

Quiz # 3
Chapter 3, 4 and 5
Suggested Answers
Group 3
Econometrics 06216

Name _____

- Choose the most correct answer
 - You have 5 minutes to solve out this quiz
1. Casual observation reveals that people's food expenditures rise as their incomes rise; people with higher incomes spend more money on food. For the model $F_i = \beta_0 + \beta_1 I_i + \beta_2 I_i^2 + \varepsilon_i$, it is possible to affirm:
 - a. $\hat{\varepsilon}_i$ represents the error term.
 - b. $\hat{\varepsilon}_i$ represents the distance between the data point and the true line.
 - c. $\hat{\varepsilon}_i$ estimates the error term.
 - d. b and c are correct.
 - e. All of the above.
 2. For the model: $\ln(\text{food bought}_i) = \beta_0 + \beta_1 \ln(\text{income}_i) + \varepsilon_i$
 - a. β_1 is the income elasticity of food demand
 - b. β_1 is the percentage change in food demand for a one unit change in income.
 - c. β_1 is the percentage change in the quantity demand in food, in response to a one percent change in income.
 - d. a. and c.
 - e. All of above
 3. An interpretation of $r^2=0.5$ for a linear simple linear regression of Y on X is: The next time X changes, Y-variations will be:
 - a. Most
 - b. Half
 - c. Very little
 - d. One quarter
 - e. None of this
 4. β is BLUE if:
 - a. β is the unbiased linear estimator that have the smallest variance.
 - b. β is the most efficient linear unbiased estimator of the slope of a DGP
 - c. β is the best linear unbiased estimator.
 - d. All of above.
 - e. None of this.
 5. If the correlation between the age of an auto and the money spent for repairs is +0.90:
 - a. 81% of the variation in the money spent of repairs is explained by the age of the auto.
 - b. 81% of money spent for repairs is unexplained by the age of the auto.
 - c. 90% of the money spent for repairs is explained by the age of the auto.
 - d. None of the above