

## Quiz #5

## Econometría 06216

Nombre: \_\_\_\_\_

Profesor: Julio César Alonso

INSTRUCCIONES:

- Escoja la opción más adecuada.
  - Usted cuenta con 5 minutos para resolver este quiz
1. The F Test for the equation is which of the following::
    - a. constructed from the sum of squared residuals and degrees of freedom for the model.
    - b. a test that the R squared is significantly different from zero.
    - c. a) and b) are correct.
    - d. None of the above.

Answer (c)

2. To In the context of linear regression, an F-test is used when the null hypothesis Involves:
  - a. more than a single coefficient.
  - b. an inequality sign.
  - c. more than a single “=” sign.
  - d. unknown parameter values.

Answer (a)

3. A linear regression model has been estimated using a very large sample and an F-statistic for a certain hypothesis has been calculated to be -4.5 (the level of significance is 5%):
  - a. The hypothesis is not rejected because  $-4.5 < 0$ .
  - b. The hypothesis is rejected because  $-4.5 < -1.96$ .
  - c. The F-statistic has not been calculated correctly.
  - d. There is insufficient information to determine the outcome of the test.

Answer (c)

4.  $F(m,n)$  has an F-distribution with  $m$  and  $n$  degrees of freedom. The expected value of F is:
  - a.  $m/n$ .
  - b.  $n/m$ .
  - c. 1.0.
  - d. approximately 1.0.

Answer (d)

5. In one of the next restrictions the F test is not applicable for the model  $y = \beta_1 + \beta_2 X_1 + \beta_3 X_2 + e$ :

- a.  $\beta_1 = \beta_2 / (1 + \text{Ln}(\bar{X}_1))$ .
- b.  $\beta_1 = \beta_2 (1 + \text{Ln}(\bar{X}_2))$
- c.  $\beta_1 = \beta_2 (1 + \text{Ln}(\bar{X}_1)) + \beta_3$ .
- d. None of the above.

Answer (d)