

## REGULAR UNIVERSITY EXAMINATIONS 2017/2018 ACADEMIC YEAR THIRD YEAR SECOND SEMESTER

## SCHOOL OF BUSINESS AND ECONOMICS BACHELOR OF SCIENCE IN AGRICULTURAL ECONOMICS AND RESOURCE MANAGEMENT

**COURSE CODE: ARE 361** 

COURSE TITLE: AGRICULTURAL PRICE ANALYSIS

DATE: 25<sup>TH</sup> APRIL, 2018 TIME: 08.30 – 10.30 AM

## **INSTRUCTIONS TO CANDIDATES**

• Question **ONE** is compulsory.

• Answer any other **THREE** questions.

This paper consists of 2 printed pages. Please turn over.

**1.** a) Explain the role of prices in organizing agricultural production. (6 Marks)

b) Differentiate between cyclical and seasonal price movements. (4 Marks)

c) Explain why the cobweb model is relevant for agricultural price forecasting.

(6 Marks)

**d)** Discuss the likely end results of the polyopoly market structure.

(5 Marks)

e) Suppose the market for milk is purely competitive with an industry demand curve expression Q = 500 - 3p and the short run supply schedule is, Q = -3 + 8p.

What are the equilibrium price and quantity in this market?

(4 Marks)

**2.** Discuss the economic functions of agricultural prices.

(15 Marks)

**3.** Discuss demand oriented price setting strategies.

(15 Marks)

4. The data below refers to real coffee prices (in KShs/Kg) between 2002 and 2017.

Year	Real prices	Year	Real prices
2002	117	2010	132
2003	116	2011	94
2004	100	2012	99
2005	93	2013	85
2006	98	2014	89
2007	105	2015	102
2008	92	2016	63
2009	87	2017	77

a) Compute the regression line defining the trend in real prices of coffee.

(11Marks)

- b) Estimate the forecasted price for coffee in the years 2018 and 2019. (4 Marks)
- **5.** Using the data provided in question 4 above;
  - a) Calculate cyclical deviation from the trend line using a 3 year moving average approach. (12 Marks)
  - **b)** Suppose the average trend is maintained, calculate the expected prices for the 3 year cycle beginning 2018. (3 Marks)

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