Correct answers to questions 1 through 5 are worth 3 points each.

1. Identify the nutrient responsible for the symptom shown. ________________

2. Identify the nutrient responsible for the symptom shown. ________________

3. Identify the nutrient responsible for the symptom shown. ________________

4. Identify the nutrient responsible for the symptom shown. ________________

5. Addition of K⁺ fertilizer resulting in a decrease in the uptake of Mg²⁺ by plants is an example of the effect of
   a) positional availability.
   b) chemical availability.
   c) physiological availability.

Correct answers to questions 6 through 11 are listed behind each question.

6. List the macronutrients (as defined in class) in the forms taken up by plants. (8 points)

7. List the micronutrients that are taken up by plants as anions in the forms taken. (6 points)

8. Briefly describe the differences between plant sap analysis and plant tissue analysis. (5 points)
9. Please describe the concepts of correlation and calibration as used in soil testing (6 points)

10. List 3 ways that nutrients move in soil to plant roots. (6 points)

11. Explain the philosophical difference between traditional soil sampling and grid soil sampling (precision agriculture). (4 points)