# MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY 

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## University Examinations 2012/2013 <br> FIRST YEAR, SECOND SEMESTER EXAMINATIONS FOR CERTIFICATE/DIPLOMA IN AGRICULTURE

## BUS 0161: FARM ACCOUNTING AND AGRIBUSINESS MANAGEMENT

DATE: AUGUST 2013
TIME: $1 ½$ HOURS
INSTRUCTIONS: Answer questions one and any other two questions

## QUESTION ONE - (30 MARKS)

a. Define production function and explain the three ways of presenting the production function.
b. List the assumptions of the production function.
c. Distinguish between variable and fixed costs.
d. By use of relevant diagram, distinguish between iso-cost and budget line.
e. List the properties of a good packaging material.
f. Highlight the characteristics of Agricultural products.

## QUESTION TWO - 15 MARKS

Given that a given level of output Q can be produced using various combinations of factor inputs $\mathrm{X}_{1} \mathrm{X}_{2}$.

| $\mathrm{X}_{1} \mathrm{Kg}$ | 37 | 20 | 13 | 11 | 8 | 6.5 | 4 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathrm{X}_{2} \mathrm{Kg}$ | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 |

## Required:

a. Draw an iso-quant and an iso-cost, given that $\mathrm{P}_{\mathrm{x} 1}=\mathrm{Ksh} 60, \mathrm{P}_{\mathrm{X} 2}=\mathrm{Ksh} 30$
(10 Marks)
b. Estimate the optimal combinations of $\mathrm{X}_{1} \mathrm{X}_{2}$ units that minimizes costs of production.
(3 Marks)
c. Calculate the least cost.
(2 Marks)

## QUESTION THREE - 15 MARKS

You are provided with the following possible output combinations of products $\mathbf{Y}_{\mathbf{1}}, \mathbf{Y}_{\mathbf{2}}$. Given that the price of $Y_{1}=16 \$$, and $Y_{2}=39 \$$.

| Output $\mathrm{Y}_{1}$ | 0 | 7 | 12 | 18 | 22 | 25 | 30 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Output $\mathrm{Y}_{2}$ | 48 | 49 | 37 | 30 | 20 | 11 | 0 |

## Required:

a. On a suitable grid plot $Y_{2}$ against $Y_{2}$.
b. Using a suitable Iso-revenue curve establish the optimal $\mathbf{Y}_{\mathbf{1}}, \mathbf{Y}_{\mathbf{2}}$ combinations.
c. Calculate the optimal revenue possible.

QUESTION FOUR - 15 MARKS
Discuss the monopolistic market in the following areas:
a. Sources of monopoly power.
b. Characteristics
c. Profit maximization

## QUESTION FIVE - 15 MARKS

a. Explain the importance of grading of agricultural products.
b. Explain giving examples the 4 -ps in marketing.

