CHUKA   UNIVERSITY

UNIVERSITY EXAMINATIONS

THIRD YEAR EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF AGRIBUSINESS MANAGEMENT

AGBM 302: AGRICULTURAL INSURANCE

STREAMS:AGBM (Y3S2)   **TIME: 2 HOURS**

DAY/DATE: TUESDAY 17/04/2018   **2.30 P.M – 4.30 P.M**

INSTRUCTION:

- **Answer question one and any other two questions**
- **Show your workings**
- **Do not write on the question paper**

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

   Type of birds is broilers

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

Weeks	Multiplying factors
1	0.160
2	0.436
3	0.709
4	1.270
5	1.962

   A day old chick cost ksh 100

   Feed cost ksh 20 per kg

Excess ksh 2,000 eel

Rate of premium 3.5% for I day to 8 weeks birds.

Required :

(i)   Determine the total sum insured.   [6marks]

(ii)   Work out the premiums payable by mark.   [2marks]

(b) Ole Moran is a large scale farmer in the south rift, who arranged weather index insurance on his wheat plantation. The following are the details;

Sum insured ksh 70,000 per acre

The normal rainfall for the above yield is 780mm

The actual rainfall during the season was 450 mm

Rate of premium is 2.5%

Subsidy offered in the area is 35%

Policy deductible 5% on each and every loss.

The claims payout structure is as follows;

Rainfall range (mm)	Payment (ksh /mm)
554 – 597	13.32
512 – 555	14.80
467 -511	16.47
426-468	18.30
384-425	20.35
341-383	20.40
298-340	20.45
256-297	20.56
213-255	20.65
170-212	20.78
128-169	20.87
85-127	20.93
42-84	21.00
0-41	21.10

Required :

(i)   Calculate the premium payable.   [2marks]

(ii)   Demonstrate how the payout will be made.   [6marks]

(c) Discuss the most commonly applied exclusions in a capital cattle insurance policy.

[14marks]

2.   (a) Mr. Njoroge is a prominent farmer in central part of Kenya who is worried about the frequent losses to his farm enterprise resulting misfortunes. Discuss any three possible misfortunes he could be facing and highlighting the possible strategies of managing them.

[15marks]

(b) Discuss the factors that a prudent insurance underwriter may consider in setting a premium for hail insurance policy.   [5marks]

3.   (a) Distinguish between agricultural insurance and agricultural relief.   [12marks]

(b) Explain how loss assessment is done is horticulture/input insurance.   [8marks]

4.   (a) 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 20 acres

80% level of coverage

Guaranteed price per ton ksh 100,000

Actual yield per acre 1 ton

Rate of premium 2.5%

Subsidy 45%

Level of indemnity 90%

A deductible of 5% of each and every loss.

Required :

(i)   Determine the sum insured.   [2marks]
(ii)   Calculate the premium payable   [3marks]
(iii)   Show the claim payable.   [4marks]
(iv)   Explain the levels of indemnity available in yield protection insurance. [3marks]

(c) Using relevant examples, justify the need for agricultural insurance in Kenya.

[8marks]