Tarleton State University Area CDE's
Veterinary Science

Practicum #1
Calculating Percent Solutions for a Medication

*Following are multiple-choice and True/False examination items. Select your choice by bubbling in the correct answer in the **"Assessment and Solution"** section of the Scan Sheet.*

Scenario

What is the percent solution for Amoxicillin Oral Suspension 250mg/5mL?

1. What is the correct amount of active ingredient?
   A) Amoxicillin
   B) 250mg
   C) 5mL
   D) 0.25g

2. What is the correct amount of solute?
   A) 250mg
   B) 5mL
   C) Amoxicillin
   D) Oral Suspension

3. What is the correct amount of solution?
   A) 0.05g
   B) 0.25g
   C) 5mL
   D) 250mg

4. Which of the following is the correct formula to convert the solute to proper units?
   A) 5mL X 1g/250mg
   B) 75mg X 1g/1000mg
   C) 250mg X 5mL/1000mg
   D) 250mg X 1g/1000mg

5. After converting the solute to proper units, what is the correct answer?
   A) 1.25mL
   B) 0.02g
   C) 0.075g
   D) 0.25g

6. What is the correct g/mL ratio of solute to solution?
   A) 0.075g/5/mL
   B) 0.25g/5mL
   C) 250mg/5mL
   D) 250g/5mL

7. After calculating g/mL, what is the correct amount of solute to solution?
   A) 50mg/mL
   B) 50g/mL
   C) 0.015g/mL
   D) 0.05g/mL

8. How is the g/mL solute to solution converted to a percentage?
   A) Divide g/mL by 100
   B) Divide g/mL by 1000
   C) Multiply g/mL by 100
   D) Multiply g/mL by 1000

9. What is the correct percent solution?
   A) 0.05%
   B) 1.5%
   C) 5%
   D) 50%

10. All amounts should be calculated and labeled at each step
    A) True
    B) False

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Answer Key

1. B & D
2. A
3. C
4. D
5. D
6. B
7. D
8. C
9. C
10. A

5 points each for 50 total points