## Quiz #7 Chapter 10 **Suggested Answers**

Name

- Choose the MOST CORRECT answer .
- You have 5 minutes to solve out this quiz
- 1. ¿Which of the Gauss-Markov assumptions is violated, when there is heteroskedasticity?
  - a.  $E(\varepsilon_i) = 0$
  - b.  $Var(\varepsilon_i) = \sigma_i^2$
  - c.  $Var(\varepsilon_i) = \sigma I$
  - d. Each  $X_i$  is fixed across samples.
  - e. None of the above

Is correct if you choose option c, because  $\sigma$  is a constant.

- 2. In presence of heteroskedasticity, the OLS estimators:
  - a. Remain BLUE
  - Remain consistent b.
  - c. Remain efficient
  - d. All of the above.
  - e. None of the above.
- 3. The

test, let you know the exact form of the heteroskedasticity.

- a. Golfend-Quandt
- b. Breush-Pagan
- c. White
- d. All of the above
- e. None of the above.
- 4. One way to correct heteroskedasticity, is applying an especial case of GLS estimators, in this case:
  - a. T-tests and F-tests based on GLS estimators don't have the same properties that OLS under Gauss-Markov conditions.
  - b. T-tests based on GLS estimators have the same properties that OLS under Gauss-Markov conditions.
  - c. F-tests based on GLS estimators have the same properties that OLS under Gauss-Markov conditions.
  - d. T-tests and F-tests based on GLS estimators have the same properties that OLS under Gauss-Markov conditions.
  - e. None of the above.
- 5. If  $var(\varepsilon_i) = \sigma^2 X_i^2$ , the correction by FGLS will be done by dividing the entire equation by:
  - a.  $X_i^2$
  - **b.**  $X_i$
  - c.  $\frac{1}{X_i^2}$

  - d.  $\frac{1}{X_i}$
  - e. None of the above.