**CHUKA** 



# **UNIVERSITY**

# UNIVERSITY EXAMINATIONS

## EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF COMMERCE

**AGBM 302: AGRICULTURAL INSURANCE** 

STREAMS: BCOM Y4S1 TIME: 2 HOURS

DAY/DATE: THURSDAY 6/12/2018 8.30 A.M – 10.30 A.M

## **INSTRUCTION:**

- Answer question one and any other two questions
- Show all your workings
- Do not write on the question paper
- 1. A rice farmer in mwea arranged for yield index insurance on her crop whose details are as follows:

Guaranteed yield per acre 2 tons

Farm area 50 acres

80% level of coverage

Guaranteed price per ton ksh 100,000

Actual yield per acre 1 ton

Rate of premium 2.5%

Subsidy 25%

Level of indemnity 90%

A deductible of 2.5% of each and every loss minimum ksh 10,000

### Required:

(i) Determine the sum insured.

[3marks]

(ii) Calculate the premium payable

[3 marks]

(iii) Show the claim payable

[4 marks]

- (b) A large scale farmer in Nyandarua who has been experiencing a lot of losses on his farm due to natural vagaries approaches you as an expert for advise. Prescribe for him, the approaches to use in handling those loss exposures. [10marks]
- (c) Discus the shortcoming of weather index based insurance.

[10 marks]

2. (a) Explain under what circumstances a cattle insurance policy could indemnity a farmer.

[ 10marks]

(b) Mr. Maina is a poultry farmer who wants to arrange a comprehensive poultry policy on his farm. He approaches you with the following details;

Types of birds is broilers

Batch (in weeks)	Number
1	500
2	2,000
3	1,000
4	1,200

Assume you have been given the following multiplier to use in determining week wise valuation;

Weeks	Multiplying factor
1	0.160
2	0.336
3	0.709
4	1.370
5	1.962

A day old chick cost ksh 80

Feed cost ksh 10 per kg

Rate of premium 7% for 1 day to 8 weeks birds.

#### **AGBM 302**

### Required:

- (i) Determine the total sum insured. [8marks](ii) Show the premiums payable. [2 marks]
- 3. (a) Assume you have been assigned a responsibility to give a presentation to group of farmers interested in lift irrigation insurance. Illustrate the areas that will form part of your presentation. [12 marks]
  - (b) Demonstrate how price and technology risks affect agriculture. [8 marks]
- 4. (a) John graduated from Elimu University and was offered a position as an underwriting assistant in a property insurance company. He was assigned a responsibility of preparing acceptance terms for a poultry policy. Explain the conditions he will place to ensure underwriting profitability. [10 marks]
  - (a) Discuss the period of insurance for various plantation crops. [6 marks]
  - (c) Explain the scope of agricultural insurance. [4 marks]