

EASTERN UNIVERSITY, SRI LANKA

FIRST YEAR FIRST SEMESTER EXAMINATION IN AGRICULTURE – 2013/2014

(Sep/2015)

EC 1101 – PRINCIPLES OF AGRICULTURAL ECONOMICS

Time allowed: 2 hours
Answer ALL questions

01)

- a) i) What are the characteristics of “Microeconomics”?
- ii) Discuss in detail, how do you make use of “Marginal Analysis” concept in economics.
- b) Evaluate the following statements and say whether they are True or False (show all relevant works/ calculations).
- i) A fall in the price of a commodity, holding everything else constant (*ceteris paribus*), results in an increase in the quantity demanded.
- ii) If the percentage increase in the quantity of a commodity demanded is smaller than the percentage fall in its price, the co-efficient of price elasticity of demand is greater than 1.
- iii) If the wheat produced by a farmer valued of Rs.1, the flour produced from wheat valued Rs.3 and the bread produced from flour is valued Rs.8, then the total GDP of this production process is Rs.12.

02)

- a) i) Define the following:
- Factors of production
 - Complementary products
- ii) Illustrate the linkages of Financial, Government and Overseas sectors in the Circular Flow Income Model of an economy.

b) i) Clearly illustrate the condition of “**Market Equilibrium**” for a commodity.

ii) Suppose that an individual’s demand function for a commodity X is $Q_{d_x} = 8 - P_x$. There are 100 individuals in the market. Suppose the single producers supply function for commodity X is $Q_{s_x} = 40 + 20P_x$. If there are 100 identical producers in the market, calculate the **market equilibrium price and equilibrium quantity**.

Due to the introduction of new technology, the new single producers supply function is found to be $Q_{s_x} = -10 + 20P_x$. Find the **new market equilibrium price and the quantity**. Comment on the changes of the values estimated.

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

- a) Income elasticity of demand
- b) Production Possibility Curve
- c) Consumer Equilibrium and Market Demand

04)

a) i) Define the following:

- Inflation Rate
- Deflation Rate

ii) Assume that the economy only produces bananas and durians. The price for a banana is Rs. 20 in 2000, whereas the price for a durian is Rs. 30. In the same year the economy produced 100 bananas and 50 durians. In 2005, the price for a banana goes up to Rs 30, whereas the price for a durian is Rs 40 at the same production levels. Calculate the **real and nominal GDP** of this economy and comment on the real GDP growth rate.

b) i) Write down the **conditions for optimum level of input use** in production.

ii) The production function for maize is given as $Y = 30k + 3k^2 - 1/2k^2$, where k is the labour input, while keeping the other input constant, if you are given the price of maize to $P_y = \text{Rs.}2$ per unit and the labour charge Rs.10 per unit find the optimum level of labour use.