**SOIL 4234 Laboratory #12**

**Precision Ag Pre-Lab (5 points)**

**Due Wednesday, November 14th at the beginning of lab**

Student\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Lab\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

TA\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. (1 point) The name of the crop sensor developed by Plant and Soil Sciences and Biosystems and Agricultural Engineering researchers is known as the:

a. Crop Circle

b. GreenSeeker

c. SPAD Meter

d. Wild Bill’s Fertilize Machine

2. (1 point) Write the equation for calculating the normalized difference vegetation index (NDVI).

3. (1 point) The mid-season sensor comparison of the non-N limiting plot compared to the N-limiting plot is known as the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

4. (1 point) List four versions of reference strips that have been utilized in Oklahoma.

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5. (1 point) Look at the Nitrogen Management Plot diagram for the area used last year. Using what you should have learned about C and N cycling, what fall residue treatment (2 tons/acre alfalfa straw, 1 ton/acre wheat straw, 2 tons/acre wheat straw, 4 tons/acre wheat straw) could likely have wheat displaying nitrogen deficiency symptoms? Why?