UVA WELLASSA UNIVERSITY OF SRI LANKA
FACULTY OF ANIMAL SCIENCE & EXPORT AGRICULTURE

BSc in Export Agriculture
Fourth Year First Semester Examination – July/ August 2018

Econometrics (EAG 402-2)
Section II – Essay Questions

Instructions:
Answer **all** questions in the given booklet.
No. of questions : Two (02)
No. of pages : Two (02)
Time : One (01) hour
Total marks allocated : 60%

01.

(I) What is meant by Data? (08 marks)

(II) Distinguish between;

a) Panel Data and Pooled Data (08 marks)

b) Primary Data and Secondary Data (08 marks)

c) Cross Sectional Data and Time Series Data (08 marks)

(III) Briefly explain the following types of data

a) Continuous data (05 marks)

b) Discrete data (05 marks)

c) Nominal data (05 marks)

d) Ordinal data (05 marks)

e) Ratio data (05 marks)

f) Interval data (05 marks)

(IV) List three (03) graphical and/or tabular techniques to present each of the following data types

a) Nominal data (09 marks)

b) Interval data (09 marks)

(V) Provide two (02) practical examples for each of the following data types

a) Primary data (04 marks)

b) Secondary data (04 marks)

c) Panel data (04 marks)

d) Time series data (04 marks)

e) Pooled data (04 marks)

02.

(I) Distinguish between;

a) Correlation and Regression (10 marks)

b) Regressand and Regressor (10marks)

c) Ordinary Least Square (OLS) estimator and Maximum Likelihood Estimator (MLE) (10 marks)

d) R^2 and Adjusted R^2 (10 marks)

(II) What are the assumptions made in OLS regression? (10 marks)

(III) Write short notes on the followings; (Hint: You should briefly explain how to correct each issue)

a) Autocorrelation (10 marks)

b) Multicollinearity (10 marks)

c) Heteroscedasticity (10 marks)

(IV) Suppose someone has presented the following regression results for your consideration

$$\widehat{\boldsymbol{Y}}_{\boldsymbol{t}} = \mathbf{2.6911} - \mathbf{0.4795}\boldsymbol{X}_{\boldsymbol{t}}$$

Where,

$Y =$ Coffee consumption in Sri Lanka (cups per person per day)

$X =$ Retail price of coffee (rupees per kilogram)

$t =$ Time period

a) Is this a time series regression or a cross-sectional regression? (05 marks)

b) Sketch the regression line. (05 marks)

c) What is the interpretation of the intercept in this example? Does it make economic sense? (05 marks)

d) How would you interpret the slope coefficient? (05 marks)

[End of Section II]