MACHAKOS UNIVERSITY

University Examinations for 2017/2018 Academic Year

SCHOOL OF AGRICULTURE AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

FIRST YEAR FIRST SEMESTER EXAMINATION FOR BACHELOR OF SCIENCE IN AGRIBUSINESS MANAGEMENT

AEE 112: AGRICULTURAL COMMUNICATION SKILLS

DATE:4/12/2017   **TIME:8.30-10.30 AM**

Instructions:
Answer question ONE and any other TWO questions

QUESTION ONE (30 MARKS)

Read the following passage and answer the questions that follow (reading skills)

Land type, cow type, labour availability and access to finance are different for every farm, so the decision whether or not to zero graze must ultimately be determined on a farm-by-farm basis. The forage costs outlined in Table 1 below are an attempt to put zero grazing into some sort of perspective. These costs are based on a 200 cow herd and include land, labour (including family labour), and depreciation on machinery and other fixed assets (silos, cow tracks, etc). Silage costs assume all harvesting operations are carried out by a contractor, while zero grazing is undertaken using a 115HP tractor and mid-range zero grazer, both purchased new and paid in full.

This comparison clearly illustrates that, where conventional grazing can be undertaken efficiently (70-75% grass utilized), it will always provide the cheapest source of forage for dairy cows. However if grass utilization is poor (below 65%) in a grazing system, for whatever reason, zero grazing can be equally or even more cost effective. On a dry matter basis, the cost of zero

grazed grass is roughly similar to that of good quality grass silage; however the greater feed value of grass and its ability to support up to 10 litres of additional milk per cow per day, makes grass a more cost effective forage.

The scale of operation is crucial to the costings outlined below. If fewer than 200 cows are being zero grazed, the decision whether or not to purchase the necessary machinery requires some added consideration. Machinery costs can be reduced by, for example, buying second hand, sharing with a neighbour or employing the services of a zero grazing contractor. If these options are not possible, the key questions to ask are:

1. How efficient is my current grassland utilization – is this likely to benefit much from zero grazing?

2. Given land type, cow type and weather constraints, how many additional 'grazing days' might be possible with zero grazing compared with conventional grazing? What savings on grass silage and concentrates are possible?

3. Is there labour currently available on the farm to dedicate to zero grazing during the spring and summer?

There are undoubtedly herds that could realise significant financial benefits from zero grazing, but it is equally true that some herds would be worse off if they adopted this policy. However, with the current depression in world dairy markets, making more efficient use of grass in dairy cow diets by the most cost-effective means possible will be key for the sustainability of the industry going forward.

Table 1 – Comparative forage costs on grass-based dairy farms

	Lax Grazing	Efficient Grazing	Zero grazing	Cut grass silage
Cost per Ha (Ksh)				
Iputs	679	679	704	675
Harvesting	-	-	544	510
Land	250	250	250	250
Total	929	929	1498	1385

Cost per ton utilize DM (Ksh)	142.43	124.45	146.04	130.72
Feeding out (Ksh/ton)	5.27	4.57	2.83	21.20
Cost Per ton fed (Ksh/t DM	149.70	129.02	148.87	151.92

Source:McLarnon feeds

a)   Suggest a suitable title for this write up   (2 marks)

b)   What does the writer mean by saying "the scale of operation is crucial to the costings outlined"?   (2 marks)

c)   Explain SIX reasons as to why the writer may have transcoded crucial information as shown in table one   (3 marks)

d)   Identify FIVE items the writer has included in the table to help readers interpret the transcoded information correctly   (5 marks)

e)   Differentiate between skimming and scanning strategies of reading   (4 marks)

f)   Explain the Sq3r formular of reading showing its effectivenss in helping students extract and remember information from written texts   (10 marks)

g)   Outline the procedure of locating an extension book by its author in a library   (4 marks)

QUESTION TWO (20 MARKS)

a)   Explain two reasons why an agricultural book whose bibliographic details appear in the catalogue would be missing from the shelves in the library   (4 marks)

b)   Selecting the sources of agricultural information from your essay is a process.Describe why you would need to consider the following as you do your library search?i

  i.   The dates of publications of books or articles   (4 marks)

  ii.   Whether the authours of the book or articles are experts on the subject   (4 marks)

c)   Explain the meaning of a library catalogue?   (3 marks)

d)   Describe FOUR forms and THREE types of library catalogues   (7 marks)

QUESTION THREE (20 MARKS)

a) You have already formed a study group of six members. Using three examples explain why it is important to come up with regulations to guide the group   (6 marks)

b) Explain TWO benefits of revising the work you cover in lectures at the end of each day

(4 marks)

c) Extension workers must communicate to farmers effectively for Farming messages to reach farmers. Describe FIVE Characteristics of extension workers that make them effective speakers   (5 marks)

d) Giving relevant classroom examples, diffentiate between listening and hearing(5 marks)

QUESTION FOUR (20 MARKS)

a) What is the meaning of a communication model?   (2 marks)

b) explain the following models of communication showing how they can be used to describe dissemination of information to farmers

    i.   Schramm's communication model   (4 marks)

    ii.   Laswell communication model   (4 marks)

    iii.   Shanon and weaver model   (5 marks)

    iv.   Osgood's communication model   (5 marks)

QUESTION FIVE (20 MARKS)

Giving relevant agricultural extension examples explain   how the following Non- Verbal communication can influence dissemination of information to farmers

a) Vocalics/Paralanguage   (4 marks)

b) Proxemics   (4 marks)

c) Chronemics   (4 marks)

d) Haptics   (4 marks)

e) Oculesics   (4 marks)