Quiz #11

Modelos Logit y Probit

Econometría 06216

Nombre: _____

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

1. If you use the OLS method to estimate a model with a dependent dummy variable:
   a. The estimates will be consistent and unbiased.
   b. The OLS estimates are unbiased and present constant variance.
   c. a) and b) are correct.
   d. None of the above.

Answer c).

2. A latent variable is:
   a. A dummy dependent variable.
   b. A dummy independent variable.
   c. A variable we cannot observe.
   d. A discrete dependent variable used in a maximum likelihood model.

Answer c).

3. Which of the following assumptions related to the distribution of the error term corresponds to a logit model.
   a. The error term follows a normal distribution.
   b. The error term follows a logistic distribution.
   c. The error term follows a chi-square distribution.
   d. None of the above.

Answer a) .

4. The difference between a logit and probit model is:
   a. The estimation method.
   b. The assumption on the error term behavior.
   c. There is no difference.
   d. (a) and (b) are correct.

Answer b)

5. Comparing the Maximum Likelihood Estimation (MLE) of unknown parameters with the Ordinary Least Squares (OLS) estimation of unknown parameters, which of the following statements is false?
   a. OLS chooses the best-fitting line by minimizing the sum of squared vertical deviations of each Y value from the line that is chosen.

   b. MLE chooses the best-fitting line by maximizing the logarithm of the joint probability of observing the n independent observations on Y in the sample.
   c. If we assume that the errors in a typical regression model are normally distributed, then the best-fitting line by MLE will have exactly the same intercept and slope as the best-fitting line by OLS.
   d. MLE can be considered as a special case of OLS methods.

Answer d)