MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF AGRICULTURAL SCIENCES

DEPARTMENT OF AGRIBUSINESS MANAGEMENT AND TRADE

THIRD YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE IN AGRIBUSINESS MANAGEMENT

AGB 308: AGRICULTURAL PRICE ANALYSIS

DATE: 9/11/2020 **TIME: 2.00-4.00 PM**

INSTRUCTIONS;

Answer question ONE and any other TWO questions

QUESTION ONE (30 MARKS)

a) Define the following pricing terms;

i. Penetration pricing (1 mark)

ii. Psychological pricing (1 mark)

iii. Deceptive pricing (1 mark)

iv. Horizontal price fixing (1 mark)

b) Differentiate between a change in quantity demanded and a shift in quantity demanded (2 marks)

c) Differentiate between loose oligopoly and tight oligopoly (2 marks)

d) Outline four elements of the marketing mix (4 marks)

e) Suppose a market is faced by the following supply and demand functions; Q_s= -5+3P; & Q_d= 10-2P;

Determine the equilibrium price & quantity (2 marks)

f) Explain three limitations of price in an economy (6 marks)

g) Explain five impacts of price volatility in an economy (10 marks)

QUESTION TWO (20 MARKS)

a) Explain five weaknesses of the market system (10 marks)

b) Explain four supply shifters (4 marks)

c) Outline three conditions necessary for effective price discrimination (6 marks)

QUESTION THREE (20 MARKS)

The demand for tea has two separate markets (domestic & export) with the following price dependent demands;

$P_d = 250 - 1.5Q_d$ *and*

$P_e = 200 - 0.36Q_e$

Where P_d is price in Kshs per ton in domestic market, P_e is price in Kshs per ton in export market, Q_d is quantity demanded in domestic market, and *Qe* is quantity demanded in export market.

a) If 200 tons are produced;

i. How much would be sold in each market (4 marks)

ii. What single price would prevail in the market (2 marks)

iii. The total revenue generated at this price (4 marks)

b) If 200 tons are produced and price discrimination can be applied;

i. What price should be charged in each market (4 marks)

ii. How much will be sold in each market to maximize revenue (4 marks)

iii. The total cumulative revenue generated at these prices (2 marks)

QUESTION FOUR (20 MARKS)

a) Sometimes, governments intervene in pricing activities in the economy. With the aid of a diagram, explain the concept of price floor setting (10 marks)

b) Discuss five disadvantages of setting a price ceiling in an economy (10 marks)

QUESTION FIVE (20 MARKS)

Assume that in a duopoly market, the demand function is given by $P=100 - 0.5(X_1 + X_2)$; and the duopolists' cost functions are given by; $C_1=5X_1$; and $C_2=0.5X^2_2$. Assume also that firm one is the quantity leader and firm two the quantity follower.

a) Compute the quantity amounts (X_1 & X_2) which each firm should set in order to maximize their profits (10 marks)

b) Compute each firm's optimal profit level (10 marks)