



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND
TECHNOLOGY**

SCHOOL OF AGRICULTURAL AND FOOD SCIENCES

**THIRD YEAR SECOND SEMESTER EXAMINATION FOR THE
DEGREE OF BACHELOR OF SCIENCE IN AGRICULTURAL
EXTENSION EDUCATION AND BACHELOR OF SCIENCE IN
HORTICULTURE
2016/2017 ACADEMIC YEAR
REGULAR**

COURSE CODE: AEE: 3311

COURSE TITLE: FARM ACCOUNTS AND PLANNING

**EXAM VENUE:
& Bsc. Horticulture)**

STREAM: (Bsc. Agri. Ext. Educ.

DATE:

EXAM SESSION:

TIME: 2 HOURS

Instructions:

- 1. Answer ALL questions in section A and ANY other 2 Questions in section B**
- 2. Candidates are advised not to write on question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**
- 4. Candidates are advised to carry electronic calculator**

SECTION A**[30 MARKS]****Answer ALL questions in this section**

Q1. The Albert Juma Multipurpose Farm had the following in the Farm records for the month of May, 2014.

May	1	Started farm with capital in cash of KES 25,000/=
“	2	Bought goods on credit from the following persons: R.M. Mutinda KES 5,400/=; L.K. Wangechi KES 8,700/=; J.A. Odhiambo KES 2,500/=; E.O. Magero KES 7,600/=; and C.K. Sang KES 6,400/=.
“	4	Sold goods on credit to E.M. Mburia KES 4,300/=, J.A. Ojala KES 6,200/=, and A.M. Mukatia KES 17,600/=.
“	6	Paid land rent by cash KES 1,200/=.
“	9	E.M. Mburia paid us his account by cheque KES 4,300/=.
“	10	A.M. Mukatia paid us KES 15,000/= by cheque.
“	12	We paid the following by cheque: J.A. Odhiambo KES 2,500/=; R. M. Mutinda KES 5,400/=.
“	15	Paid transport by cash KES 2,300/=.
“	18	Bought goods on credit from L.K. Wangechi KES 4,300/=; E.O. Magero KES 11,000/=.
“	21	Sold goods on credit to J.A. Ojala KES 6,700/=.
“	31	Paid land rent by cheque KES 1,800/=.

- (a) Enter up the necessary accounts using your knowledge of the Double entry system for the month of May for the Albert Juma Multipurpose Farm. **(20 Marks).**
- (b) State and briefly explain the three (3) methods of inventory valuation. **(6 Marks).**
- (c) Briefly discuss the two (2) Accounting concepts often used as a basis for valuation purposes. **(4 Marks).**

SECTION B**[40 MARKS]****Answer ANY TWO questions in this section**

Q2. Use your knowledge of Linear Programming as a Farm Planning technique and the basic data give in Table 2 below to answer the following questions:

Table 2. Basic data for Linear Programming.

Resources	Constraints		
	Units/ha	Cotton/ha	Groundnuts/ha

Cropland	180 ha	1.0	1.0
March (Spring) labour	600 hrs	2.0	4.5
August (Summer) labour	600 hrs	3.5	2.5
Operating capital	45,000/=	300/=	350/=
Net Returns/ha		18,000/=	20,000/=

- (a) What would be the Production Possibilities schedule, by resource, for Linear programming purposes? **(8Marks).**
- (b) Which is the most limiting resource for Groundnuts production? **(1 Marks).**
- (c) Illustrate by way of computation, the implication of producing Cotton only. **(3 Marks).**
- (d) Suppose a combination of Cotton and Groundnuts would be profitable, use a graphical presentation to determine the optimum solution for Cotton-Groundnuts production. **(3 Marks).**
- (e) With the information obtained in locating the feasible solution in the graphical presentation above, use the “trial and error” method to compute the BEST point/level for the Cotton-Groundnuts production combination. **(5 Marks).**

Q3. A farmer would like to change from the production of “Commercial Maize” to “Baby Corn”. One (1) hectare of Baby corn yields 95 bags of 90 kg each. The market price of a 90 kg bag of Baby Corn is KES 2,225/=. The total variable cost of producing 1 hectare of Baby corn is KES 25,000/=. One (1) hectare of Commercial Maize yields 100 bags of 90 kg each. The market price of Commercial Maize is KES 1,800/= per bag. The total variable cost of producing 1 hectare of Commercial maize is KES 18,000/=.

- (a) Using Partial Budgeting as a Farm Planning technique, determine whether it is profitable for the Farmer to introduce the change. Indicate all the necessary steps and assumptions. **(18 Marks).**
- (b) Briefly explain the main purpose of a partial budget in farm business planning **(2 Marks).**

Q4a) Distinguish between “Farm records” and “Farm Accounts” and in each case give three (3) examples and the use **(8 Marks).**

- b) State and briefly explain any four (4) purposes of keeping farm records **(4 Marks).**
- c) Discuss any four (4) difficulties often encountered in keeping farm records **(4 Marks).**
- d) Define the following Farm Accounts and Planning terminologies* **(1 Mark)**
- i) Break even yield **(1 Mark)**
 - ii) Slack variables **(1 Mark)**
 - iii) Accrual method **(1 Mark)**
 - iv) Liquidation **1 Mark)**