**Arkansas FFA**

**Veterinary Science CDE**

**Math Practicum 2014**

**Question 1**

To properly sterilize a kennel in between dogs, mix a solution of Clorox Regular Bleach in 5 gallons of water at the rate of ¾ cup of bleach per 1 gallon of water. What is the volume of bleach added to the 5 gallons of water?

 A. 3 ¾ cups

 B. 3 cups

 C. 2 ½ cups

 D. 4 cups

**Question 2**

Your digital thermometer reads in Celsius but you know your customers will only understand Fahrenheit. You record a temperature of 37 degrees Celsius on a boar stud in the clinic for semen evaluation. What Fahrenheit temperature will you tell the customer?

 A. 97.2 degrees Fahrenheit

 B. 99 degrees Fahrenheit

 C. 98.6 degrees Fahrenheit

 D. 99.5 degrees Fahrenheit

**Question 3**

You are asked to weigh a customer’s cat. The cat weighs 3.5 kg. How many pounds does the cat weigh?

 A. 7 lb.

 B. 8.2 lb.

 C. 6.5 lb.

 D. 7.7 lb.

**Question 4**

The doctor prescribed Duramycin 72-200 for a 200 lb. calf that is acting sluggish. The dosage on the label for cattle is 4.5 mL/100 lb of body weight. What dose of Duramycin 72-200 will be administered?

 A. 8 mL

 B. 9 mL

 C. 10 mL

 D. 12 mL

**Question 5**

As a routine dewormer, the doctor prescribed Valbazen broad spectrum dewormer to a customer for the control of tapeworms in their market lamb. The lamb weighs 100 lbs. The dosage on the label for sheep is 0.75 mL/25 lb. of body weight. What dose of Valbazen will be administered?

 A. 1.75 mL

 B. 2 mL

 C. 2.5 mL

 D. 3 mL

**Question 6**

The doctor has prescribed BO-SE (Selenium, Vitamin E) as treatment for Selenium-Tocopherol Deficiency in a sow that is nursing 10 piglets. The dosage on the label for sows is 1 mL/40 lbs. of body weight. The sow weighs approximately 340 lbs. What dose of BO-SE will be administered?

 A. 8.5 mL

 B. 3 mL

 C. 7.25 mL

 D. 5.5 mL

**Scenario for Question 7 and 8**

The doctor has prescribed Baytril 100 (enrofloxacin) as treatment for bovine respiratory disease (BRD) for a 300 pound calf. Baytril has two methods of administering. If a person gives it in a single dose treatment, the dosage rate is 3.5-5.5 mL/100 lbs. of body weight. If a person gives it in multiple day treatments, the dosage rate is 1.5-2 mL/100 lbs. of body weight.

**Question 7**

What dose of Baytril 100 will be administered if the farmer chooses to only administer a single dose treatment?

 A. 8.5-9.5 mL

 B. 10.5-16.5 mL

 C. 3.5-5.5 mL

 D. 6-9 mL

**Question 8**

What does of Baytril 100 will be administered each day if the farmer chooses to administer a multiple day treatment?

 A. 1.5-2 mL

 B. 3-6 mL

 C. 4.5-6 mL

 D. 7-9.5 mL

**Question 9**

A feedlot manager had several steers that had bovine interdigital phlegmon (foot rot) and administered Nuflor (Florfenicol) intramuscularly on April 1 and April 5, 2014. The withdrawal time on the label says that animals intended for human consumption must not be slaughtered within 28 days of the last intramuscular treatment. What would be the first possible date that the manager could send the animals to processing?

 A. April 15, 2014

 B. April 20, 2014

 C. May 3, 2014

 D. May 20, 2014

**Question 10**

A customer has a female dog that weighs 65 pounds, and currently has 8 puppies nursing that weigh approximately 10 pounds each. The doctor has prescribed D-Worm 60, liquid wormer to prevent against Roundworms. The female and puppies all need dewormed with the same medication. The dosage rate is 5 mL/5 lb. of body weight. How many total mL of D-Worm 60 would the customer need for the female and the puppies?

 A. 100 mL

 B. 145 mL

 C. 165 mL

 D. 200 mL

**Question 11**

How many mL of medicine are in the syringe in the photo below?



 A. 8 mL

 B. 10 mL

 C. 12 mL

 D. 14 mL

**Question 12**

A customer brings in a 30 pound dog that has received a bite wound. The doctor prescribes Cefazolin, a common antibiotic which is administered at a dose rate of 22 mg/kg. What is the dose rate for the dog?

 A. 88 mg

 B. 280.5 mg

 C. 126.42 mg

 D. 300.08 mg

**Question 13**

How many milliliters (mL) are in 6 ounces (oz) of liquid?

 A. 180 mL

 B. 240 mL

 C. 10 mL

 D. 50 mL

**Question 14,15 and 16**

Your place of employment offers dog-boarding services and has the ability to accommodate the specific needs of each pet and family.

The daily rates for 8 to 24 hour boarding are:

Under 20 lbs. - $20.00

20-50 lbs. - $22.00

Over 50 lbs. - $25.00

Dogs can be walked for an additional fee of $5.00 per dog per day. Two or more dogs in the same kennel receive a 10% discount on all boarding services.

**Question 14**

Using the scenario above, A client has two dogs that can be housed together. One is a 10 pound Pomeranian named Boomer, and the other is a 65 pound Labrador Retriever named Max. The owner requests that both dogs be walked once per day. The owner boarded the dogs from Tuesday morning until Friday evening. You are responsible for billing the client, what is the total charge for all boarding services?

 A. $220.00

 B. $178.00

 C. $198.00

 D. $250.00

**Question 15**

Using the scenario above, A client has two dogs that can not be housed together. One is a 25 pound border collie named Suzie, and the other is a 35 pound Golden Retriever named Clark. The owner does not request that the dogs be walked. The owner boarded the dogs from Friday afternoon till Saturday morning. You are responsible for billing the client, what is the total charge for all boarding services?

 A. $44.00

 B. $39.60

 C. $35.00

 D. $50.00

**Question 16**

Using the scenario above, A client has one dog, a 125 pound Bull Mastiff named Boxer. The owner requests that Boxer be walked once a day. The owner boarded the dog from Monday morning till the following Monday evening. You are responsible for billing the client, what is the total charge for all boarding services?

 A. $75.00

 B. $125.00

 C. $200.00

 D. $210.00

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**Official Key**

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

**\*Each question worth 6.25 points each for a total of 100 points for Math Practicum**