



MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

P.O. Box 972-60200 – Meru-Kenya.

Tel: 020-2069349, 061-2309217. 064-30320 Cell phone: +254 712524293,

+254 789151411

Fax: 064-30321

Website: www.must.ac.ke Email: info@must.ac.ke

University Examinations 2013/2014

FIRST YEAR, FIRST SEMESTER EXAMINATIONS FOR DIPLOMA IN AGRICULTURE
AND
FIRST YEAR, FIRST SEMESTER EXAMINATIONS FOR CERTIFICATE IN
AGRICULTURE

BUS 0161: PRODUCTION ECONOMICS AND AGRICULTURAL MARKETING

DATE: APRIL 2014

TIME: 1 ½ HOURS

INSTRUCTIONS: Answer question *one* and any other *two* questions

QUESTION ONE – (30 MARKS)

- (a) Define the following terms as used in agricultural production and marketing:
- (i) Long run and short run time periods. (2 Marks)
 - (ii) Marginal physical production (MPP) and Marginal Rate of Substitution (MRS) (2 Marks)
 - (iii) Opportunity cost (1 Mark)
 - (iv) Economies of production (2 Marks)
 - (v) Elasticity of production (2 Marks)
 - (vi) Production function (2 Marks)
- (b) State five characteristics of agricultural production. (5 Marks)
- (c) In preparation for the holiday season, a farm decides to increase its labour input from 4,000 hours per week to 4,100 hours per week. In return productivity increases from 8,000 bags to 12,000 bags per year. Calculate the farm's average labour elasticity of output. (5 Marks)
- (d) State five roles played by the government in agricultural marketing. (5 Marks)
- (e) State five reasons why the supply of agricultural products is low in Kenya. (5 Marks)

QUESTION TWO – (15 MARKS)

Given the following production function $y = 5x + 0.05x^2 - 0.00x^3$

(a) Complete the following table. (7 Marks)

Input (x)	TPP (y)	APP	MPP
0			
10			
20			
30			
40			
50			
60			
70			
80			

Where;

TPP = Total physical product

APP = Average physical product

MPP = Marginal physical product

(b) Plot TPP against x. (2 Marks)

(c) Plot APP and MPP against x below the graph in (b). (4 Marks)

(d) Indicate the regions of the production function. (2 Marks)

QUESTION THREE – (15 MARKS)

(a) Explain the 4 P's of marketing. (8 Marks)

(b) Explain the factors that determine the supply of agricultural products. (7 Marks)

QUESTION FOUR – (15 MARKS)

Using isoquant and isorevenue curves, explain the least cost combination principle.

(15 Marks)

QUESTION FIVE – (15 MARKS)

Consumers are said to be the “king” of the production process. Using relevant examples, discuss this statement in relation to key production problems. (15 Marks)