CHUKA UNIVERSITY

UNIVERSITY EXAMINATIONS

THIRD YEAR EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN AGRICULTURAL ECONOMICS

AGEC 343: FARM MANAGEMENT PRINCIPLES

STREAM: AGED, ANSCI, AGRI, B.ED (AGRIC) TIME: 2 HOURS

DAY/DATE: TUESDAY 18/4/2023 2.30P.M – 4.30 P.M.

INSTRUCTIONS:

(i). Answer one question in Section A and any other THREE questions in Section B
(ii).Do not write on the question paper.
(iii). Write legible and cite relevant examples where applicable

Section A (25 marks)

QUESTION ONE

a) Distinguish among the following types of budgets;
   i) Complete budget (2 marks)
   ii) Partial budget (2 marks)
   iii) Break even budgeting (2 marks)

b) Discuss the functions managers play in a farm. (7 marks)

c) A dairy farmer is contemplating whether to engage in veal production i.e fatten his bull calves and sell at Kshs. 33.280 (160Kg. live weight @ Kshs. 208) or sell the new born calve at Kshs. 1600 and the milk for Kshs. 15/kg. To attain the required weight the calve will have consumed 1800Kg. of milk. Other costs include labour and housing costs which are estimated at Kshs. 3,200.

Required: Use this information to advise the farmer on the merits and demerits of veal production.

d) Explain two economic principles taken into consideration in farm management(5 marks)

SECTION B (40 MARKS)

QUESTION TWO

The table below shows the costs of producing both tomatoes and onions by a farmer.

	Tomatoes (kshs)	Onions(kshs)
Seedlings	120	120
Land clearing	150	100
Planting	20 man-hours	60 man-hours
Ridging	300	200
Weeding	450 man-hours	240 man-hours
Harvesting	300 man-hours	100 man-hours
Sales	6,050	2,800
Land size	3 acres	2 acres
Marketing	199	20
Fertilizer	60	40
Labour cost is 300 per 8 man-Hour day		

i) Given the following information, should the farmer grow tomatoes or onions? (12 marks)

ii) What other factors must the farmer consider before making the choice? (3 marks)

QUESTION THREE

a) A dairy farmer is faced with two alternative enterprise decisions, to switch from raising replacement heifers to purchasing heifers. The heifer calves will be sold at KES 40,000 per heifer that will provide income to the farm. The cost of producing heifers include: pasture maintenance at KES 10,000, veterinary and health cost at KES 12,000, hay feed at KES 8,500 and supplementary materials at KES 6,500. The dairy farmer has 4 calves to raise or replace with purchased calves. The cost of buying one heifer is KES 50,000. There will be no reduced income for purchasing a heifer. Using partial budgeting technique, advice the farmer on the best investment decision. Clearly show your analysis and interpret. (10 marks)

b) Discuss the major sources of farm management data. (5 marks)

QUESTION FOUR

a) Highlight the assumptions of linear programming. (5 marks)

b) Describe five steps followed in collection of data in the farm. (10 marks)

QUESTION FIVE

a) Explain four risk facing farm business and corresponding approaches of dealing with the risk. (8 marks)

b) A farmer who produces mutton and wool is contemplating to change to wheat production. The average cost of wheat production is Kshs. 32,000 per ha. The price of wheat is Kshs. 2200 per 90 kg bag. At what yield will the farmer begin making a profit? (7 marks)

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