February 20, 2014 Name:

#  ANSC 310 1st Exam

 86 + 32 = 118 points

Matching

1. (4 pts) Place the letter that indicates the time period in which the listed people were most active, by the most appropriate person.

\_\_\_\_ Aristotle a. 1935 - 1960's

\_\_\_\_ Konrad Lorenz b. 1900 - 1930's

\_\_\_\_ Karl von Frisch c. 300 B.C.

\_\_\_\_ Charles Darwin d. mid to late 1800's

 e. 4,000 B.C.

2. (4 pts) In humans, which neurotransmitters (hormones) are thought to be related with what behaviors?

 1. \_\_\_ Responsible for “jogger’s high” and mediation of pain.

2. \_\_\_ Responsible for long term attachment or bonding, and is(are) probably important in cases when a loved one dies and a close relative goes into depression.

3. \_\_\_ Is referred to as the "cuddle" hormone(s) and is important in a mother accepting and bonding to its offspring.

4. \_\_\_ Involved in initial attraction and the "high" that often accompanies being in love. Its (their) eventual depletion is associated with losing those "rose colored glasses" and possibly discovering that one’s partner is a "jerk."

 A. Oxytocine B. Dopamine or norepinephrine

 C. Attractamine D. Prostaglandin E. Endorphins

True / False (1 point each)

T / F 1. The EEG of a chicken in tonic immobility indicates that the animal is in a sleepy hypnotic state.

T / F 2. The spike in leutenizing hormone (LH) that is seen during estrus stimulates estrous behavior.

T / F 3. Laying hens show a strong aversion to eating a broken chicken egg.

T / F 4. Brain wave patterns during REM sleep are similar to those of an alert animal.

T / F 5. Research has shown that the more relaxed a chicken is, the easier it is to get the chicken to show tonic immobility.

T / F 6. The Limbic System is the portion of the brain that is thought to be the area involved in people’s basic drives, emotional experience, fears and pleasures.

T / F 7. The Cerebellum is the portion of the brain involved in coordination of information between the two cerebral hemispheres.

T / F 8. There is evidence that the left and right hemispheres of the brains of men communicate with each other more than the hemispheres of women.

T / F 9. Castration of mature bulls stops ejaculatory behavior in mature bulls within a week or two.

Multiple Choice (1.5 points each)

\_\_\_ 1. During estrus, blood concentrations of the following hormones are elevated or spike: A) estrogen and progesterone, B) leutenizing hormone and progesterone, C) estrogen and leutenizing hormone, D) estrogen and oxytocine.

\_\_\_ 2. The behavior that poultry breeders were able to greatly reduce in commercial egg layers is: A. feather pecking; B. broodiness; C. head flicking; D. pecking or eating of other hens' eggs.

\_\_\_ 3. The book "The Expressions of the Emotions in Man and Animals" was written by: A) Charles Darwin; B) Lorenz; C) Pavlov; D) Karl von Frisch; E) B. F. Skinner.

\_\_\_ 4. Wrote about the effectiveness of the sheep-guarding dogs he observed in South America: A) Charles Darwin; B) Lorenz; C) I. Pavlov; D) Tinbergen, E) L. Coppinger

\_\_\_ 5. The green or yellow reflection you see when shining a light on an opossum is a pretty good indicator they possess: A) fovea; B) green and yellow eyes; C) more cones than rods; D) tapetum.

\_\_\_ 6. A study that determined which animals were killed by over 300,000 M-44’s found that: A) sheep accounted for 5% of the kills; B) canines (coyote, fox and dog) were killed as often as other animals (raccoons, skunks, opossums); C) canines accounted for 75% of the kills; D) canines accounted for almost 90% of the kills.

Short Answer (3 points each)

1. The successful incubation of an egg is rather difficult for people to mimic, but birds know what to do the first try. Describe the internal workings of one of the egg incubators we looked into at the Poultry Center that mimics what the hen seems to innately know to do.

2. Explain what is meant by the term “critical periods”:

3. Some memories get stored into “long term memory” while other memories are only temporary. What are the two main factors that help determine if something gets into long term memory?

 1.

 2.

4. Explain what is meant by the term “feral”:

5. List three behaviors that are considered to be conducive to domestication of a species:

 1.

 2.

 3.

6. Explain how “sensory systems” differ from “perception”.

7. How does the Reticular Activating System influence the perception of stimuli?

8. Describe the technique that seems to be the most useful in determining if many species of mammals have full color vision.

 9. Gestalt Psychology emphasized how our brains process sensory information that is beyond what is actually there or being sensed. Give two examples:

 1.

 2.

10. The Coppingers reported on what was one of the biggest problems when starting young guard dogs, it occurred especially in dogs that were well socialized or bonded to the animals they were guarding. Darwin described it as “Their most troublesome fault, when young.” What are they talking about?

11. What are the two main characteristics that you could use to help distinguish between whether a cougar or domestic dogs attacked a flock of your sheep.

 1.

 2.

12. What are two techniques or things that trappers can do to improve the chances that a leg hold trap would catch a coyote or other canine?

 1.

2.

13. During the laboratory at the Poultry Center we talked about broodiness in laying hens.

 A. What is broodiness?

 B. What design feature of battery cages helps reduce the occurrence of broodiness?

14. Your aunt, who lives in California, is very concerned about how her eggs are produced. Describe the housing that commercial egg producers in California are adopting for laying hens kept in cages that the producers hope will satisfy the behavior requirements that were specified in California’s Proposition 3.

15. How does ethology generally differ from psychology? Both fields study animal behavior, but what are the major traditional differences?

 1.

 2.

16. Define IMPRINTING (give the major elements that constitute most definitions):

17. In the Introduction, Kilgour spends a lot of time discussing “man’s domestic contract with animals.” Why is applied ethology so important to that contract?

18. What are two methods or practices commonly used to control aggression in poultry or game birds that we talked about in Lab?

 1.

 2.

19. Name the three ethologists who won the Nobel Prize in 1973.

 1.

 2.

 3.

20. What is the “fovea”?

 How does its shape differ between a grazing animal and people?

Cattle Section

32 points

True / False (1 point each)

T / F 1. Laying out, feeding and playing are all part of a calves daily rhythm.

T / F 2. Bottle feeding is labor intensive.

T / F 3. Cows readily accept foster calves.

T / F 4. Younger calves are more mobile and have a higher social rank than older calves.

T / F 5. A calf’s sucking drive is responsible for many of the intersucking problems.

T / F 6. Calves should work harder and longer to alleviate intersucking problems.

T / F 7. Disease and calf immunity can be an issue in calved stalled individually.

T / F 8. Calves become insensible immediately after their throats have been cut.

Multiple Choice (1.5 points each)

\_\_\_\_ 1. Research has shown that cows need how much contact with their calf shortly after calving to form a specific bond: A) 5 minutes; B) 30 minutes; C) until the calf defecates; D) not sure, but 4 to 6 hours is average.

\_\_\_\_ 2. Anomalous or ”abnormal” behavior seen in calves kept in crates: A) licking the walls; B) licking themselves; C) licking other calves; D) chewing or sucking the on bars: E) can be all of the above

\_\_\_\_ 3. In Temple Grandin’s article, she discussed several causes for cattle balking in handling facilities. Which is not one of those causes. A)Grazing B) Water Puddles C) Drain gates D) Flapping objects E) Shadows

\_\_\_\_ 5. Konrad Lorenz used the term “damming up” to label a behavioral phenomena that widely occurs in nature. What was he describing? A) Play behavior B) Coping mechanism C) Calving Behavior D) Feeding mechanism E) Rock throwing

Short Answer (3 points each)

1. What does precocial mean and why is it important to animal agriculture?

2. List and describe 3 of the 4 basic principles of livestock handling covered in class and in the Australian video.

 1.

 2.

 3.

3. In class and lab we talked about the painted stripes on the ground. Discuss the effectiveness of the stripes, and some downfalls.

4. A reporter for the Battalion who is doing a feature article on calf behavior asked you “as long as a calf is placed in a narrow crate or pen while it is very young, will it miss running around as it gets older because it never experienced running?“ Explain your answer.

5. The green “shade material” is used at the A&M Beef Center for what purpose?

6. List three methods that are described in Kilgour’s book that are used to get a cow to accept alien foster calves.

 1.

 2.

 3.

Bonus (2 pts): What is a major design flaw of the sale ring we looked at in lab.