



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND
TECHNOLOGY
SCHOOL OF AGRICULTURE AND FOOD SCIENCES
SECOND SEMESTER THIRD YEAR EXAMINATION FOR THE DEGREE OF
BACHELOR OF SCIENCE IN AGRIBUSINESS MANAGEMENT 2019/2020
ACADEMIC YEAR**

SIAYA CAMPUS

COURSE CODE: AAE 3325

COURSE TITLE: FARMING AS A BUSINESS

EXAM VENUE: STREAM: (BSc. Agribusiness Management)

DATE: EXAM SESSION:

TIME: 2HOURS

Instructions:

- 1. Answer ALL questions in Section A (compulsory) and ANY TWO questions in Section B**
- 2. Candidates are advised not to write on the question paper**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**

SECTION A [30 MARKS]

Answer ALL questions from this section

Q1. SAFS Farm is planning to establish a commercial component in the Farm and have selected to introduce Indigenous Vegetables during the short rains duration for this year 2020. The Farm is likely to incur the following costs over the production cycle of the commodity:

- Land preparations (KES 5,000); Cess charges (KES 800);
- Improved seeds (KES 1,500); Agrochemicals (KES 2,000);
- Salaries (KES 18,000); Fertilizers (KES 6,000);
- Taxes (KES 2,500); Transport (KES 8,000);
- Storage (KES 1,800); Interest paid (KES 1,500);
- Electricity (KES 4,000); Oil and Fuel (KES 5,500);
- Insurance (KES 9,000); Repairs (KES 3,000);
- Hired labor (KES 18,000); Depreciation (KES 3,500).

Based on the Research data available at the Sub-County Agribusiness Office, the output per hectare of Indigenous Vegetables is 3,500 Kg for SAFS' Agroecological zone. The sales price per Kg is KES 500/=.

- a) Using your knowledge of Farm Planning Techniques, develop an Enterprise budget for the SAFS Farm **(12 Marks)**.
- b) Compute the Gross Margin for the Farm **(6 Marks)**.
- c) Using the Break-Even analysis, calculate the Break-Even price and yield for the Farm **(8 Marks)**.
- d) What is the estimated profit for the Farm? Give an interpretation of this **(4 Marks)**.

SECTION B [40 MARKS]

Answer any TWO QUESTIONS in this Section.

Q2. A farmer has a wide range of production possibilities given the conducive locality of the farm. These include producing Macadamia, Watermelon, or Butternut. He has, in his possession the following resources: Cropland (900 ha); Spring i.e. March/April labour (1800 hrs); Summer i.e. August/September labour (1400 hrs); Fall i.e. October/November labour (950 hrs). Employ the Programme Planning technique and the table below to introduce enterprises for production purposes in the order of their returns to these potentially scarce resources.

Table1. Available Resources and Enterprise requirements

Resource	Available (Maximum)	Maize (1 ha)	Peanuts (1 ha)	Wheat (1 ha)
Land (ha)	900	1	1	1
Cropland (ha)	900	1	1	1
Macadamia (ha)	50	-	-	1
Watermelon (ha)	150	1	-	-
Butternut (ha)	210	-	1	-
March/April labour (hrs)	1800	1	2	5
August/Sept. labour (hrs)	1400	3	1	2
October/Nov. labour (hrs)	950	2	0	14
Gross margin		25,000/=	28,000/=	35,000/=

- (a) Which enterprise should be introduced first at the maximum level with Spring (March/April) labour as the most scarce resource? Illustrate your selection. **(16 marks)**.
- (b) Compute the total Gross-margin after the selection and introduction of all the enterprises possible. **(4 marks)**

Q3. . (a) Distinguish between “Book-keeping” and “Accounting”. **(3 Marks)**

(b) State and briefly explain 3 major difficulties often encountered in keeping farm records. **(6 Marks)**.

(c) Briefly explain two (2) main reasons for using “ratios” to analyze the Balance sheet. **(4 Marks)**.

(d) Discuss the two (2) concepts used in the Inventory and Valuation of Farm Assets in relation to Farm record keeping. **(2 Marks)**.

(e) Define the following Farm Accounts & Planning terminologies:

i) Slack variables **(2marks)**

ii) LCM **(2marks)**

iii) Liquidation **(2marks)**

iv) Salvage value **(2marks)**

v) Double Entry system. **(2marks)**

Q4 The Siaya Agribusiness Inc. would like to established a vertically integrated Dairy Products processing firm by purchasing three (3) exotic dairy cows at KES 50,000/= each, and a milk processing facility for KES 4,000,000/=. Additionally the Firm will incur the following costs: packing expenses KES 1,500/=, transport KES 2,000/=, taxes KES 3,150/=, storage KES 850/=, insurance KES 4,500/=, pasture maintenance KES 1,800/=, depreciation on fixed assets KES 5000/=, equipment maintenance KES 1,000/=, hired labor KES 5,570/=, Agrochemicals KES 1500/=, electricity expenses KES 2,250/=, and salaries KES 14,000/=. The total physical product of the business was valued at KES 1,850,000/= at the end of the accounting period.

- a) Compute the Income above Variable Costs (IAVC) for the Siaya Agribusiness Farm Inc. **(10 Marks)**
- b) What was the enterprise profit at the end of the accounting period? **(8 Marks)**.
- c) Describe any two (2) legal purposes for keeping Farm records **(2 Marks)**.