

EASTERN UNIVERSITY, SRI LANKA

FOURTH YEAR FIRST SEMESTER EXAMINATION IN AGRICULTURE – 2011/2012

AEC 4105 – BASIC ECONOMETRICS (REPEAT)

Answer ALL Questions

Time allowed: 02 hours

01)

a) What do you mean by “Regression Analysis”?

b) Define the following:

i) Simple regression

ii) Multiple regression

c) List the steps of “Methodology of Econometrics”?

d) Write down the **estimated equation** for the following results shown:

Model	Coefficients		t	Sig.
	B	Std. Error		
1 (Constant)	3870.379	9976.521	0.388	0.699
Amount of agricultural land	4831.818	695.230	6.950	0.000

a Dependent Variable: Farm Income (Rs.)

02) Write **Short Notes** about the following:

a) R squared (R^2)

b) OLS (Ordinary Least Square) estimators

c) Hypothesis testing

d) Linearity assumption

03)

a) Explain the difference between **cross sectional data** and **time series data**, Give examples of each

b) Give examples for each of the following variables:

i) Continuous scale variables

ii) Nominal scale variables

iii) Ordinal scale variables

c) What do you mean by **Dummy Variables**? What are the rules for including dummy variables in regression?

04)

a) List the **assumptions** required for multiple regression analysis.

b) Briefly explain the situations of **normality** and **multicollinearity**.

c) Write down the determinants (at least one) for the given dependent variable:

Dependent variable	Independent variables (determinants)
1. Crop yield	----- -----
2. Demand	----- -----
3. Consumption expenditure	----- -----