ASSIGNMENT

(1) Give classical two Variables linear model. How would you estimate the parameters of the model?

(2) Explain clearly trivariate linear regression model. Explain the concept of multiple and partial regression coefficients.

(3) What is adjusted R^2? How would you present it in terms of R^2? How would you use $\bar{R}^2$ for comparison between several regressions models that are fitted?

(4) What is Econometrics? Mention clearly the concepts of cross sectional data, time series data and panel data giving illustrations.

(5) (1) Interpret the following result

(a) 99% confidence interval for β coefficient is (0.32, 0.49)

(b) R^2 = 0.83

(c) 95% confidence interval for α is (3.023, 4.19)

(2) Interpret the following model output

$$Y = 1.68 + 0.38X_2 - 0.45X_3 + 0.71X_4$$

S.E. = (0.07) (0.29) (0.05) (0.93)

t = 13.9 5.23 1.79 2.35

n = 27 R^2 = 0.6837 F =10.84