THE CO-OPERATIVE UNIVERSITY OF KENYA

END OF SEMESTER EXAMINATION DECEMBER-2022

EXAMINATION FOR THE DEGREE OF BACHELOR OF AGRIBUSINESS MANAGEMENT
(YR II SEM I)

UNIT CODE: BAFS 2107

UNIT TITLE: INTRODUCTION TO AGRICULTURAL ECONOMICS

DATE: WEDNESDAY 14TH DECEMBER, 2022

TIME: 2:00 PM – 4:00 PM

INSTRUCTIONS:

- **Answer question ONE (compulsory) and any other TWO questions**

QUESTION ONE

(a) Using an appropriate example from agricultural production, explain the concept of 'tragedy of commons' (5 Marks)

(b) Suppose the market for wheat is competitive, with an upward-sloping supply curve, a downward-sloping demand curve, and an equilibrium price of Ksh 40 per kg. Explain why a higher price (e.g., Ksh 50 per kg) would not be an equilibrium price. (5 Marks)

(c) How could a firm earn positive accounting profit but negative economic profit? Briefly explain. (5 Marks)

(d) Jeff is a graduate of Agribusiness who could work as an agribusiness officer at the bank at a salary of kshs 32,000. Instead, Jeff decides to be a private agribusiness consultant earning 44,000 and faces business expenses of 5000 for computer and shs 6,000 for rent of his office. Calculate Jeff's Accounting costs and economic costs (5 Marks)

(e) 'Surpluses in the supply of food isamong the results of a price ceiling'. Do you agree or disagree? Explain briefly. (5 Marks)

(f) Examine the following statements and indicate which onerepresents a positive and which represent a normative statement. (5 Marks)

(i). The market price of wheat is Ksh. 75,000 per ton
(ii). The market price of spinach should be higher.
(iii). GMOs are legal in Kenya.
(iv). Environmentalists have an increasing voice in agricultural policy.
(v). High fertilizer prices are a major economic issue.

QUESTION TWO

(a) Explain why the average product curve continues to rise after the marginal product curve has begun to decline (5 Marks)

(b) State whether true or false and explain briefly (9 Marks)

(i). 'Government intervention in markets does not necessarily result in an improvement in economic welfare' is a positive statement

(ii). The fundamental problem of economics is to achieve a more equitable distribution of money income in order to mitigate poverty (iii). The most efficient combination of resources in producing any output is that which comes closest to using equal quantities of land, labour, capital and entrepreneurship.

(c) Distinguish between the following economic concepts: (6 Marks)

(i). Positive and normative economic models
(ii). Perfect competition and monopolistic competition
(iii). Short run and long run production period

QUESTION THREE

(a) Explain how the following affect elasticity of supply of agricultural commodities:

(i). Time
(ii). Storability
(iii). Factor mobility (9 Marks)

(b) Answer questions (i) – (v) on the basis of the following cost data

Potato Output (Bags)	Total cost (Kshs)
0	24000
2	33000
3	41000
4	48000
5	54000
6	69000

Calculate

(i) The total variable cost of producing 5 bags (1 Mark)
(ii) The average total cost of producing 3 bags of potato (1 Mark)
(iii) The average fixed cost for producing 3 bags of potato. (1 Mark)
(iv) The marginal cost of producing the sixth bag of potato. (1 Mark)
(v) The profit maximizing output for this firm if price of output is Kshs 12,800 per bag. (1 Mark)

(c) If a producer is operating with maximum efficiency, why would the production of more potatoes entail the production of less of onions? (4 Marks)

QUESTION FOUR

The demand and supply schedules for broccoli are given in the following tables. Use this information to answer the questions below.

Price (per kg)	Quantity Demanded (000 Kgs)	QuantitySupplied (000 Kgs)
1.00	100	0
1.50	90	40
2.00	80	80
2.50	70	120
3.00	60	160
3.50	50	200
4.00	40	240

(a) Explain why the market will be in disequilibrium at a price of Kshs.3.50 per Kg. (3Marks)

(b) Explain how the market will adjust from a price of Kshs. 3.50 per kg to the equilibrium identified in part (a). (3 Marks)

(c) New studies indicate that broccoli has significant healing powers if it is consumed daily. How will these studies affect the broccoli market? (5 Marks)

(d) Suppose tighter immigration restrictions reduce the number of farm laborers. How will these restrictions affect the broccoli market? (5Marks)

(e) Explain any two factors likely to affect the supply of broccoli. (4 Marks)