur as the result of primary pituitary stimulation.
- 36) _____ indicate when, to whom, and how strongly certain emotions can be shown.
- a) Instincts
 - b) Display rules
 - c) Motivations
 - d) Polygraphs
 - e) Nonverbal communication
- 37) Eye blinks, sideways glances and downcast eyes are examples of _____ .
- a) facial feedback
 - b) eye casts
 - c) minifacials
 - d) emotional effects
 - e) microexpressions
- 38) An instinct is a tendency that is _____ .
- a) easily controlled
 - b) learned
 - c) nonresponsive to stimuli
 - d) conditioned
 - e) inherited
- 39) _____ is the view that even mundane or seemingly insignificant behavior has an underlying psychological cause.
- a) Atypical behavior theory
 - b) Behavioral relativity
 - c) Reciprocal development
 - d) Psychological determinism
 - e) Relativity
- 40) When anxiety-provoking memories are prevented from reaching conscious awareness, such as a child's not remembering lying to parents, it is called _____ .
- a) regression
 - b) denial
 - c) sublimation
 - d) repression
 - e) intellectualization
- 41) Jung's idea that all people share certain ideas and memories at an unconscious level is what he called the _____ .
- a) complex consciousness
 - b) collective unconscious
 - c) stored consciousness
 - d) evolutionary consciousness
 - e) subliminal consciousness
- 42) The perceived source of control over one's life is:
- a) the motivation to change.
 - b) self-determination.

- c) mode of operation.
 - d) the locus of control.
 - e) self-esteem.
- 43) A teratogen is typically thought of as _____ that can cause damage to the _____.
- a) a chemical; fetus only
 - b) any chemical, virus, or radiation; embryo or fetus only.
 - c) virus; fetus only.
 - d) any chemical, virus, or radiation; zygote, embryo, or fetus.
 - e) any chemical or radiation; embryo or fetus only.
- 44) The Moro reflex is most likely to be produced when _____.
- a) there is a sudden loud sound
 - b) the baby is placed face-down in water
 - c) the baby's head is turned on one side
 - d) the baby's palm is pressed
 - e) someone lightly strokes the baby's cheek
- 45) In Harry Harlow's classic experiments where baby monkeys were separated from their biological mothers, the baby monkeys tended to prefer clinging to _____.
- a) a "mother" not made of terry cloth that did offer food
 - b) a "mother" made of terry cloth that did not offer food
 - c) a "mother" made of terry cloth that offered food
 - d) any available "mother"
 - e) none of the "mothers"
- 46) During development, children who successfully navigate this stage will make decisions and act independently.
- a) basic trust vs. mistrust
 - b) identity vs. role confusion
 - c) initiative vs. guilt
 - d) Autonomy vs. doubt
 - e) integrity vs. despair
- 47) The first stage of the general adaptation syndrome is called _____.
- a) burnout
 - b) alarm
 - c) resistance
 - d) exhaustion
 - e) fatigue
- 48) In cognitive appraisal, coping is _____.
- a) not a major aspect
 - b) independent of primary and secondary appraisal
 - c) taking some course of action regarding the stressor
 - d) the primary mechanism in primary appraisal
 - e) only existent after tertiary appraisal
- 49) Problem-focused coping is particularly used by those who score high on the Big Five personality dimension of _____.
- a) agreeableness
 - b) conscientiousness
 - c) neuroticism

- d) openness
 - e) extraversion
- 50) The best predictor of stress-related illness seems to be _____.
- a) any major change in life circumstances
 - b) any positive event that is not viewed as such
 - c) too varied amongst individuals to make concrete determinations
 - d) any negative event
 - e) the amount of life's daily hassles
- 51) In addition to the three major indicators of abnormality, one most needs to examine _____.
- a) the context of the behavior
 - b) the gender of the person
 - c) the impairment of the person
 - d) the result of the behavior
 - e) the age of the person
- 52) Which of the following is considered to be a type of anxiety disorder?
- a) phobias
 - b) panic disorder
 - c) posttraumatic stress disorder
 - d) obsessive compulsive disorder
 - e) all of the above
- 53) _____ disorders are marked by persistent or episodic disturbances in emotion that interfere with normal functioning in at least one realm of life.
- a) Eating
 - b) Personality
 - c) Anxiety
 - d) Mood
 - e) All of the above
- 54) Which of the following does humanistic therapy NOT emphasize?
- a) Mastery
 - b) Free will
 - c) Personal growth
 - d) Self-esteem
 - e) Unconscious processes
- 55) The view that depressive thoughts produce depressive feelings and behaviors is a hallmark of _____.
- a) both cognitive and behavior therapy
 - b) behavior therapy but not cognitive therapy
 - c) neither cognitive nor behavior therapy
 - d) all forms of psychotherapy
 - e) cognitive therapy but not behavior therapy
- 56) What is the most prominent theoretical orientation for therapists?
- a) Psychodynamic
 - b) Cognitive-behavior
 - c) Eclectic
 - d) Cognitive
 - e) Client-centered or humanistic

- 57) The three basic components of attitudes are _____, _____, and _____.
- a) effective; behavioral; personal
 - b) strength; consistency; duration
 - c) affective; behavioral; cognitive
 - d) person; brain; group
 - e) frequency; relevance; uniqueness
- 58) Increased contact between two warring groups has a tendency to _____.
- a) prevent prejudicial beliefs from worsening at best
 - b) showcase similarities between the groups
 - c) solidify preexisting stereotypes
 - d) decrease mutual attraction
 - e) reinforce the belief that the outgroup is homogenous
- 59) Our tendency to interpret others' behaviors as due to dispositional causes rather than situational causes is called the _____.
- a) fundamental attribution error
 - b) belief in a just world
 - c) hostile attributional bias
 - d) self-serving bias
 - e) general attributional bias effect
- 60) _____ considers how we try to maximize gains and minimize losses in our relationships.
- a) The similarity-attraction model
 - b) Repeated contact theory
 - c) Social exchange theory
 - d) Utility theory
 - e) Evolutionary psychology

Part II: Short Answer (worth 8 points each). Choose 5 out of the following 8 questions to answer. The length of your answers should range from just a few words (if that's sufficient) to several sentences. Please write your answers on the exam pages.

1. Suppose researchers were to discover a negative correlation between two variables of psychological interest, such as the number of video games a person owns compared with their grade point average (this is purely hypothetical!). Draw a quick, approximate graph that would reflect such a negative correlation, making sure to label your axes and entering hypothetical data that would demonstrate the relationship.

Answer: a simple scattergram is all we're looking for. It doesn't matter which variable goes on which axis, and it doesn't matter whether the correlation is strongly or only weakly negative; but some sort of appropriate labels are needed, as are enough data points to suggest a negative slope. A regression line fit through the points would be good but not required by the question as stated.

2. What are some of the research methods employed in cognitive neuroscience?

Answer: cognitive neuroscientists look at the neural basis of cognitive processes by studying both "normal" control subjects, subjects with unusual cognitive abilities or disabilities (e.g., face blindness), and patients who have had strokes or other forms of brain damage. They test these individuals both in conventional behavioral experiments and in experiments with some neural measurement (e.g., EMG, or functional MRI), intervention (electrical brain stimulation, transcranial magnetic stimulation, drug

treatment). The goal is both to learn where different processes work in the brain and to better understand how those processes operate and how they fail when disease or accidents strike.

3. Cognitive learning is learning that takes place without rewards or punishments. What is the evidence that people (or other animals) can learn anything without reinforcement or punishment?

Answer: Tolman noted that rats that were left free to explore a maze containing no food learned the maze much more quickly when food was introduced than did other rats who were not given an opportunity to explore in advance. The conclusion was the rats were learning the maze even though they weren't reinforced for doing it or punished for not doing it. Other evidence comes from the common finding in humans, but found in some other animals too, of learning through observation or modeling (watching another person do something is often sufficient for us to learn how to do it ourselves). Kohler's chimps seemed to learn through ah-hah type insight, seemingly pondering a problem cognitively and then abruptly hitting on the answer (e.g., putting two short poles together to form a long pole that can be used to rake a distant banana into a cage).

4. How exactly does perception require a well-functioning memory system?

Answer: When we recognize an object using our perception – our visual system for example, we are comparing the information flowing into our eyes at the moment with information stored in memory. There is no way we could recognize that which we have not seen before and remembered (recognize means to re-cognize). To note that an object is moving one must remember the location where it had been instants ago. To perceive a word, one must remember how it started long enough when the end comes around. Often we perceive an object through multiple glances, e.g., when we walk around the four side of a house. We must remember these glances to build up a percept of the whole house.

5. Beyond phonology, syntax, and semantics, language is characterized by pragmatics. What are pragmatics? Give an example to supplement your definition.

Answer: pragmatics refers to the ways in which language conveys meaning indirectly rather than literally or explicitly, and it is tied in with conventions in how people use language. When one says, "Can you answer the phone?" it is not a question about whether a person has a specific ability; instead it is a request. Pragmatics lie at the heart of metaphor; thus when a poet writes "love is a rose," the words are not to be taken literally.

6. Spearman distinguished between a "g factor" in intelligence and several "s factors". What are these two components of intelligence?

Answer: the S factors point to specific mental abilities, components that are separate from one another and not highly correlated with each other across individuals. Spatial ability (including our ability to visualize objects from different angles, etc.) is one such specific ability. The "g" component is the dominant factor that is correlated or shared across a wide range of intellectual abilities. When several s factors are moderately but not perfectly correlated, the g factor may be what they share. Some speculate that the g factor reflects some very broad aspect of functioning, such as speed of mental processing / neural transmission. Note: contemporary views include a third set of factors, group factors, intervening between g and s factors. These group factors span a number of s factors but not all of them.

7. If a child sees liquid poured from a short, wide container into a tall, thin one, and then reports that there is now more liquid than there was before, what does that tell us about the intellectual stage of that child? What theory was proposed to handle such results?

Answer: Jean Piaget's stage theory of cognitive development holds that child pass through an orderly series of cognitive changes as they age, and that the differences between the stages are qualitative not just quantitative. After an infant passes through the sensorimotor period (ages 0 - 2 years), he or she enters the pre-operational period (ages 2 – 7). One of the main accomplishments the toddler makes during this stage is figuring out about conservation of quantity. A child just entering this phase has not yet learned that pouring liquid from one container to another does not alter its quantity. Such a child probably uses height of fluid in a container as a proxy for quantity, because he or she has seen the level of fluid rise as more is poured into a glass or cup.

8. What are some treatments for psychological disorders whose effectiveness has been well established through research?

Answer:

Type	Problem
Cog Beh Therapy	Panic disorder (w/ and w/o agoraphobia)
Cog Therapy	Depression
Cog Therapy	Bulimia
Interpersonal Therapy	Depression
Beh Therapy	OCD
Beh Therapy	Childhood enuresis

Answer Key, m/c questions

1) B	21) E	41) B
2) D	22) D	42) D
3) D	23) C	43) D
4) B	24) C	44) A
5) E	25) D	45) B
6) C	26) D	46) D
7) C	27) D	47) B
8) C	28) C	48) C
9) A	29) A	49) B
10) A	30) A	50) E
11) A	31) C	51) A
12) B	32) C	52) E
13) E	33) A	53) D
14) D	34) B	54) E
15) A	35) B	55) E
16) D	36) B	56) C
17) B	37) E	57) C
18) C	38) E	58) B
19) E	39) D	59) A
20) C	40) D	60) C