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

BSc in Export Agriculture
Bachelor of Animal Science
BSc in Tea Technology and Value Addition
BSc in Palm and Latex Technology and Value Addition

First Year Second Semester Examination – February/March 2020

Economic Thinking in Agriculture (EAG 121-3)
Section II – Essay Questions

Instructions:
Answer **all** questions in the given booklet.
No. of questions : Four (04)
No. of pages : Three (03)
Time : Two (02) hours
Total marks allocated : 50%

01. Write short notes on the following. Use graphical illustrations where necessary.

(I) Coarse Theorem (25 marks)
(II) Effect of harvesting on fish stock (25 marks)
(III) Efficiency in production in Pareto sense (25 marks)
(IV) The process of moving from one long-run competitive equilibrium position to another (25 marks)

02.

(I) Define the followings;
a) Law of Demand (10 marks)
b) Law of Supply (10 marks)
c) Income Elasticity of Demand (10 marks)
d) Elasticity of Supply (10 marks)

(II) The equation for the demand curve for Tea in Sri Lanka is

$$\boldsymbol{Q_D = 350 - (P/2)}$$

The equation for the supply curve for Tea in Sri Lanka is

$$\boldsymbol{Q_S = -200 + 5P}$$

a) Sketch the demand and supply functions (20 marks)

b) Calculate equilibrium price and quantity in domestic potato market in Sri Lanka (10 marks)

c) Calculate consumer surplus and producer surplus at equilibrium price (10 marks)

d) If the world market price is \$120 per Kilogram of tea, calculate producer surplus, consumer surplus and total welfare to the society. (20 marks)

03. Graphically show;

(I) how you derive the producer demand curve for inputs (25 marks)

(II) how you derive the demand curve from indifference curves (25 marks)

(III) short run equilibrium of a perfectly competitive firm assuming that it earns a normal profit (25 marks)

(IV) monopoly profits and losses (25 marks)

04.

(I) Define the "Production Function". (10 marks)

(II) Briefly explain the stages of production by taking the labor as the variable input. Use graphical illustrations where necessary. (40 marks)

(III) For the production function $\boldsymbol{Q = 6L^2 - L^3}$, fill in the given table (20 marks)

and state how much the firm should produce so that:

a) average product is maximized (7.5 marks)

b) marginal product is maximized (7.5 marks)

c) total product is maximized (7.5 marks)

d) average product is zero (7.5 marks)

L	Q	APP	MPP
0			
1			
2			
3			
4			
5			
6			

(L-Labour, Q – Output, APP- Average Physical Product, MPP – Marginal Physical Product)

[End of Section II]