# 2018 Veterinary Science Math Practicum

Question #1 (10 points)

A cat was on 20 mg of Prednisone daily, the dose is then reduced to 5 mg twice daily. What is the fraction of decrease in the dose?

1. 1/4
2. 1/2
3. 2
4. 1/3

Question #2 (5 points)

A lab (Libby) presents to your clinic, the owner is concerned her dog is outside the weight range of her current dose of Heartworm prevention. The range is 25-50 lbs. Today Libby weighs 24 kg, what do you tell the owner?

1. Libby is on the correct dose of Heartworm prevention
2. Libby needs a lower dose of Heartworm prevention
3. Libby needs a higher dose of Heartworm prevention
4. Libby is an inside dog and does not need heartworm prevention

Question #3 (5 points)

An Angus steer weighing 600 lbs. needs a drug at a dose rate of 30 mg/kg/day. The drug contains 500mg/ml. How many mls per day does the steer need to receive the correct dose?

1. 16 ml
2. 36 ml
3. 27 ml
4. 8 ml

Question #4 (10 points)

A 20lbs Chihuahua (Chunky) presents dehydrated and needs IV fluids. She needs 500 mls over the next 24 hrs. You choose a 15 drops/ml set. What is the drip rate?

1. 10 drops/min
2. 20 drops/min
3. 5 drops/min
4. 2.5 drops/min

Question #5 (10 points)

An owner brings in a puppy (5lbs) that has coccidia. It needs treatment with Albon for 8 days at a dose of 12.5 mg/lbs/day. The oral suspension is a 250 mg/ 5ml. How many mls does the puppy need per day?

1. 0.5 mls
2. 1.5 mls
3. 0.25 mls
4. 1.25 mls

Question #6 (5 points)

What is the smallest ounce bottle of Albon you could send home with the puppy from question #5 for the full 8 days of treatment?

1. 1/2 ounce bottle
2. 2 ounce bottle
3. 4 ounce bottle
4. 1 ounce bottle

Question #7 (5 points)

A bottle of 500 ml Albon costs $200. How much will it cost to treat the puppy from questions #5 and #6?

1. $15
2. $6
3. $12
4. $37.50

Question #8 (5 points)

A 5lbs. dog needs Benadryl at a dosage of 1 mg/ lb. The owner only has Benadryl over the counter in liquid form, which contains 12.5 mg per teaspoon. How many mls does the dog need?

1. 0.4 ml
2. 1 ml
3. 2 ml
4. 1.5 ml

Question #9 (10 points)

The thermometer at work was dropped and is now reading in Celsius. A cat presents with a 38.6 degree celsius temperature.

1. The cat in normothermic
2. The cat is febrile
3. The cat is hypothermic
4. The cat is exothermic

Question #10 (5 points)

Desiree the clinic manager buys a pack of Bravecto for $320. The pack contains 10 doses. What would be the profit on the pack with a 50% markup?

1. $190
2. $160
3. $48
4. $16

Question #11 (5 points)

A ratio of 1:10 solution of gentamicin flush is needed during surgery. The gentamicin is mixed with sterile saline and drown into a 6 ml syringe. How many mls of gentamicin is in each 6 mls syringe.

1. 0.5 ml
2. 0.4 ml
3. 0.6 ml
4. 0.3 ml

Question #12 (10 points)

A Dog (15lbs) presents with a snake bite, the vet gives an injection of Dexmethasone and Penicillin mixed together. The dosage is 1ml Dexmethasone (2mg/ml) with 1 ml Penicillin per 20lbs. How much total injection was given with both medications mixed together?

1. 1.5 ml
2. 0.75 ml
3. 2.25 ml
4. 2 ml

Question #13 (5 points)

How many mls from question #12 of Dexmethasone was given?

1. 1.5 ml
2. 0.75 ml
3. 1 ml
4. 0.5 ml

Question #14 (5 points)

A farmer has a head of 100 cattle all infected with pinkeye. A mixture of 20 ml Gentacin and 10 ml of Dexmethasone makes 30 doses. A bottle of Gentacin contains 25 mls, how many bottles of Gentacin will the farmer need to treat all of his affected cattle?

1. 2
2. 3
3. 1
4. 4

Question #15 (5 points)

How many mls of Dexmethasone is in each dose of medication?

1. 0.5
2. 0.3
3. 0.7
4. 0.2

Key

1. B
2. C
3. A
4. C
5. D
6. A
7. B
8. C
9. A
10. B
11. C
12. A
13. B
14. B
15. B