

ds

Multiple Choice

Identify the choice that best completes the statement or answers the question.

- ___ 1. Pavlov's study of classical conditioning began as an extension of his work on
- digestion.
 - pain.
 - the auditory system.
 - the knee-jerk reflex.
- ___ 2. Pavlov supplemented the funds for his laboratory by which of the following?
- training dogs for the upper class
 - selling stomach juice
 - teaching pitch recognition
 - inserting fistulas into obese individuals
- ___ 3. Object learning involves making an association between which of the following?
- any two naturally occurring stimuli
 - the same feature of two objects
 - different features of the same object
 - an arbitrary stimulus and a biologically relevant stimulus
- ___ 4. After giving your cat fish-shaped treats time and time again, you notice the cat begins to salivate at the sight of the fish-shaped snack. This is an example of
- differential learning.
 - sequential learning.
 - taste aversion learning.
 - object learning.
- ___ 5. A hungry rat is exposed to a red light, followed by brief access to food. After several such trials, the rat approaches the light bulb when it is illuminated. In this example, the light is
- an unconditional stimulus.
 - a conditional stimulus.
 - an unconditional response.
 - a conditional response.
- ___ 6. Conditional Stimulus is to Unconditional Stimulus as
- unlearned is to learned.
 - eliciting stimulus is to orienting stimulus.
 - trained is to untrained.
 - independent is to dependent.
- ___ 7. A rat is trained to press a lever for a small amount of food. While pressing the lever at a steady rate, the rat is presented with a tone-light stimulus that had been previously paired with foot-shock. When the tone-light stimulus is on, the rat decreases its rate of lever pressing. This decrease is an example of
- sign tracking.
 - conditioned suppression.
 - conditioned repression.
 - unconditioned fear responding.
- ___ 8. The suppression ratio equals _____.

- a. $\text{CS responding} / (\text{CS responding} + \text{pre-CS responding})$
 - b. $\text{CS responding} / \text{pre-CS responding}$
 - c. $\text{pre-CS responding} / (\text{CS responding} + \text{pre-CS responding})$
 - d. $\text{pre-CS responding} / \text{CS responding}$
- ___ 9. A rat makes 30 responses during the CS period. During the same duration pre-CS period the rat made 60 responses. The suppression ratio is _____.
- a. 0.0
 - b. 0.33
 - c. 0.5
 - d. 0.66
- ___ 10. The greatest amount of fear is indicated by a suppression ratio of _____.
- a. < 0.0
 - b. 0.0
 - c. .5
 - d. 1.0
- ___ 11. No fear is indicated by a suppression ratio of _____.
- a. < 0.0
 - b. 0.0
 - c. .5
 - d. 1.0
- ___ 12. Decreasing suppression ratios indicates which of the following?
- a. increasing fear
 - b. decreasing fear
 - c. less pre-CS responding
 - d. more CS responding
- ___ 13. There has been a renewed interest in human eyeblink conditioning because of which choice below?
- a. Animals are expensive to maintain.
 - b. Progress has been made in understanding the neurobiological substrate of this type of learning.
 - c. We understand so little about this type of learning.
 - d. It is a very complex behavior that we can easily observe.
- ___ 14. Why are rabbits frequently used in eyeblink conditioning experiments?
- a. Their visual system is very similar to that of humans.
 - b. Like humans, they frequently blink to wet the cornea.
 - c. Like humans, they frequently blink to reduce the load on the retina.
 - d. They rarely blink.
- ___ 15. Which of the following best describes eyeblink conditioning?
- a. rapid and sure to elicit a CR
 - b. rapid and results in a CR being produced on many but not all trials
 - c. slow but sure to elicit a CR
 - d. slow and results in a CR being produced on many but not all trials
- ___ 16. The essential circuits for eyeblink conditioning appear to be located in the
- a. hippocampus.
 - b. cerebral cortex.
 - c. cerebellum.

- d. corpus callosum.
- _____ 17. The cells that act as “teachers” selecting the connections to be modified in the cerebellum due to eyeblink conditioning are which of the following?
- a. the climbing fibers
 - b. the mossy fibers
 - c. the cells of the red nucleus
 - d. the cells of the hippocampus
- _____ 18. In eyeblink conditioning, the CS information is conveyed in the cerebellum via which of the following?
- a. climbing fibers
 - b. mossy fibers
 - c. cranial motor neurons
 - d. olivary neurons
- _____ 19. In eyeblink conditioning, the US information is conveyed in the cerebellum via
- a. mossy fibers.
 - b. auditory neurons.
 - c. climbing fibers.
 - d. pontine neurons.
- _____ 20. The _____ is necessary for delay eyeblink conditioning; the _____ is necessary if there is a trace.
- a. hippocampus; cerebellum
 - b. frontal cortex; cerebellum
 - c. cerebellum; hippocampus
 - d. cerebellum; frontal cortex
- _____ 21. In order for food to be presented in an autoshaping procedure, the pigeon must do which of the following?
- a. approach the food hopper before the food is delivered
 - b. approach the signal light before the food is delivered
 - c. avoid the signal light until after the food is delivered
 - d. There are no requirements for the pigeon.
- _____ 22. Which of the following is not true of sign tracking?
- a. The subject need not do anything to receive the US.
 - b. Learning proceeds most rapidly when the CS is presented just before the US.
 - c. Subjects will approach the CS even if the CS and the US are presented at random times in relation to each other.
 - d. Sign tracking has been demonstrated in a variety of species, including human children.
- _____ 23. In order for sign tracking to occur, which of the following must be true?
- a. The food must be available for only a short time.
 - b. The CS and the US should be presented at random intervals in relation to each other.
 - c. The CS must be of proper modality and configuration.
 - d. Visual CS must be accompanied by auditory stimuli.
- _____ 24. Taste aversion learning can occur under which of the following circumstances?
- a. after just one CS-US pairing
 - b. only if the subject is hungry
 - c. only with very long delays between the CS and US
 - d. only with tastes the subject knows well
- _____ 25. Surveys of human eating behavior suggest which of the following?

- a. If you know that a food did not cause your illness, you will not form a taste aversion.
 - b. Even if you are certain that a food did not cause your illness, you are likely to develop an aversion to the taste of that food.
 - c. If you are made aware of the mechanisms of taste aversion conditioning, your behavior becomes more rational.
 - d. It usually takes more than one exposure to an illness-producing food for an aversion to develop in humans.
- ___ 26. Which of the following CS-US intervals produces the strongest taste aversion learning?
- a. 6 hours
 - b. 12 hours
 - c. 18 hours
 - d. > 18 hours
- ___ 27. The interstimulus interval refers to which of the following time periods?
- a. between the start of the CS and the end of the US
 - b. between the start of the CS and the start of the US
 - c. between the end of the CS and the start of the US
 - d. between the end of the US and start of the next CS
- ___ 28. The interstimulus interval is usually ___ the intertrial interval.
- a. the same as
 - b. shorter than
 - c. longer than
 - d. not determined in any way by
- ___ 29. The most frequently used procedure for Pavlovian conditioning is
- a. trace conditioning.
 - b. simultaneous conditioning.
 - c. short-delayed conditioning.
 - d. long-delayed conditioning.
- ___ 30. A rat is exposed to a three-second red-light stimulus. A short while later, a food pellet is delivered to the rat. This is an example of
- a. short-delayed conditioning.
 - b. trace conditioning.
 - c. backward conditioning.
 - d. long-delayed conditioning.
- ___ 31. Which of the following best describes backward conditioning?
- a. The US follows the CS.
 - b. The US begins with the CS and continues after the CS terminates.
 - c. The CS follows the US.
 - d. The CS begins with the US and continues after the US terminates.
- ___ 32. Which of the following best describes the “trace interval” in trace conditioning?
- a. the time between the start of the CS and the end of the US
 - b. the time between the start of the CS and the start of the US
 - c. the time between the end of the CS and the end of the US
 - d. the time between the end of the CS and the start of the US
- ___ 33. A buzzer sounds every time food is made available for a pigeon. The buzzer starts when food is in the hopper, and stops when food is removed. The food is available for 3 minutes. This is an example of

- a. short-delayed conditioning.
 - b. long-delayed conditioning.
 - c. backward conditioning.
 - d. simultaneous conditioning.
- ___ 34. A test trial in classical conditioning consists of presenting which of the following?
- a. the CS alone
 - b. the US alone
 - c. the CS and US in reverse order
 - d. neither the CS nor the US
- ___ 35. Which of the following is not a measure of conditioned responding?
- a. counting the number of drops of saliva elicited by a bell tone
 - b. counting the number of lever presses made to receive food
 - c. counting how often a rabbit blinks when a tone sounds
 - d. counting the time that elapses between presentation of a tone and a rabbit's eyeblink
- ___ 36. To conclude that an association has been established in a classical conditioning experiment, one must ensure which of the following?
- a. that the subject responds every time the CS is presented
 - b. that the subject responds every time the US is presented
 - c. that changes in behavior are due to the US presentation
 - d. that changes in behavior are not due to prior separate presentations of the CS and US
- ___ 37. Instances in which exposure to the US is sufficient to create CR-like responses to the CS are called
- a. pseudo-conditioning.
 - b. habituation.
 - c. pseudo-habituation.
 - d. Pavlovian conditioning.
- ___ 38. The most successful control procedure in classical conditioning is
- a. pseudo-conditioning.
 - b. sensitization.
 - c. random control.
 - d. explicitly unpaired control.
- ___ 39. One group of rats receives a standard CS-US pairing on each trial. A second group of rats receives CS and US presentations at varying times and intervals such that the total number of CS and US exposures is equal to that of the first group. The second group is which of the following?
- a. a random control group
 - b. a sensitization group
 - c. a pseudo-conditioning group
 - d. an explicitly unpaired control group
- ___ 40. You wish to train your cat to salivate at the sound of a tone. You are most likely to get the best results with which procedure?
- a. trace conditioning
 - b. short-delayed conditioning
 - c. long-delayed conditioning
 - d. simultaneous conditioning
- ___ 41. The results of backward conditioning experiments demonstrate which of the following?
- a. Backward conditioning results in inhibition of conditioned responding.

- b. Backward conditioning results in excitation of conditioned responding.
 - c. The factors that determine the outcome of backward conditioning may depend on factors other than the CS being a good signal for the onset of the US.
 - d. Simultaneous and backward conditioning procedures are similar.
- _____ 42. The temporal coding hypothesis suggests that a subject will do which of the following?
- a. will not learn CS-US associations
 - b. will learn CS-US associations and learn when the US occurs in relation to the CS
 - c. will learn temporal relations only in short-delay situations, accounting for the strong conditioning that occurs in this procedure
 - d. will learn temporal relations only in long-delay situations, accounting for the one trial learning seen in taste-aversion conditioning
- _____ 43. Conditioned excitation is to conditioned inhibition as
- a. sensitization is to habituation.
 - b. long-delayed conditioning is to short-delayed conditioning.
 - c. pseudo-conditioning is to control group.
 - d. random-control procedure is to explicitly unpaired control procedure.
- _____ 44. A sign reading “out of gas” at a restaurant does not cause the frustration of the same sign at a service station because of which choice below?
- a. The restaurant is excitatory.
 - b. The excitatory context is missing at the restaurant.
 - c. The excitatory context is missing at the service station.
 - d. The restaurant is inhibitory.
- _____ 45. Inhibitory conditioning depends on an excitatory context, whereas excitatory conditioning depends on
- a. an inhibitory context.
 - b. an excitatory context.
 - c. an explicitly unpaired control.
 - d. None of the above
- _____ 46. Normally, you eat breakfast every morning at Sam’s Diner. For the past three mornings, a large yellow banner has stated that Sam’s is closed. Now, every time you see a yellow banner you turn away from the banner. Your conditioning is an example of
- a. short-delayed conditioning.
 - b. differential inhibition.
 - c. the standard procedure for conditioned inhibition.
 - d. a negative CS-US contiguity.
- _____ 47. In the standard procedure for conditioned inhibition, which of the following is true?
- a. The CS+ and CS- occur during the same trial.
 - b. The CS+ and CS- occur on different trials.
 - c. The CS- and US closely follow one another.
 - d. The CS+ and US occur only when separated by a length of time.
- _____ 48. Only a single CS is needed for inhibitory conditioning in which of the following procedures?
- a. trace conditioning
 - b. differential inhibition
 - c. the standard procedure for conditioned inhibition
 - d. a negative CS-US contiguity

- ___ 49. Pigeons will approach a CS associated with food delivery. They withdraw from a CS that signals the absence of food. This is evidence that sign-tracking is
- a bi-directional response system.
 - a compound stimulus system.
 - an inhibitory system.
 - an excitatory system.
- ___ 50. In a bidirectional response system, subjects move away from an excitatory CS. You expect the subjects to ___ an inhibitory CS.
- move away from
 - approach
 - show inhibition of delay to
 - It cannot be determined.
- ___ 51. Which of the following is not a bidirectional response system?
- taste preferences
 - heart rates
 - rabbit eyeblinks
 - temperatures
- ___ 52. The difficulty in investigating inhibitory conditioning of rabbit eyeblink responses is that
- eyeblink in rabbits is a bidirectional response.
 - there are low baseline levels of eyeblinking in rabbits.
 - eyeblink is excitatory.
 - eyeblink is already inhibitory.
- ___ 53. To measure conditioned inhibition in non-bidirectional response systems, you could use
- the response blocking test.
 - the differential-inhibition test.
 - the compound-stimulus test.
 - the compound-inhibitory test.
- ___ 54. Evidence for inhibitory conditioning in a summation test comes from which of the following?
- an increased suppression ratio when the CS+ and CS- are presented together
 - a decreased suppression ratio when the CS+ and CS- are presented together
 - no change in the suppression ratio when the CS+ and CS- are presented together
 - None of the above are sufficient without a control group.
- ___ 55. The rationale for the retardation of acquisition test is found in which of the following choices?
- The rate of acquisition of an excitatory CR should be retarded if the CS is a conditioned inhibitor.
 - The rate of acquisition of an excitatory UR should be retarded if the CS is a conditioned inhibitor.
 - The rate of acquisition of an excitatory CR should be facilitated if the CS is a conditioned inhibitor.
 - The rate of acquisition of an excitatory UR should be facilitated if the CS is a conditioned inhibitor.
- ___ 56. X-market uses a red light commonly found at traffic intersections to indicate a sale price. Y-market uses a blue light rarely seen by its customers to indicate a sale price. The customers at Y-market learn to run to the sale item much sooner than those at X-market. This is an example of
- a bidirectional response.
 - the compound-stimulus principle.

- c. retardation of acquisition.
 - d. inhibitory conditioning.
- _____ 57. Pairing repeated presentations of a photograph of a water can with subsequent presentations of a photograph of a flower on a computer screen is likely to
- a. have little effect on the conscious judgment of causality in normal human adults.
 - b. affect informal judgments of causality in human adults, and will likely share features common to Pavlovian conditioning.
 - c. affect informal judgments of causality in human adults, but in spite of surface similarities, does not have the features common to Pavlovian conditioning.
 - d. impact judgments of causality in only well trained human subjects with experience in the experimental setting.
- _____ 58. Which of the following is not a result of Pavlovian sexual conditioning in males?
- a. more successful competition for the female
 - b. more offspring produced
 - c. more reproductive frustration
 - d. more courtship behavior

Short Answer

59. Describe the use of classical conditioning in two experimental situations. Identify the conditional stimulus and unconditional stimulus in each situation.
60. What are the five common procedures for classical conditioning? Provide an example from common human experience that illustrates the CS-US timing of each procedure.
61. How is learning in classical conditioning procedures measured?
62. What is pseudo-conditioning? Describe two control procedures that help to differentiate true conditioning from pseudo-conditioning.
63. Compare the effectiveness of short-delay and long-delay conditioning. What factors influence the effectiveness of each procedure?
64. Why is an excitatory context necessary for inhibitory conditioning? Describe two inhibitory conditioning procedures and identify the excitatory context in each procedure.
65. Describe two procedures to measure conditioned inhibition and note the circumstance in which each procedure would be used.
66. What is learned in extinction procedures? Provide evidence to support your answer.
67. Describe the interplay of elicited and classically conditioned behaviors that is necessary in successful nursing.
68. How does classical conditioning contribute to our understanding of causal judgments?
69. Describe similarities and differences between habituation, sensitization, and classical conditioning.

70. What is object learning, and how is it similar or different from conventional classical conditioning?
71. What is the most effective procedure for excitatory conditioning and how is it different from other possibilities?
72. What is a control procedure for excitatory conditioning and what processes is the control procedure intended to rule out?
73. Are conditioned excitation and conditioned inhibition related? If so, how are they related?
74. Describe procedures for conditioning and measuring conditioned inhibition.
75. Describe four reasons why classical conditioning is of interest to psychologists.

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Answer Section

MULTIPLE CHOICE

- | | | | | |
|-----|----------|--------|------------------|--------------|
| 1. | ANS: A | PTS: 1 | REF: Page 69 | KEY: Fact |
| 2. | ANS: B | PTS: 1 | REF: Page 69 | KEY: Fact |
| 3. | ANS: C | PTS: 1 | REF: Page 71 | KEY: Fact |
| 4. | ANS: D | PTS: 1 | REF: Page 71 | KEY: Concept |
| 5. | ANS: B | PTS: 1 | REF: Page 71 | KEY: Concept |
| | MSC: WWW | | | |
| 6. | ANS: C | PTS: 1 | REF: Page 71 | KEY: Concept |
| 7. | ANS: B | PTS: 1 | REF: Page 73 | KEY: Concept |
| 8. | ANS: A | PTS: 1 | REF: Page 73 | KEY: Fact |
| 9. | ANS: B | PTS: 1 | REF: Page 73 | KEY: Concept |
| 10. | ANS: B | PTS: 1 | REF: Page 73 | KEY: Fact |
| 11. | ANS: C | PTS: 1 | REF: Page 73 | KEY: Fact |
| 12. | ANS: A | PTS: 1 | REF: Page 73 | KEY: Concept |
| 13. | ANS: B | PTS: 1 | REF: Page 75 | KEY: Fact |
| 14. | ANS: D | PTS: 1 | REF: Page 76 | KEY: Fact |
| | MSC: WWW | | | |
| 15. | ANS: D | PTS: 1 | REF: Page 77 | KEY: Fact |
| 16. | ANS: C | PTS: 1 | REF: Page 78 | KEY: Fact |
| 17. | ANS: A | PTS: 1 | REF: Page 78 | KEY: Fact |
| 18. | ANS: B | PTS: 1 | REF: Page 78 | KEY: Fact |
| 19. | ANS: C | PTS: 1 | REF: Page 78 | KEY: Fact |
| 20. | ANS: C | PTS: 1 | REF: Page 77 | KEY: Fact |
| 21. | ANS: D | PTS: 1 | REF: Page 79 | KEY: Concept |
| 22. | ANS: C | PTS: 1 | REF: Page 79 | KEY: Concept |
| 23. | ANS: C | PTS: 1 | REF: Page 80 | KEY: Concept |
| 24. | ANS: A | PTS: 1 | REF: Page 81 | KEY: Fact |
| 25. | ANS: B | PTS: 1 | REF: Pages 81-82 | KEY: Fact |
| 26. | ANS: A | PTS: 1 | REF: Page 82 | KEY: Fact |
| 27. | ANS: B | PTS: 1 | REF: Page 84 | KEY: Fact |
| 28. | ANS: C | PTS: 1 | REF: Page 84 | KEY: Fact |
| 29. | ANS: C | PTS: 1 | REF: Page 84 | KEY: Fact |
| 30. | ANS: B | PTS: 1 | REF: Pages 84-85 | KEY: Concept |
| 31. | ANS: C | PTS: 1 | REF: Page 85 | KEY: Fact |
| 32. | ANS: D | PTS: 1 | REF: Page 85 | KEY: Fact |
| | MSC: WWW | | | |
| 33. | ANS: D | PTS: 1 | REF: Page 85 | KEY: Concept |
| 34. | ANS: A | PTS: 1 | REF: Page 86 | KEY: Fact |
| 35. | ANS: B | PTS: 1 | REF: Pages 86-87 | KEY: Concept |
| 36. | ANS: D | PTS: 1 | REF: Pages 86-88 | KEY: Concept |
| 37. | ANS: A | PTS: 1 | REF: Page 86 | KEY: Fact |

38.	ANS: D	PTS: 1	REF: Page 87	KEY: Fact
39.	ANS: A	PTS: 1	REF: Page 86	KEY: Concept
40.	ANS: B	PTS: 1	REF: Page 84	KEY: Fact
41.	ANS: C	PTS: 1	REF: Pages 87-89	KEY: Fact
42.	ANS: B	PTS: 1	REF: Page 89	KEY: Fact
43.	ANS: A	PTS: 1	REF: Pages 89-90	KEY: Concept
44.	ANS: B	PTS: 1	REF: Page 91	KEY: Concept
	MSC: WWW			
45.	ANS: D	PTS: 1	REF: Page 91	KEY: Fact
46.	ANS: C	PTS: 1	REF: Pages 91-92	KEY: Concept
47.	ANS: A	PTS: 1	REF: Pages 91-92	KEY: Fact
48.	ANS: D	PTS: 1	REF: Page 92	KEY: Fact
49.	ANS: A	PTS: 1	REF: Page 93	KEY: Concept
50.	ANS: B	PTS: 1	REF: Page 93	KEY: Concept
51.	ANS: C	PTS: 1	REF: Page 93	KEY: Fact
52.	ANS: B	PTS: 1	REF: Pages 93-94	KEY: Fact
53.	ANS: C	PTS: 1	REF: Pages 93-94	KEY: Fact
54.	ANS: D	PTS: 1	REF: Pages 93-94	KEY: Concept
55.	ANS: A	PTS: 1	REF: Page 96	KEY: Concept
56.	ANS: C	PTS: 1	REF: Page 96	KEY: Concept
57.	ANS: B	PTS: 1	REF: Pages 96-97	KEY: Fact
58.	ANS: C	PTS: 1	REF: Page 98	KEY: Fact
	MSC: WWW			

SHORT ANSWER

59. ANS:
Answer not provided
- PTS: 1
60. ANS:
Answer not provided
- PTS: 1
61. ANS:
Answer not provided
- PTS: 1
62. ANS:
Answer not provided
- PTS: 1
63. ANS:
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- PTS: 1
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73. ANS:
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74. ANS:
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PTS: 1
75. ANS:
Answer not provided

PTS: 1