BIO 130 MODULE 1 APPLICATION QUESTIONS Name: _Maya Scriven__

1. State THREE characteristics of a good hypothesis. (25) 1). Logical 2). ECurrent Information 3). Testable
2. The following statements are found in a student's notebook. Identify each of the following as an observation (O), a hypothesis (H), or an experiment (E): (25)

a. "Today I placed two tomato seedlings in the garden, and two more in a closet. I will give all the plants the same amount of water and fertilizer." _(E)_____

b. "After 50 days, the tomato plants in the garden are 3 ft high with green leaves. The plants in the closet are 8 in. tall and yellow." _(O)_____

c. "Tomato plants need sunlight to grow. __(H)_____

3. The five characteristics of life are: A. Metabolic Process B. Responsive Process C. Generative Process D. Control Process E. Unique Structural Organization. Read the following statements and identify each one as one of the 5 life processes. You may indicate your answer by writing the letter A, B, C, D, or E beside each statement. (25)

1. A baby grows into a young adult____(C)_____.

2. Eating and digesting a hamburger. ___(A)_____

3. Producing energy within the body using food and oxygen. __(D)_____

4 . Forming of a complex multicellular organism from cells. ___(E)_____

5. A cut stem of a strawberry plant grows into a new strawberry plant. __(C)_____

6. Poor performance in coursework leads to poor grades. __(B)_____

7. Trapping sunlight energy to produce sugar. __(A)_____

8. Exposure to sun causes sweating. __(B)_____

9. Several organs producing Organ System. _(E)_____

10. Change in the heritable characteristics of biological populations over successive generations. _(B)_____

4. Define Pseudoscience. Give one example. (25)

Pseudoscience (4) is defined as a deceptive practice that uses the language of science to convince people into thinking that a claim has scientific validity. Pseudoscience may interpret scientific facts to deceive. Marketing claims of nutritional supplements. Marketing claims of organic foods.