JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF AGRICULTURAL AND FOOD SCIENCES
THIRD YEAR FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN HORTICULTURE AND BACHELOR OF SCIENCE IN EXTENSION EDUCATION
2017/2018 ACADEMIC YEAR

REGULAR

COURSE CODE: AAE 3311

COURSE TITLE: FARM ACCOUNTS AND PLANNING

EXAM VENUE: LAB 11   **STREAM: BSC. (Hortic. & Agric. Ext. Educ.)**

DATE: 12.12.17   **EXAM SESSION:9.00 – 11.00 AM**

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 a calculator for this examination

SECTION A [30 MARKS]

ANSWER ALL QUESTIONS FROM THIS SECTION.

Q1. Use your knowledge of Linear Programming as a Farm Planning technique and the basic data give in Table X below to answer the following questions:

Table X. 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? **(2 Marks)**.

(c) Illustrate by way of computation, the implication of producing Cotton only. **(6 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.

(8 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. **(6 Marks).**

SECTION B [40 MARKS]

ANSWER ANY TWO (2) QUESTIONS FROM THIS SECTION

Q2 Given the following information relating to a small Poultry Enterprise:

Year 2007,

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 for the month of May for the Poultry Enterprise.

(15 Marks).

(b) Extract a trial balance for the Poultry Enterprise as at 31st May, 2007.   **(5 Marks).**

Q3. A farmer is planning a Cross-breed Dairy goat rearing enterprise. It is assumed that a suitable structure, that is, a Zero-grazing unit which can accommodate a batch of 15 Weaners is available. Weaners are purchased and reared into Does and Bucks for meat and dairy purposes. It takes 4 months to rear a batch of Weaners. As soon as 1 batch is sold out, another batch is bought. Feed requirements for the batch increases as the Weaners grow.
The price of a Weaner is KES 3500/= and the average sale price for both Does and Bucks is KES 15000/= per goat. Feed costs in the first, second, third, and the fourth months are 500/=, 550, 650/=, and 800/= respectively.

(a) Prepare a Complete Budget for the Cross-breed Dairy rearing enterprise   **(15 Marks).**
(b) What was the monthly cash deficit at the end of the 7th month (July)?   **(1 Mark).**
(c) What was the cumulative balance at the end of the month of May?   **(1 Mark).**
(d) What was the net gain or loss at the end of the year? Briefly explain your findings **(3 Marks).**
Q4i.Farm records are important for many reasons.
   a) Sate and briefly discuss any four (4) reasons for keeping farm records and any four (4) difficulties often encountered in keeping farm records?   **(8 Marks).**
   b) Briefly explain two (2) main reasons for using "ratios" to analyze the Balance sheet.

(4 Marks).
   c) Describe any two (2) examples of Physical and Financial farm records and in each case state the use of the record   **(4 Marks).**

   (ii) Define the following Farm Accounts & Planning terminologies*
      • Down Stroke
      • Slack variables
      • Liquidation
      • Break-Even yield   (**4 MARKS**)