## Quiz # 7 Chapter 10 Suggested Answers

- Choose the **MOST CORRECT** answer
- You have 5 minutes to solve out this quiz
- 1. Suppose you have the next model:  $Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \varepsilon_i$  and you find out that the p-value corresponding to the significance test of  $\beta_2$  is 0.001. In presence of **no** homokedasticity, you may conclude:
  - a.  $\beta_2$  is statistically significant.
  - b.  $\hat{Y}_i$  increases in  $\hat{oldsymbol{eta}}_2$  when  $X_{2i}$  increases in one unit.
  - c.  $\beta_2$  is not statistically significant.
  - d. None of the above.
- 2. For both heteroskedastic and homoskedastic disturbances, the distribution of  $\hat{\beta}$  collapses around the true value as n grows because:
  - a. The Central Limit Theorem.
  - b. OLS estimators are unbiased ergo consistent.
  - c. OLS estimators are BLUE.
  - d. All of the above.
  - e. None of the above.
- 3. About the OLS estimator of the variance of the coefficients of certain model with  $\sigma_i^2 = \sigma^2 X_i^2$ , you can affirm that:
  - a. It remains unbiased but inefficient.
  - b. It is biased and inconsistent.
  - c. It is correct
  - d. None of the above.
- 4. Which of the next test for Heteroskedasticity is the most general?
  - a. Breusch-Pagan test
  - b. Goldfeld-Quandt test.
  - c. Barro test
  - d. White test.
  - e. None of the above.
- 5. About White's Heteroskedasticity variance estimator, we can affirm that:
  - a. Although consistent It is biased.
  - b. It is better than the OLS estimator in presence of no Heteroskedasticity.
  - c. It is unbiased and consistent.
  - d. None of the above.