

**Quiz #5**  
**Econometría 06216**

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INSTRUCCIONES:

- Escoja la opción más adecuada.
- Usted cuenta con 5 minutos para resolver este quiz

1. The relationship between the R squared and the F for the equation is as follows:
  - a. a large R squared must mean a large and significant F test.
  - b. R squared goes up when we add variables but the statistical significance Of the F ratio may go down
  - c. All of the above.
  - d. None of the above.

Answer (c)

2. In the context of a linear regression model, a computed F-statistic will be:
  - a. positive if the null hypothesis is true.
  - b. negative if the null hypothesis is false.
  - c. positive in all cases.
  - d. of either sign whether the null is true or false, due to the effects of random sampling.

Answer (c)

3. The Chow statistic follows a distribution:
  - a. Normal distribution in big samples due the central limit theorem.
  - b. A chow distribution.
  - c. Chi square distribution.
  - d. None of the above.

Answer (d)

4. In order to perform the chow test, you must know:
  - a. The R squared of the all sample regression.
  - b. The fracture point of the sample.
  - c. The global F critical value for the restricted and unrestricted regression
  - d. None of the above.

Answer (b)

5. Consider the model  $y = \beta_0 + \beta_1 X + e$  where  $\beta_1$  is scalar and the null hypothesis  $H_0 : \beta_1 = 0$ . This hypothesis can be tested at the 5% level of significance:
  - a. either with a t-test or an F-test, but the conclusions may differ.
  - b. either with a t-test or an F-test, and the conclusions will be the same
  - c. with a t-test only.

- d. with an F-test only.

Answer (b)