

Quiz # 4

Chapter 6 and 7

Suggested Answers

Group 1

Econometrics 06216

Name _____

- Choose the most correct answer
- You have 5 minutes to solve out this quiz

1. You **cannot** estimate a model by OLS (without doing modifications) that is:

- Linear in the coefficients but not in the independent variables.
- Linear in the dependent variables, but not in the independent variables.
- Linear in the independent variables but not in the coefficients.
- None of the above could be estimated.

Answer c

2. The adjusted coefficient of determination is calculated in order to:

- Make comparisons between models with different number of regressors
- Make comparisons between models with different dependent variable.
- The coefficient of determination is definitely a bad estimator.
- All of the above

Answer a

3. The following is a Gauss-Markov assumption in matrix form:

- $\hat{\beta} = [X'X]^{-1} X'Y$
- Estimate If the estimator is unbiased, all the variation comes from estimation errors.
- If the estimator is biased, all the variation comes from estimation errors.
- $E[\varepsilon\varepsilon'] = mI$
- None of the above.

Answer d

4. In a multiple regression model with intercept, we can affirm that:

- The R^2 is larger number than 1.
- The OLS estimators are efficient
- The OLS estimators are biased.
- The OLS residuals always sum to zero..

Answer d

5. The Chow statistic follows a distribution:

- Normal distribution in big samples due the central limit theorem.
- A chow distribution.
- Chi square distribution.
- None of the above.

Answer d