

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 – December/January 2016/17

Principles of Agricultural Economics (EAG 131-3)
Economic thinking in Agriculture (EAG 121-3/0)

Section III – Essay Questions

Instructions:

Answer **all** questions.

No. of questions : Three (03)

No. of pages : Two (02)

Time : One (01) hour

Total marks allocated : 40%

1.

- (I) Define the term “Elasticity of Production”. (10 marks)
- (II) What can be said about the elasticity of production, assuming the classical production function, at the output when; (10 marks X 6 = 60 marks)
- MPP is at maximum?
 - APP is at maximum?
 - MPP is zero?
 - $MPP = APP$?
 - MPP is negative?
 - MPP is less than APP?
- (III) Consider the production function $Y = 70 + 2X - 0.02X^2$
Find; (6 marks X 5 = 30 marks)
- MPP and APP functions
 - The level of X at which Y is maximum
 - The level of X at which APP is maximum

- d) the level of X at which MPP is maximum
- e) Calculate the elasticity of production when X = 10 and X=20

2.

- (I) What is meant by Demand? (20 marks)
- (II) List four (04) major demand shifters (20 marks)
- (III) Consider the following Demand and Supply functions of a commodity

$$P = 380 - 4.5Q_d \text{ and } P = 100 + 2.5Q_s.$$

Where **P** is the price of the commodity and **Q** is the quantity

- a) Find the equilibrium price and the quantity and sketch the functions in a graph (30 marks)
- b) Calculate the consumer surplus and the producer surplus. (10 marks)
- c) Assume that the world market price is 150. Therefore, government intends to import the commodity at that price. How much should the government import? (10 marks)
- d) Briefly explain what happens to the producer surplus and the consumer surplus if the government imports the commodity. (hint; no need of any calculation) (10 marks)

3. Distinguish between the followings;

- (I) Long run and short run
- (II) Iso cost line and budget line
- (III) Increasing returns to scale and decreasing returns to scale
- (IV) Price consumption curve and income consumption curve

(25 marks X 4 = 100 marks)

[End of the Section III]