Quiz #6

Econometría 06216

Nombre: _____

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

1. I want to test whether a group of three dummy variables to represent one feature of my model, is statistically significant as a group (e.g. if it was the influence of appearance I might use dummies for height, weight and looks). Should I:
   a. Decide by looking at how big the R squared is.
   b. Decide by adding up the coefficients of the dummies to see if the total is more than 1.
   c. Decide the group is important only if all the individual 't' ratios are statistically significant.
   d. Conduct an 'F' test on the restriction that all three coefficients simulateously zero.

Answer (d)

2. To account for seasonality in a linear regression model in presence of quarterly data you could:
   a. Include an intercept plus four seasonal dummies.
   b. Include an intercept plus three seasonal dummies.
   c. Add a series consisting of 1,2,3,4 repeating.
   d. None of the above.

Answer (b)

3. Which of following statements are true?:
   a. A dummy variable can be used to test hypotheses.
   b. The inclusion of a dummy variables does not alter the properties of the OLS model.
   c. You can not have more than four dummy variables in a regression equation.
   d. a) and b) are correct.

Answer (d)

4. Which of the following is an example of a dummy variable?:
   a. A variable coded as 0 if the subject is male and 1 if is female.
   b. A variable coded as 0 if someone was over 16 years old and 1 if they were under 16 years old.
   c. A variable coded as 1 if a person was the first born child in their family and 0 if they were the second or later child.
   d. All of the above.

Answer (d)

5. Given the following model:

$$y_i = \alpha_0 + \alpha_1 x_{i1} + \alpha_2 (x_{i1} D_i) + \alpha_3 D_i + \varepsilon_i$$

if α_2 and α_3 are different from zero, then.
   a. Both the slope and intercept differ for observations whose D equals 1 from those observations whose D equals zero.
   b. For observations whose D equals 1, the intercept is $(\alpha_0 + \alpha_3)$.
   c. One could say that the sample should be split between D equal to 1 and D equal to 0 observations.
   d. All of the above.

Answer (d)