Quiz #4

Regresión Múltiple

Econometría 06216

Nombre: ____________________________

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INSTRUCCIONES:

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

1. If the error terms are linearly independent among themselves therefore:
   a. $\rho\left(\varepsilon_i, \varepsilon_j\right) = 0$.
   b. The error term is autocorrelated.
   c. Forecasting future error terms is feasible.
   d. All of the above.

Answer a).

2. In the estimated model with N observations: $\hat{Y} = \hat{\alpha}_0 + \hat{\alpha}_1 X_1 + \hat{\alpha}_2 X_2 + \hat{\alpha}_3 X_3$ the number of degrees of freedom for a t -test is:
   a. N - 3.
   b. N - 1
   c. N
   d. None of the above.

Answer d).

3. Given the $H_0 : \beta_3 = 2\beta_1$ and the $H_A : \beta_3 \neq 2\beta_1$, is possible to affirm:
   a. If the null hypothesis is not reject the F statistic is close to 1
   b. If the null hypothesis is reject the F statistic is close to 0
   c. If the null hypothesis is not rejected the F statistic is small
   d. None of the above.

Answer d).

4. Given the estimated model: $\hat{Y} = \hat{\alpha}_0 + \hat{\alpha}_1 X_1 + \hat{\alpha}_2 X_2 + \hat{\alpha}_3 X_3$, if $\hat{\alpha}_1$ is not statistically significantly different from zero:
   a. We can drop the variable X_1 from the model without any consequences in the parameters
   b. The critical t statistic's p-value for $\hat{\alpha}_1$ is above 10% of significance
   c. Based on the economic theory, the X_1 variable can be dropped from the model to improve the precision of its estimates
   d. None of the above

Answer b).

5. A log-log specification is preferred ex ante because:
    a. They always provide a better fit to the data.
    b. They are easier to estimate.
    c. Slopes can be interpreted as (constant) elasticities.
    d. A negative logarithm cannot be taken.

Answer c).