Quiz #8

Heteroscedasticidad

Econometría 06216

Nombre: ___________________________

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INSTRUCCIONES:
- Escoja la opción más adecuada.
- Usted cuenta con 5 minutos para resolver este quiz
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1. Which of the following assumptions of the Gauss Markov theorem is violated in presence of heteroskedasticity:
   a. $Var(\hat{\varepsilon}) = \sigma^2$
   b. Between all the error terms exists the same serial correlation
   c. $E(\hat{\varepsilon}) = \varepsilon$
   d. None of the above

Answer a).

2. If the error term is heteroskedastic, then the OLS estimators are:
   a. Biased and efficient.
   b. Unbiased and inconsistent.
   c. Biased and inefficient.
   d. Unbiased and inefficient.

Answer d).

3. Suppose that the variance of the error term is given by $\sigma_i^2 = \sigma^2 Z_i^{-1/2}$. Therefore the weight given to each observation employing the Weighted Least Squares (WLS) will be:
   a. $Z_i^{1/2}$.
   b. $Z_i^{1/4}$.
   c. Z_i .
   d. $1/Z_i^{1/4}$.

Answer b).

4. Under the null hypothesis of no heteroskedasticity, the Goldfeld – Quandt test statistic is close to:
   a. Minus one.
   b. Zero.
   c. One.
   d. Two.
   e. Answer c) .

5. The WLS method.
   a. Is a special case of OLS.
   b. Assigns a weak influence to the small values of the dependant variable and a strong influence to the greatest values of the dependant variable.
   c. Assigns a lighter weight to the observations where the data presents loudest noise, and more weight to the observations where the data presents minor noise.
   d. None of the above.

Answer c)