

Name: _____

Date: _____

Psychology 101 Exam 2 (March 20, 2008)
Rice University, Spring 2008

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

Part 1: Multiple Choice (40 questions worth 2 points each; please answer all of them using your Scantron form)

1. Classical conditioning is an example of _____.
a) associative learning
b) avoidance learning
c) stimulus generalization
d) trace conditioning
e) contrapreparedness

2. The _____ occurs without requiring prior learning.
a) UR
b) US
c) USC
d) CS
e) CR

3. If Steven's _____ has been removed, then autonomic responses of fear will probably disappear.
a) cerebellum
b) hippocampus
c) thyroid
d) hypothalamus
e) amygdala

4. The "gambling reinforcement schedule" is the same as a _____ schedule
a) fixed interval
b) variable ratio
c) fixed ratio
d) interval
e) variable interval

5. Positive reinforcement is to negative reinforcement as _____.
 - a) increase is to decrease
 - b) good is to bad
 - c) reward is to punish
 - d) effect is to affect
 - e) **present is to remove**

6. All of the following are examples secondary reinforcers EXCEPT:
 - a) good grades
 - b) **relief from pain**
 - c) praise
 - d) attention
 - e) money

7. _____ is synonymous with negative reinforcement.
 - a) Shaping
 - b) Discrimination
 - c) **Reward**
 - d) Extinction
 - e) none of the above

8. Recalling the definition of *long-term memory* is an example of _____.
 - a) episodic memory
 - b) implicit memory
 - c) modal memory
 - d) **semantic memory**
 - e) working memory

9. When Tiger Woods has a certain "feel" for how hard to putt the ball depending on the slope and distance to the hole, he is utilizing his _____ memory.
 - a) iconic
 - b) sensory
 - c) **implicit**
 - d) structural
 - e) short-term

10. Miller argued that short-term memory can hold _____ chunks at once.
 - a) two
 - b) limitless amounts of
 - c) six
 - d) **from five to nine**
 - e) four

11. Mateo is 70 years old, had a stroke last year, and now is unable to remember how to get to and return from his new doctor's office using a specific route. What brain structure was potentially damaged by Mateo's stroke?
- a) His cerebellum
 - b) His hippocampus**
 - c) His amygdala
 - d) His hypothalamus
 - e) His thalamus
12. Remembering your first day of college classes is an example of _____ memory.
- a) episodic**
 - b) working
 - c) implicit
 - d) semantic
 - e) modal
13. Participants in the famous "sweet" experiment conducted here at Rice falsely recalled the word "sweet" when asked to memorize a word list. Why did they make this mistake?
- a) The words on the list were all the opposite of sweet
 - b) Hypnosis was used to modify the original memory
 - c) The words were associated with the concept *sweet* and so it became activated**
 - d) Food items completely erase the accurate of memory
 - e) The participants were given subliminal suggestions
14. Which of the following pairings would result in the best overall memory?
- a) Happy during learning and sad during recall
 - b) Sad during learning and happy at recall
 - c) Serious during learning and serious during recall**
 - d) Intoxicated during learning and intoxicated during recall
 - e) None of the above
15. The reason why you wouldn't say "Kicked girl ball the blue," has to do with the rules of _____.
- a) morphemes
 - b) pragmatics
 - c) syntax**
 - d) phonology
 - e) semantics
16. Wug is a Martian and all Martians are green. Therefore, Wug is green. This is an example of _____ logic.
- a) inductive
 - b) invalid
 - c) reasoning
 - d) deductive**
 - e) incorrect

17. When subjects are asked to scan a mental image, the relationship between the scan time and the size of the image is _____.
- a) negative
 - b) curvilinear
 - c) zero
 - d) not known at this time
 - e) **positive**
18. Skinner believed that language was learned mainly through _____.
- a) genetic influences
 - b) general cognitive abilities
 - c) **imitation and reinforcement**
 - d) observational learning
 - e) the LAD
19. Which of the following statements BEST describes the general relationship between thinking and language?
- a) When we think, we always make use of language.
 - b) Language is the sole basis of thought.
 - c) Language usually is not required in thought processes.
 - d) **Language is a tool that may be used in thinking, but it isn't the sole basis of thought.**
 - e) Language and thought are the same thing.
20. As children acquire more language skills, they will start to use incorrect structures like "feets" and "runned". This illustrates _____.
- a) telegraphic speech
 - b) **the overregularization error**
 - c) dyslexia
 - d) underextension
 - e) overextension
21. Alfred Binet and Theodore Simon are credited with _____.
- a) explaining the difference between general and specific intelligence
 - b) **creating the first intelligence test**
 - c) developing physiological measures of brain activity in response to intellectual tasks
 - d) devising a universal definition of intelligence
 - e) improving the American education system in the early 1900s
22. Your intelligence quotient can be obtained by _____.
- a) multiplying your chronological age by your mental age and dividing the result by 100
 - b) **dividing your mental age by your chronological age and multiplying the result by 100**
 - c) dividing your chronological age by your mental age
 - d) subtracting your chronological age from your mental age

- e) dividing your mental age by your chronological age
23. Norming a test involves setting two measures, the _____ and _____.
a) the standard deviation and mean deviation
b) mean and the standard deviation
c) mean and the total distribution
d) population mean and the sample mean
e) mean and the average score
24. The theory of multiple intelligences currently holds that there are _____ distinct forms of intelligence.
a) twenty or more
b) ten or twelve
c) eight or nine
d) countless
e) three or four
25. According to Thurstone, we have _____ separate primary mental ability (abilities).
a) two
b) hundreds of
c) seven
d) one
e) ten
26. Charles Spearman argued for the existence of _____.
a) *s only*
b) both *g* and *s* factors
c) *g only*
d) a single combined *g+s* factor
e) neither *g* nor *s*
27. According to Ekman, _____ would NOT be considered a basic emotion.
a) anger
b) fear
c) disgust
d) surprise
e) guilt
28. Which is the best explanation of the Cannon-Bard theory?
a) Bodily arousal and emotional experience occur simultaneously.
b) Bodily arousal occurs before emotional response.
c) Emotions are changes in core affect.
d) Emotions arise from learned triggers.
e) Emotion is nothing but a reflexive response based on instincts.

29. It is possible to interpret bodily arousal incorrectly. When this happens, it is called:
- a) cognitive restructuring.
 - b) misattribution of arousal.**
 - c) an affective disorder.
 - d) interpretive error.
 - e) misapplication of arousal.
30. Which area of the brain is most responsible for fear-related responses, including signaling other parts of the brain?
- a) brain stem
 - b) amygdala**
 - c) pons
 - d) thalamus
 - e) cerebellum
31. The positive or negative aspect of emotion is called _____.
- a) differentiation
 - b) spuriousness
 - c) affect
 - d) objectivity
 - e) valence**
32. The idea that we function best with moderate levels of arousal is called _____ .
- a) Homeostasis theory
 - b) Subsistence Arousal law
 - c) Control theory
 - d) Yerkes-Dodson law**
 - e) Cattell-Allport theory
33. In Maslow's hierarchy of needs, which of the following needs is a higher order need than cognitive needs?
- a) belongingness needs
 - b) aesthetic needs**
 - c) esteem needs
 - d) physiological needs
 - e) safety needs
34. Certain researchers have found slight differences in the brain structure known as the _____ in homosexual versus heterosexual men.
- a) hypothalamus**
 - b) thyroid
 - c) thalamus
 - d) hippocampus
 - e) amygdala

35. Freud proposed three personality structures: the id, the ego and the _____ .
a) subconsciousness
b) superego
c) consciousness
d) preconsciousness
e) superstructure
36. Which of the following is the correct order of Freud's psychosexual stages?
a) oral, anal, phallic, latency, genital
b) oral, anal, genital, phallic, latency
c) latency, anal, oral, phallic, genital
d) anal, genital, phallic, latency, oral
e) anal, genital, oral, phallic latency
37. In the discussion of Gordon Allport's *central traits*, your text points out that whether or not traits are viewed as causing behavior, they aren't always accurate in predicting behavior because of _____.
a) the situations in which we find ourselves exert power over our behavior, thoughts and feelings
b) various forms of psychopathology interfere with accurate personality assessment
c) the inconsistency with which we live our lives makes any prediction impossible
d) trait instability is inherent in all of us
e) invalid personality tests and what they suggest
38. According to your text, if we define a trait narrowly, it better predicts behavior but:
a) the trait can be applied to fewer situations.
b) this is difficult because of the disagreement over how many traits there are.
c) psychologists cannot agree on what such traits are.
d) a narrow trait applies to a broader range of situations.
e) the definitions are fixed and should not be altered.
39. Which if the following is NOT one of the superfactors identified as the "Big Five?"
a) agreeableness
b) autonomy
c) openness
d) conscientiousness
e) extraversion
40. What have twin studies suggested about extroversion?
a) It does not rise to the level of a superfactor.
b) It is learned behavior.
c) It is mostly inherited.
d) It is a result of cognitive programming.
e) It is partly inherited and partly environmental.

Part II: Short Answer (5 questions worth 4 points each). Choose 5 out of the following 7 questions. The length of your answers should range from just a short sentence or list, if that is sufficient, to a few sentences. Write your answers on the exam pages (Use the blank page at the end if needed).

41. In class we discussed two memory metaphors. Identify and briefly describe both.

Answer: Structural metaphor: Memories are likened to physical objects, which evokes terms like *store, search, organize, and find* when referring to them. Thinking of memories as letters in a file cabinet is a structural analogy. Procedural metaphor: Memories (as they are consciously experienced) do not exist until they are created through mental processes. They are not formed objects waiting to be retrieved but are more like melodies waiting to be played.

42. How might expert chess players quickly learn a chess game layout? What is the name for their general strategy? Describe a situation when you would use this strategy to help.

Answer: Experienced chess players may organize a chess game into a few pre-memorized configurations, reducing the amount of new information that needs to be memorized. This strategy is called "chunking". (Any answer where the student reorganizes raw/meaningless pieces of information into meaningful chunks.

Example: (713) 314-2525 --> (my area code) first three digits of pi - my age twice.

Example: C D Eb F G Ab Bb C --> C minor scale.

43. Name the three major types of learning studied by psychologists and others, and give a sentence or two explaining what each one is.

Answer: besides habituation (the simplest form of learning because it involves no new associations, the main three types are classical (aka Pavlovian), operant (Skinnerian or instrumental), and cognitive. Classical starts with a reflex (US -> UCR) and pairs an initially neutral CS with the UCS so that after repeated pairings, the CS -> CR. In plain English, it involves the learning of an association between two stimuli (bell and food in mouth). Operant involves the learning that an initially neutral response, such as pressing on a bar, will lead to a reward or to a punishment, as when a rat learns that pushing a level leads to food. In plain English, operant learning involves learning the consequences of behaviors. Cognitive learning is of a higher order and involves acquisition of information unrelated to any reflex or to reinforcement or punishment. E.g., latent learning is the acquisition of information with no rewards involved, as when rats learn a maze simply by wandering through it.

44. What are *pragmatics* in language processing? Give an example or two.

Answer: pragmatics involves the comprehension of meaning in a sentence not through its syntax or semantics alone but through understanding of cultural conventions in the use of language. For example, if you encounter someone whose arm are full with suitcases asking you "Can you open the door," that person is not asking a question about your abilities but instead is requesting a favor from you. Successful use of pragmatics requires that the language user have a broad understanding of the world and of the quirks of language use.

45. In problem solving, what are algorithms and heuristics, and how do they differ?

Answer: algorithms are explicit series of steps to be taken that will result in achieving a determined outcome. For example, a recipe is an algorithm for preparing a certain kind of food. A heuristic is a less precise set of guidelines, or “rules of thumb” that do not guarantee that any outcome will result but instead just make it likely that outcome will occur. Algorithms are safer bets for solving many sorts of problems, but they are sometimes slow and rigid. A heuristic can be much faster and more fluid but can lead to errors. Humans judge how likely events will be (e.g., how likely is it that a Volvo automobile will be involved in a fatal accident) by noting the ease with which instances come to mind (how often have I heard of a Volvo being involved in a fatal wreck?). This method is much quicker than an algorithm (e.g., acquiring and tabulating accident statistics from the police department), but we know that human memory is fallable and so this shortcut can lead us astray.

46. Intelligence measurements are often described loosely as forming a “bell shaped curve.” Describe what this means more rigorously – what characteristics does the distribution of intelligence scores have, and why does it have them?

Answer: intelligence test scores are, to a first approximation, distributed normally. This means that they do indeed form a symmetrical bell shape, highest at the middle and tapering smoothly toward the ends. A normal distribution is a special kind of bell-shaped curve that result from a large number of independent events, reflecting the impact of all the individual factors that affect intelligence (genetic factors and environmental factors). For standard intelligence tests, the curve is centered at 100 and has a standard deviation of 15. Thus, a person with a tested score of 145 has scored 3 standard deviations above the population mean, which means he or she has tested better than 99% of the population.

47. In the videos about Terri Schiavo featuring Nicholas Schiff and Dan Wegner, indicate any point of similarity between the two presentations.

Answer: both speakers indicated there were two primary dimensions by which physicians and laypeople assess whether another person or entity is conscious: the extent to which they sense the external world around them, and the extent to which they are able to act upon it and have an effect. A person who is comatose is both unable to sense the environment and unable to act upon it; by this standard, then the person in a coma is not conscious. A person in a persistent vegetative state is regarded as less than fully conscious – in a minimally conscious state – when they have little or no ability left to move muscles. Robots or lower-order animals that can act on the world but do not sense it the way humans do are seen also as less than fully conscious.