

Quiz # 4  
Chapter 6 and 7  
Suggested Answers  
Econometrics 06216

Name \_\_\_\_\_

**Professor: Julio César Alonso**

- Choose the **MOST CORRECT** answer
  - You have 5 minutes to solve out this quiz
1. You can not estimate a model by OLS (without doing modifications) that is:
    - a. **Linear in the independent variables but not in the coefficients.**
    - b. Linear in the coefficients but not in the independent variables.
    - c. Linear in the dependent variables, but not in the independent variables.
    - d. All of the above could be estimated.
    - e. None of the above could be estimated.
  
  2. A "good" estimator for  $\beta$  is:
    - a.  $\hat{\beta} = [X^T X]^{-1} X^T Y$
    - b.  $\hat{\beta} = [X^T X] X^T Y$
    - c.  $\hat{\beta} = [XX^T] X^T Y$
    - d. None of the above
  
  3. If you want to test if one independent variable influences the dependent variable, you:
    - a. **Make a significance test.**
    - b. Make a significative test.
    - c. Have to use a Chi-square test.
    - d. B and C.
  
  4. A problem that is present in the  $R^2$  is that:
    - a. **Gets higher with the inclusion of independent variables.**
    - b. Gets lower with the inclusion of independent variables.
    - c. It's lower than the adjusted coefficient of determination.
    - d. It's higher than the adjusted coefficient of determination.
  
  5. A p-value of 0.05, for a t-test implies that:
    - a. The area in each tail is 0.05.
    - b. The area in one of the tails is 0.05.
    - c. The sum of each of the three tail's area is 0.05.
    - d. **None of the above.**

