

Student Name: _____

Date: _____

Section 1: Multiple Choice

1. Which variable is deliberately manipulated?

- Dependent
- Controlled
- Independent
- Responding

2. A null hypothesis states:

- Experiment will succeed
- No relationship between variables
- IV causes change
- All trials equal

3. Statistical significance means:

- Results are large
- Results unlikely due to chance
- Experiment repeated
- Hypothesis correct

4. Blinding in an experiment prevents:

- Observer bias
- Equipment malfunction
- Uncontrolled variables
- Sample size problems

5. Precision is best defined as:

- How close to true value
- How repeatable the measurement is
- How large the sample is
- How fast data collected

Section 2: Short Answer

1. Explain the difference between accuracy and precision. Give one example of each.

2. Why is a large sample size important in scientific experiments?

3. Design an experiment to test: Does caffeine affect reaction time? Include hypothesis, IV, DV, 2 constants.

Multiple Choice Answers:

1. C
2. B
3. B
4. A
5. B