

**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**](http://www.must.ac.ke) **Email:** [**info@must.ac.ke**](mailto:info@must.ac.ke)

**University Examinations 2015/2016**

FIRST YEAR, SECOND SEMESTER EXAMINATION FOR CERTIFICATE IN AGRICULTURE

**BUS 0161: PRODUCTION ECONOMICS AND AGRICULTURAL MARKETING**

**DATE: AUGUST, 2016 TIME: 1 ½ HOURS**



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

**QUESTION ONE – (30 MARKS)**

1. Explain the various types of factor-product relationships. (5 Marks)
2. List the five management guidelines questions. ( 5Marks)
3. State and explain the various principles of substitution. (5 Marks)
4. State the factors to consider when choosing a marketing mix. (5 Marks)
5. Illustrate the various marketing channels of agricultural products. (5 Marks)
6. State the role of middlemen in agricultural market. (5 Marks)

**QUESTION TWO (15 MARKS)**

You are provided with the following output combinations of products and. Given that the price of = 30$, and = 20$

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Output | 0.24 | 10 | 14 | 18 | 22 | 25 | 27 |
| Output | 47 | 50 | 37 | 30 | 20 | 10 | 0.22 |

**Required:**

1. Identify any irrational combination. (2 Marks)
2. Define the relationship between Y1 and Y2 (2 Marks)
3. On a suitable grid draw an Iso-quant and an iso-revenue curve. (6 Marks)
4. What are the optimal combinations. (2 Marks)
5. Calculate MRTS at the optimal combination. (3 Marks)

**QUESTION THREE (15 MARKS)**

1. Explain the various classifications of Agricultural markets. (9 Marks)
2. Explain the factors to consider when choosing an appropriate means of transport.

(6 Marks)

**QUESTION FOUR (15 MARKS)**

The following table shows the technical relationship between input fertilizer and output in terms of bags of maize.

|  |  |  |  |
| --- | --- | --- | --- |
| Bags of fertilizer per acre | Total product/TPP  Bags of maize per acre | APP | MPP |
| 1 | 28 |  |  |
| 2 | 74 |  |  |
| 3 | 124 |  |  |
| 4 | 176 |  |  |
| 5 | 225 |  |  |
| 6 | 265 |  |  |
| 7 | 287 |  |  |
| 8 | 288 |  |  |
| 9 | 260 |  |  |
| 10 | 201 |  |  |

1. Completer the table (5 Marks)
2. On a suitable scale draw a production function showing TPP, APP and MPP(7 Marks)
3. Shade the rational region. (3 Marks)