



**MASINDE MULIRO UNIVERSITY OF SCIENCE AND
TECHNOLOGY (MMUST)**

MAIN CAMPUS

**UNIVERSITY EXAMINATIONS
2023/2024 ACADEMIC YEAR**

THIRD YEAR FIRST SEMESTER MAIN EXAMINATION

FOR THE DEGREE OF

**BACHELOR OF SCIENCE IN AGRIBUSINESS MANAGEMENT
AND MARKETING**

COURSE CODE: AEC 302
COURSE TITLE: FARM MANAGEMENT II

DATE: 8/12/2023

TIME: 3-5 PM

INSTRUCTION TO CANDIDATES

Answer question one and any other two in section B

Time: 2hrs

MMUST observes ZERO tolerance to examination cheating

This paper consists of 3 printed pages.

Please turn over

QUESTION ONE

a. Using relevant examples where necessary, clearly explain the following concepts as used in farm management

i. Farm management (3 marks)

ii. Partial budgeting (5 marks)

b. A farmer has 30 acres of arable land, 20 acres of which is under maize and 10 acres under grass ley. He wishes to know whether replacing 10 acres of maize with Irish potatoes would be worthwhile. The fertilizer rate would have to be increased from one bag per acre for maize to 2 bags per acre for potatoes and an extra 20 man days of casual labor at the rate of Shs. 40/ MD will be necessary as a result of the change. Average yields of maize and potatoes are 150 and 500 bags per acre respectively. The output prices are Shs. 220 per bag of maize and Sh. 180 per bag of per bag of potatoes. Seeds cost 120 per acre for maize 320 per acre for potatoes .Fertilizers costs 850 per bag. Required: Draw up a partial budget and indicate the effects of the change and advise the farmer. (12 marks)

c. Highlight any five usefulness of Gross margin analysis in farm management (5 marks)

d. Explain any five objectives of farm management (5 marks)

QUESTION TWO

i. Briefly highlight five systems of farming (5 marks)

ii. State and explain essential steps farm manager must follow when making a sound decision that affects general operation in a production firm. (15 marks)

QUESTION THREE

ABC freshfruit firm has approached you to offer management advises on their day to day operations. You have noticed that the firm has never hired a farm manager despite having other operations employees. Clearly explain the importance of hiring a farm manager to the board of directors. (20 marks)

QUESTION FOUR

- i. Despite importance of Maize as a staple food in the country, its production has been dwindling in the recent past. Discuss any seven factors affecting maize crop yields in the country (7 marks)
- ii. Explain any five types of risks that farm management. (10 marks)
- iii. Discuss any three limitations of budgeting techniques a farm manager encounters (3 marks)

QUESTION FIVE

A farmer has ten acres of land, 4 acres of which is planted to a permanent crop (coffee). Of the remaining 6 acres, at least one half must be resting at any one time. This year, he intends opening 3 acres for sunflower. With previous sunflower crops he has tried casual labour at the rate of 40 man-days per acre at shillings 20 per man-day. He is considering replacing casual labour with a hired tractor doing the work at shillings 1100/-per acre. The farmer anticipates that by working the tractor 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.0.5 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. (20 marks)