

Uganda Martyrs University
Faculty of Agriculture

B. Agriculture I, Semester II Final Assessment: 2013 – 2014

Course Unit: Agricultural economics

10:00 am – 1:00pm

Date: 8th May, 2014

Instruction:

Question one is compulsory and choose any 3.

Do not write anything on a question paper

Time: 3 hours

Question 1

Table1: showing the demand schedule of Nakati in tonnes in Nakasero market over a period of ten years.

| Year | Quantity | Price in '000 | Income in' 000 |
|------|----------|------------------|-------------------|
| 1995 | 22 | 5 | 20 |
| 1996 | 20 | 9 | 20 |
| 1997 | 19 | 10 | 20 |
| 1998 | 16 | 12 | 17 |
| 1999 | 15 | 15 | 17 |
| 2000 | 13 | 17 | 17 |
| 2001 | 8 | 17 | 10 |
| 2002 | 7 | 20 | 10 |
| 2003 | 4 | 24 | 10 |

- a) Using an appropriate scale plot the demand curve of Nakati against price
b) Using the graph determine the amount of Nakati demanded when the cost/tonne is 7000/=; 13000/= and 19000/=
- c) A multiple regression of quantity demand against income of traders and price of Nakati gave the following out put

Summary of analysis

| Regression Statistics | |
|-----------------------|------------|
| Multiple R | 0.99618869 |
| R Square | 0.9923919 |
| Adjusted R Square | 0.98985587 |
| Standard Error | 0.63255803 |
| Observations | 9 |

Estimates of parameters

| Parameter | estimate | s.e. | t(6) | t pr. |
|-----------|----------|--------|-------|-------|
| Constant | 8.07 | 2.38 | 3.40 | 0.015 |
| Income | 0.8131 | 0.0932 | 8.73 | <.001 |
| Price | -0.4908 | 0.0700 | -7.01 | <.001 |

Using the output

- Develop an hypothesis for the response of demand for Nakati against income of traders and price of Nakati
- Write an equation to represent the response of the demand Nakati to price and income of traders.
- Using your knowledge of agricultural economics use the results to advise the LC V council on the implication of results to the production of Nakati in a District of your choice. (40 marks)

Questions 2

- With relevant diagrams discuss how price of farm products are determined.
- How can a cobweb theory help critical farmers to determine the level of farm production? (20 marks)

Question 3

- With examples, outline the factors which determine the supply of agricultural commodities.
- Why does peasant agriculture fail to conform to the normal supply curve?
- Advise a chairperson of LC3 in your sub-county on how to improve supply of agricultural commodities for an existing market of banana. (20 marks)

Question 4

With examples write short notes on the following terms and their application in agricultural production

- Demand
- Demand schedule
- Demand curve
- Derived demand
- Autonomous demand
- Cross demand
- Law of diminishing marginal utility (20 marks)

Question 5

- What is price elasticity of demand?
- The price of oranges fell from Sh. 2000/= to Sh. 1000/= in the first season of the year. The fall in price caused the quantity of goods demanded to increase from 150 metric tonnes to 250 metric tonnes. Calculate the price elasticity of oranges in the first season of the year.

- c. Outline the practical importance of elasticity of demand of agricultural products to an agricultural specialist. (20 mark)

Question 6

Agricultural economics is the study of how people take decisions and manages resources. Discuss (20 marks)

Question 7

What do you understand by the terms market failure and market efficiency?
Discuss the causes of market failure. (20 marks)

END