

## Psyco 381 Spring 2010 Midterm 1 Sample Questions

Below are some sample questions for Midterm 1. Answers are at the bottom.

1. According to Descartes, what is the difference between human and non-human animal behaviours?
  - A. Humans can perform voluntary behaviours; non-human animals can perform only involuntary behaviours.
  - B. Humans respond to environmental stimuli; non-human animals only behave reflexively.
  - C. Human reflexes are voluntary; non-human animal reflexes are involuntary.
  - D. Human behaviour is explainable by natural laws; non-human animal behaviour is unpredictable.
2. Which of the following is the INCORRECT statement about reflexive behaviours?
  - A. Most reflexes promote the well-being of the organism.
  - B. Simple reflexes are not influenced by higher nervous system functions.
  - C. Reflexes are the simplest form of elicited behaviour.
  - D. The organization of the nervous system determines the specificity of the stimulus/response relationship.
3. 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, what is the light?
  - A. An unconditional stimulus.
  - B. A conditional stimulus.
  - C. An unconditional response.
  - D. A conditional response.
4. Which of the following is a function of preexposure to the CS or the US?
  - A. Having little effect on later associative learning.
  - B. Facilitating later associative learning.
  - C. Retarding later associative learning.
  - D. CS-preexposure facilitates later associative learning; US preexposure retards later associative learning.
5. All of the following are true of British Empiricists except
  - A. they believed that ideas were based on associations of simple sensory events.
  - B. they conducted experiments to test the rules of association.
  - C. they held that the mind was a blank slate at birth.
  - D. they thought that sense experiences were the basis of knowledge.

6. Which of the following describes the difference between a general search and a focal search?
- A. General searches occur when an animal does not yet know specifically where to look for food, while focal searches are spatially localized.
  - B. General searches are localized, while focal searches focus on a larger area.
  - C. General searches are appetitive while focal searches are consummatory.
  - D. There are no differences; both terms are alternative ways of describing appetitive (i.e., food-related) behaviour.
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. What is this decrease an example of?
- A. Conditioned suppression.
  - B. Sign tracking.
  - C. Conditioned repression.
  - D. Unconditioned fear responding.
8. Belongingness effects have been demonstrated to reflect which of the following?
- A. Extensive experience with the stimuli.
  - B. Sensitization effects of CS preexposure.
  - C. Sensitization effects of US preexposure.
  - D. Genetic predispositions.
9. The research of Ivan Pavlov and Herman Ebbinghaus is similar because both researchers
- A. were using empirical methods to investigate reflexes.
  - B. were using empirical methods to study laws of association.
  - C. extended Descartes' concept of dualism.
  - D. were concerned with the study of the mind, not with physiological mechanisms.
10. Elicited behaviours are interesting to researchers studying learning because of which of the following results?
- A. They are invariant and make good controls.
  - B. They are present in most animals except humans, and provide clues to the evolution of behaviours.
  - C. They do not occur in the same way each time the eliciting stimulus is presented.
  - D. They allow for voluntary behaviour to be studied in non-human animals.
11. The greatest amount of fear is indicated by a suppression ratio of \_\_\_\_\_.
- A.  $< 0.0$
  - B. 0.0
  - C. 0.5
  - D. 1.0

12. Higher-order conditioning demonstrates which of the following?

- A. After training, a CS can function as a US.
- B. After training, a US can function as a CS.
- C. After training, a CS cannot function as a US.
- D. After training, a US cannot function as a CS.

13. What can behavioural studies of learning demonstrate?

- A. How the elements of the nervous system change due to associative learning.
- B. The features of the reflex arc necessary for learning to occur.
- C. The conditions under which information is acquired.
- D. All of the above.

14. A bright light causes a startle response. The second presentation of the light elicits less of a response because the subject was temporarily blinded by the first light flash. This is an example of

- A. habituation.
- B. sensitization.
- C. response fatigue.
- D. sensory adaptation.

15. 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.

16. The compensatory-response model challenges the stimulus substitution model because it suggests which of the following?

- A. The CR and UR are unrelated.
- B. The CR and UR can be opposing in form.
- C. The CR and UR can be the same form and the same strength.
- D. The CR and UR can be the same form, but not the same strength.

17. Behaviour changes due to learning

- A. can be short lived must be due to interaction with the environment.
- B. must be enduring and due to changes of stimulus conditions.
- C. must be enduring but must not depend on interaction with the environment.
- D. must be enduring and due to interaction with the environment.

18. The dual-process theory assumes which of the following?
- A. One neural process is responsible for increases and decreases in responsiveness to stimulation.
  - B. Different types of neural mechanisms are responsible for increases and decreases in responsiveness to stimulation.
  - C. Habituation and sensitization effects are essentially the same.
  - D. Habituation is due to fatigue; sensitization is due to learning.
19. 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. What is this an example of?
- A. Short-delay conditioning.
  - B. Long-delay conditioning.
  - C. Simultaneous conditioning.
  - D. Backward conditioning.
20. According to the behaviour systems model, which of the following is true regarding the form of the CR?
- A. It will be similar to that of the UR.
  - B. It will oppose the form of the UR.
  - C. It will be mediated by the intertrital interval.
  - D. It will be mediated by the interstimulus interval.
21. Which of the following would correctly be identified as due to learning?
- A. A weight lifter can raise less and less weight as her sets go on.
  - B. After a growth spurt, a child can now climb on the couch.
  - C. In the spring, male birds are attracted to females, but not in the fall when the females are not receptive.
  - D. None of the above.
22. According to the dual-process theory, when rats were tested with a relatively quiet background noise, what should their response to a startling tone do?
- A. Sensitize because both the state and S-R systems were activated.
  - B. Sensitize because the state system was responding to the background tone.
  - C. Habituate because the state system was already responding to auditory stimuli.
  - D. Habituate because only the S-R system was activated.
23. 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.

24. How might a researcher determine whether conditioned responding is due to S-S or S-R learning?
- A. Change the value of the CS.
  - B. Change the value of the US.
  - C. Run test trials with a novel CS.
  - D. Run test trials with a novel US.
25. What does the general-process approach to learning assume?
- A. That all animals respond to training in a similar manner.
  - B. That learning phenomena are products of elemental processes that change across situations.
  - C. That learning phenomena are products of elemental processes that are consistent across situations.
  - D. That differing species will learn about similar stimuli and responses similarly.
26. Sensitization in the *Aplysia* occurs due to
- A. engagement of the facilitatory interneuron.
  - B. changes in the sensitivity of the motor neuron.
  - C. changes in the sensitivity of the sensory neuron.
  - D. Changes in the action potential of the sensory neuron.
27. Conditioned excitation is to conditioned inhibition as
- A. pseudo-conditioning is to control group.
  - B. long-delayed conditioning is to short-delayed conditioning.
  - C. sensitization is to habituation.
  - D. random-control procedure is to explicitly unpaired control procedure.
28. Using the Rescorla-Wagner model, predict  $\Delta V$  of stimulus B during conditioning trials with compound stimulus A-B when the associative value of A at the beginning of the trial is  $\lambda$  and the associative value of B at the beginning of the trial is 0.
- A. 0
  - B.  $1/4 \lambda$
  - C.  $1/2 \lambda$
  - D.  $\lambda$
29. Where will the generation of new, previously unknown facts about behaviour come from?
- A. Studying live organisms
  - B. Advanced computer modeling.
  - C. Studying live humans.
  - D. Studying live non-humans.
30. According to the opponent process theory of habituation, what will an emotion-arousing stimulus elicit?
- A. emotion after-effects directly.
  - B. the a process directly.
  - C. the b process directly
  - D. the a and b processes directly.

31. 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. What is your conditioning an example of?

- A. Short-delayed conditioning.
- B. Differential inhibition.
- C. A negative CS-US contiguity.
- D. Conditioned inhibition.

32. According to the Rescorla-Wagner model, inhibition is which of the following?

- A. Unpredictable with the model.
- B. Unrelated to excitation.
- C. The opposite of excitation.
- D. The same as excitation.

33. Evidence for inhibitory conditioning in a summation test comes from which of the following?

- A. An increased suppression ratio when the CS+ and CS- are presented together.
- B. A decreased suppression ratio when the CS+ and CS- are presented together.
- C. No change in the suppression ratio when the CS+ and CS- are presented together.
- D. None of the above are sufficient without a control group.

34. Which of the following correctly states the importance of time in conditioning procedures?

- A. The duration of the CS-US interval determines conditioned responding.
- B. The duration of the intertrial interval determines conditioned responding.
- C. The relative durations of the intertrial interval and the CS-US interval determine conditioned responding.
- D. The relative duration of the interstimulus interval determines conditioned responding.

## ANSWERS

1. A
2. B
3. B
4. C
5. B
6. A
7. A
8. D
9. B
10. C
11. B
12. A
13. C
14. D
15. D
16. B
17. D
18. B
19. C
20. D
21. D
22. D
23. A
24. B
25. C
26. A
27. C
28. A
29. A
30. B
31. D
32. C
33. D
34. C