

Quiz # 5
Chapter 6
Suggested Answers
Econometrics 06216

Name: _____

- Choose the **MOST CORRECT** answer
 - You have 5 minutes to solve out this quiz
1. You have been hired to conduct an investigation about the econometrics' score for Asian and Female students. Your econometricians design the next model: $Y_i = \beta_0 + \beta_1 D_1 + \beta_2 D_2 + \varepsilon_i$, where D_1 takes the value of 1 if it's Asian and 0 otherwise, and D_2 takes the value of 1 if it's female and 0 otherwise. The model does allow you to:
 - a. Determine the ceteris paribus difference in the average score for an Asian.
 - b. Determine the ceteris paribus difference in the average score for a female.
 - c. Determine the ceteris paribus difference in the average score for an Asian female.
 - d. **All of the above.**
 - e. None of the above.
 2. Suppose you will prove, using Dummy variables, that the slope of the consumption function in Colombia has changed after the economic reforms of 1991 (where D takes the value of 1 if $t > 1991$ and 0 otherwise) with the null hypothesis: _____ and a regression model like: _____
 - a. $H_0: \beta_1 + \beta_2 = 0, C_i = \beta_0 + \beta_1 D_1 Y_i + \varepsilon_i$
 - b. $H_0: \beta_1 + \beta_2 = 0, C_i = \beta_0 + \beta_1 Y_i + \beta_2 D Y_i + \varepsilon_i$
 - c. $H_0: \beta_2 = 0, C_i = \beta_0 + \beta_1 Y_i + \beta_2 D Y_i + \varepsilon_i$
 - d. None of the above.
 3. Dummy variables will be used in the next situations except for:
 - a. Difference in econometrics' score, between man and woman.
 - b. Difference in the marginal product of Labor between companies
 - c. Regime shift.
 - d. Explain a stochastic variable with a regression model.
 - e. All of the above
 - f. **None of the above.**
 4. Let D be a dummy variable that takes the value of 1 if it's a girl, and 0 if it's a boy. X be the lunch's price in school, and Y be the amount of money they spend buying candies. In the following model, α_2 represents:

$$Y_i = \alpha_0 + \alpha_1 X_i + \alpha_2 D + \varepsilon_i$$
 - a. The amount of extra money spent by a boy in comparison with a girl, for each dollar extra in his money to have lunch.
 - b. The amount of extra money spent by a girl in comparison with a boy, for each dollar extra in her money to have lunch.
 - c. The amount of money that a boy spent in candies.
 - d. **None of the above**
 5. In the regression model $Y_i = \alpha_0 + \alpha_1 D X_i + \alpha_2 X_i + \varepsilon_i$, where D is a dummy variable:
 - a. **The dummy modifies the slope of the regression line.**
 - b. The dummy modifies the intercept with axis X of the regression line.
 - c. The dummy doesn't modify the graphic of the regression line.
 - d. The dummy rotates some degrees the regression line.

- e. None of the above.