



“Investing in Africa’s future”

COLLEGE OF HEALTH AGRICULTURE & NATURAL SCIENCES

NAEC 401: FARM MANAGEMENT AND FARM PLANNING

END OF FIRST SEMESTER FINAL EXAMINATIONS

NOVEMBER 2022

LECTURER : DR K. MUKUMBI

DURATION : 3 HOURS

INSTRUCTIONS

1. Do not write your name on the answer sheet

2. Use Answer Sheets Provided

3. Begin your answer for Each Question on a New Page

4. Credit is Given for Neat Presentation

SECTION A

Answer ALL questions in this section

QUESTION 1

a) *Read the passage below and answer the questions that follow.*

Jean wants to grow soybeans this year. Jean has 1 hectare of land and the selling price of soybeans is \$453 per ton, he expects to get a yield of 4 tons per hectare.

- i. You have been asked to complete the table below -calculate the gross income, total for each cost, total variable costs, gross margin and the rate of return to variable costs. (12 marks)
[Copy the table below into your answer booklet and enter your answers for the sections shaded in grey]

	Unit	No. of units	Price per unit USD	Total USD
Gross income				
Variable costs				
Land preparation - Diesel	liters	50	1.73	
Fertilizer- Compound C	50kg bag	6	54	
Seed	25kg bag	4	60	
Chemicals		4	20	
Planting - Diesel	liters	50	1.7	
Labor	labour days	40	3	
Electricity	kWh	40	0.10	
Packaging	bags	55	0.45	
Total variable costs				
Gross margin				
Return/\$VC				

- ii. What does the rate of return to variable cost you have calculated tell you? (4 marks)

b) List 4 sources of risk (4 marks)

c) After graduation you are hired as a farm manager in your home country. Describe how you will manage each of these risks for your farm business:

- i. Production risk (4 marks)
- ii. Market risk (4 marks)
- iii. Human risk (4 marks)
- iv. Legal risk (4 marks)

v. Financial risk

(4 marks)

SECTION B

Answer any THREE questions in this section

QUESTION 2

- a) Describe 5 key lessons related to recordkeeping you learned from the AU farm or your workplace. (10 marks)
- b) Explain how you will apply what you learned on recordkeeping to your career in the agriculture sector. (10 marks)

QUESTION 3

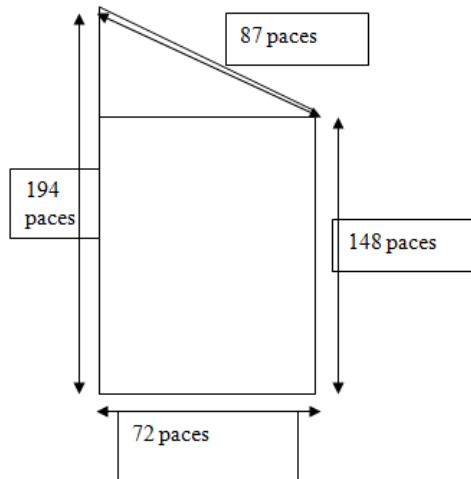
- a) What are 4 unique characteristics of land? (4 marks)
- b) What are the advantages of a cash lease to the:
 - i. Tenant? (4 marks)
 - ii. Landlord? (4 marks)
- c) What are the disadvantages of a cash lease to the:
 - i. Tenant? (4 marks)
 - ii. Landlord? (4 marks)

QUESTION 4

- a) Your friend has just started farming but does not have enough capital to purchase some needed but expensive machinery. Your friend asks you for advice on what they can do to acquire the machinery if they do not have a lot of money. Write a 1.5-page summary to your friend listing and explaining 8 alternatives for acquiring the machinery. (16 marks)
- b) Give 2 disadvantages of buying agricultural inputs in quantities that are less than what is needed at the time. (2 marks)
- c) List 2 disadvantages of buying agricultural inputs in quantities that are more than what is needed at the time. (2 marks)

QUESTION 5

- a. Give 4 reasons why it is helpful for a farmer to know the area of their fields. (4 marks)
- b. Crystal measured the field below by pacing. She took 60 paces to walk 50m.



What is the area of the field, in m^2 and in hectares? (6 marks)
[Show your working and round off your answers to 2 decimal points]

- c. Why do farmers sometimes fail to pay back the money they borrowed? (5 marks)
- d. What is interest on investment? (1 mark)
- e. A tractor costs \$50 000 new, and can be sold 10 years later for \$6 000. The interest rate is 15% per year. Calculate the interest on investment. (4 marks)

END OF EXAMINATION PAPER