



Republic of South Sudan
Ministry of General Education & Instruction
Secretariat of Examinations

045/2
AGRICULTURE
PAPER TWO
2 ½ Hours

SOUTH SUDAN CERTIFICATE OF SECONDARY EDUCATION (SSCES) EXAMINATIONS

Nov/Dec, 2012

045/2

**AGRICULTURE
PAPER TWO**

TIME: 2 ½ Hours

INSTRUCTIONS

Read the instructions carefully before answering any question

1. *This paper consists of five(5) Sections A, B, C, D and E*
2. *Answer question 1 in Section A and any four questions selecting one from each of the sections B, C, D and E.*

FOR EXAMINERS USE ONLY		
	EXAMINER	TEAM LEADER
SECTION A		
SECTION B		
SECTION C		
SECTION D		
SECTION E		
TOTAL MARKS		

SECTION A: (COMPULSARY)

1. (a) Explain five (5) differences between organic and inorganic fertilizers (10 Marks)
- (b) Mention and explain ten (10) general methods of applying artificial fertilizers (10 Marks)

SECTION B: (CROP PRODUCTION)

2. (a) Using Groundnuts, Maize, Cotton, Cassava and one fallow period, plan and design a five (05) year's crop rotation programme indicating which crop comes first, second, third, fourth and fifth. (05 Marks)
- (b) For each crop chosen in first, second, third, fourth and fifth positions, give a reason for your choice. (05 Marks)
- (c) Explain the importance of crop rotation. (10 Marks)
3. (a) Differentiate between hay and silage. (04 Marks)
- (b) Describe the procedure of making hay. (04 Marks)
- (c) What factors influence the quality of hay? (06 Marks)
- (d) State the limitations faced in making silage in the farm. (06 Marks)

SECTION C: (ANIMAL PRODUCTION)

4. (a) Explain the basic factors that a livestock farmer should consider before mixing animal feeds (10 Marks)
- (b) A farmer who owns a poultry enterprise has maize containing 16% protein and fish meal containing 86% protein. As a student, help the farmer to compute the proportion of the two ingredients to make a meal of mixture of 45% protein. Use the Pearson's square method and support your procedure or steps with an explanation. (10 Marks)
5. (a) Describe the management practices in keeping of pigs. (10 Marks)
- (b) What are the problems associated with keeping of pigs. (10 Marks)

Section D: (MECHANIZATION AND ENGINEERING)

6. Describe the sources of farm power that are commonly used by farms. (20 Marks)

7. Describe the methods of agro-forestry tree harvesting (20 marks)

Section E: (AGRICULTURAL ECONOMIES)

8. Define the following terms as applied to farming and give four examples of each.

(i) Risks

(ii) Uncertainties (06 Marks)

(b) What measures should a farmer adopt to safeguard against risks and uncertainties?

(14 Marks)

9. (a) Explain what is meant by the following;

(i) Balance sheet.

(ii) Profit and loss account. (08 Marks)

(b) Mr. Zachariah is a farmer who practices mixed farming. Help him to prepare a balance sheet using the information below that he has at hand as from 30th June 2012.

Items	Value (SSP)
-Cash at hand	500
-Feed in the store	200
-Debt payable	350
-Cash in the bank	750
-Loan from the bank	650
-Debt receivable	1000
-Prepared expenses	750

-Value of machine	250
-Livestock value	800
-Depreciation of machines	700
-Bank overdraft	300
-Value of buildings	400

(12 Marks)

THE END