

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

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

AGEC 343: FARM MANAGEMENT PRINCIPLES

STREAMS: AGBM Y2S2

TIME: 2 HOURS

DAY/DATE: TUESDAY 17/12/2024

8.30 A.M. –10.30 A.M.

INSTRUCTIONS

- (i) Answer ALL questions in Section A and any other THREE questions in Section B.
- (ii) Do not write on the question paper
- (iii) Write legibly 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 on 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 (160 Kg. live weight @ Kshs. 208) or sell the newborn calve at Kshs. 1600 and the milk for Kshs. 15/Kg. To attain the required weight the calve will have consumed 1800 Kg. 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 or demerits of veal production. (7 marks)
- a) Explain two economic principles taken into consideration in farm management (5 marks)

SECTION B (45 marks)

Question Two (15 Marks)

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

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

Question Three (15 Marks)

- a) A farmer has ten acres of land, 4 acres has been planted with tea. Of the remaining 6 acres, at least one-half must be resting at any one time. This year, the farmer intends to open 3 acres for sunflowers. With previous sunflower crops, he had hired casual labour at the rate of 10 man per day per acre at shillings 100 per man-day. He is considering replacing casual labour with a hired tractor doing the work at shillings 2200/-per acre. The farmer anticipates that by working the tractor, there will be an increase in average sunflower yield from 7000 kgs to 8000 kgs per acre due to better cultivation and timely planting. The sunflower would fetch Kshs. 50 per kg, harvesting costs are 100/- per 1000kg of sunflower seeds.

Required: Prepare a partial budget and advise the farmer whether the change is worthwhile or not. **(10**

Marks)

- b) Discuss the major sources of farm management data. **(5 Marks)**

Question Four (15 Marks)

- a) Highlight the assumptions of linear programming (5 Marks)
- b) Describe five steps followed in the collection of data in the farm (10 marks)

Question Five (15 Marks)

- a) Explain four risk-facing farm business and corresponding approaches of dealing risk (8 marks)
- b) A farmer who produces mutton and wool is contemplating changing to wheat production. The average cost of wheat production is Kshs. 32,800 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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