SPECIFY TYPE OF EXAMINATION	
FIRST ATTEMPT	

# JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY SCHOOL AGRICULTURAL AND FOOD SCIENCES UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE AGRICULTURAL AND EXTENSION EDUCATION 3<sup>RD</sup> YEAR 1<sup>ST</sup> SEMESTER 2023/2024 ACADEMIC YEAR

## **MAIN CAMPUS**

#### COURSE CODE: AEB 1302

COURSE TITLE: FARM ACCOUNTS AND PLANNING

DATE:

TIME:

TIME: 2 HOURS

#### **Instructions:**

- 1. Answer ALL questions in Section A and B and ANY other TWO questions in Section C
- 2. Tick the most correct alternative in Section A
- 3. Answers to Questions in Section B and C must be written in the spaces provided on the question paper.
- 4. Candidates must ensure they submit their work by clicking "finish and submit attempt" button at the end.

### SECTION A: 20 Marks (Each question carries 1 mark)

NB: These are multiple choice questions with four choices, A, B, C, and D and the candidate is supposed to tick the correct answer.

Q1 a). Farm Accounts refers to the principles and procedures for systematically recording business transactions and for summarizing, reporting, and interpreting the results. Which of the following would be classified as examples of Financial Farm Records:

A. Liability Schedule, Livestock Records, and Field Records

B. Operational Expenses, Farm Map, and the Balance Sheet

C. Depreciation Schedule, Crop Record, and Enterprise Budget

D. Balance Sheet, Cash Receipts, and Income Statement

Q1 b). Farm records -Refers to the more mechanical routine of entering receipts, expenses and other items in a prescribed set of accounts or forms. Which of the following would be classified as examples of Physical Farm Records:

A. Soil Map, Income statement, and Crop Record 🦾

B. Aerial Photograph, Farm Map and Balance Sheet

C. Field Records, Aerial Photograph, and Farm Map

D. Soil Map, Field Records, and Cash Receipts

c). When we add up what accounting records say we own and subtract what the Agribusiness owes:

A. We can therefore know the important assets in the Agribusiness

B. This shall help in calculating the liquidity of the Agribusiness

C. We can then identify what the business is worth

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#### D. We can know the Current Liabilities of the business

Q1 d). To start a business we need resources. If the owner supplies all the resources then the Accounting Equation can be shown as:

A. Assets (A) = Networth (NW) + Liability

B. Capital (C) = Assets (A)

C. Assets (A) = Liabilities (L)

D. Capital (C) + Assets (A) = Liability (L)

Q1 e). On March 1, 2020, G. Ngei started a business and deposited 100,000/= in a bank account opened for the business. Identify the 2 effects of this transaction on the Business Balance sheet at end of the days.

A. Liability in the business has been reduced. However, assets in the business has increased

B. Capital in the business has increased. But the Networth is reduced

C. Asset called Bank account is increased. An asset called cash is also increased

D. An asset called cash at bank is increased. While the owner's net worth in the business is also increased

Q1 f). On March 13th, 2020 Goods worth 1000/= were sold to Felix Otieno for immediate cheque payment. Identify the 2 effects of this transaction on the Business Balance sheet at end of the days.

A. Asset called Stock of goods is reduced. And asset called Bank Account is increased

B. This would show that the Networth of the business is high. While the liability is low

C. The Business Capital in reduced and Liability is increased

D. Total Assets are equal to total Liabilities. An asset is reduced

Q1 g). A Balance Sheet is a status report that shows information about the organization's resources at one given time. Examples of information found on a balance sheet are:

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	A. are how much cash is in the bank, what is owed to creditors, and the value of the company's assets
	B. The total Assets, Cash Revenue, and Fixed Expenses
	C. Intermediate Assets, Current Assets, and Liabilities that the Business owe to other Organizations
	Q1 h). The primary purpose/use of a Balance Sheet is to measure the financial strength and position of the business. Examples of measures of financial strength and position that can be obtained from a balance sheet include:
	A. Rate of Returns to Capital, Liquidity, and Returns to Labour
	B. Net Capital Ratio, Solvency, and Returns to Management
	C. Total Liabilities, Networth, and all Fixed Assets
	D. Liquidity, Solvency, and Owner's Equity
	Q1 i). The defining feature and an important characteristic of a Balance Sheet is that:
	A. Total Capital MINUS Total Liabilities Equals Total Assets
	B. Total Assets MUST exactly equal Total Liabilities plus Networth
	C. Working Capital Ratio PLUS Net Capital Ratio are always equal

D. It MUST be developed annually by 31<sup>st</sup> December

Q1 j). Given the following information about the SAFS Siaya Far:

Total Assets = KES 950,000/-; Current Assets = KES 250,000/-; Intermediate Liabilities = KES 112,500/-; Current Liabilities = KES 365,000/-; Intermediate Assets = KES 389,750/-; And Longterm Liabilities = KES 95,500/-

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Q1 k) the computed Current Ratio for the Farm would be equal to:
A. KESH 250,000/- B. 68.5% C. KES 365,000/- D. 6.85
Q1 l) the total value of the Fixed Assets?
A. KES 350,750/- 🔲 B. KES 950,000/- 💭 C. KES 310,250/- D. KES 639,750/- 💭
Q m) the computed Net Capital Ratio of the Farm would be equal to:
A. KES 389,750/- B. KES 950,000/- C. 1.66 D. 16.6 %
Q1 n) The Farm Business Networth would be equal to:
A. KES 950,000/- B. KES 377,000/- C. 0.166 D. KES 573,000/-
Q1 o). The Farm Working Capital Ratio (WCR) would be equal to:
A. 13.4% B. KES 639,750/- C. 1.34 D. KES 477,500/-
Q1 p). The Farm Debt/Equity Ratio would be equal to:
A. 1.52 B. KES 573,000/- C. KES 950,000/- D. 15.2%
Q1q). The Income statement includes a list of all expenses (business debits) on the one hand, and all receipts (business credit) on the other hand. The Net Income for the year is determined by:
A. Dividing the total Revenue by the Total Expenses B. Adding the Total Expenses to the Total Revenue C. Total Costs MINUS Total Variable Expenses D.
Total Revenue MINUS Total Expenses
Q1r). The Gross Margin of the Business is computed by:
A Multiplying the Output price (D) by the lengt level (D) $\square$ D. Total Physical Output

A. Multiplying the Outp	out price (P <sub>y</sub> ) by the Inp	out level $(P_x)$ B. Total Physical Output
value MINUS Total Ope	rational Costs	C. Total Fixed costs PLUS Total Variable
Expenses 🗔	D. The Break Even p	orice

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Q1 s). The overall objective a Comparative Inco	1 s). The overall objective a Comparative Income Statement is to:		
A. Compare Family Income from all sources Expenses as compared to Variable Expenses income and expense items	B. Analyze the impact of Fixed C. Find out the trends in various		
Q1 t). The three (3) main procedures for detern	nination of Income for the Business include:		
A. Summation of all Expenses, Revenue, and Total credit of the Business			
<ul> <li>B. Considerations of the Marginal Value Product, the Variable expenses, and Fixed expenses</li> <li>C. Cumulative Balance, Monthly Balance, and Total Expenses</li> </ul>			
D. Revenue and Expenditure Account, Gross Margin Calculation, and projection of individua components of the business			
Q1 u). Business transactions (payments) can be made in the following modes:			
A. Cash, in kind, services, and by Rights	B. Material. Liquid, Credit, and Cash		
C. In kind, Debits, Credit, and Services	D. Monetary, Material, Overheads, and		
SECTION B: 30 Marks			

The candidate is supposed to attempt all questions in this section. Answers to questions in this section must be written in the spaces provided. Answers must be precise and concise.

The questions are supposed to be structured/short answer questions which carry 2 to 5 marks each, making a total of 30 marks.

**Q2.** A farmer purchased an Incubator valued at KES 2million to start a Poultry Hatchery in Bondo Sub-County. Additional KES 130,000/= was spent as initial investment for the poultry enterprise. During the first Accounting period, the total farm output was valued at KES 400,000/=. The following expenses were incurred during the same period: Chicken feeds KES 3,500/=; Vaccination KES 1,000/=; Taxes KES 1,600/=; Electricity KES 2,665/=; Machinery repairs KES 1,550/=; Salaries KES 15,000/=; Transport 3250/=; Hired labour KES 2725/=; Interest on loans KES 650/=; Storage expenses KES 850/=.

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- a) What was the Income Above Variable Costs (IAVC) for the Poultry farm? (12 Marks).
- b) What was the estimated profit for the farm? (15 Marks).
- c) Give an interpretation of the above results (3 Marks).

### SECTION C: 20 Marks

These are long answer questions.

There are a total of three (3) questions, each carrying ten (10) marks. A candidate is supposed to answer any two (2) questions.

**Q3**. Linear Programme is a computational method for determining the BEST plan or course of action where there are many alternatives, specific objective, and limited resource.

(a) Sate and briefly explain the four (4) types of information required in order to prepare a matrix for the Linear Programme (2 Marks).

(b) Identify any two (2) similarities and differences between Linear Programming and Budgeting (2 Marks).

(c) Distinguish the three (3) Components of the Simplex Method of Linear Programme (3 Marks).

(d) Describe "Slack Variables" and provide any 2 examples (3 Marks).

**Q4**. A farmer is planning a Rabbit rearing enterprise. It is assumed that a suitable structure, that is, a Cage unit which can accommodate a batch of 20 Bunnies is available.

Bunnies are purchased and reared into Does and Bucks for meat and as pets. It takes 4 months to rear a batch of Bunnies. As soon as one batch is sold out, another batch is bought. Feed requirements for the batch increases as the Bunnies grow.

The price of a Bunny is KES 4,000/= and the average sale price for both Does and Bucks is KES 16,000/= per Rabbit. Feed costs in the first, second, third, and the fourth months are 600/=, 650, 750/=, and 900/= respectively.

(a) Prepare a Complete Budget for the Rabbit rearing enterprise (8 Marks).

(b) What was the monthly cash deficit at the end of the 7th month (July)? (1 marks).

(c) What was the cumulative balance at the end of the month of May? (1 marks).

S/No.	Item	Value (KES)
1.	Net Farm Income	140,000.00
2.	Interest paid	7,000.00
3.	Opportunity Cost of Labour	14500.00
4.	Opportunity Cost Management	24,000.00
5.	Opportunity Cost of Capital	10%
6.	Total Value of Farm Assets	965,250.00
7.	Farm Business Networth	650,950.00

**Q5.** A Farmer had the following information regarding his farm business records:

- a) Compute the following using the information given above:
- i) Returns to Capital (3 Marks).
- ii) Returns to Labour (2 Marks).
- iii) Returns to Management (2 Marks).
- iv) Returns to Equity (3 Marks).