

# **GATUNDU FORM 4 EVALUATION EXAM**

443/1

AGRICULTURE

PAPER1

JULY /AUGUST 2015

2HOURS

## **SECTION A (30 MRKS)**

**Answer all question in this section in the space provided**

1. Differentiate between olericulture and pomoculture as used in crop production .(1mrk)
2. List the physical weathering agents in soil formation process (1 ½ mrks)
3. Give four method of farming (2mrks)
4. Give two examples for each of the following types of cost incurred in broiler production .
  1. Variable cost (2 marks)
  2. fixed cost (2 marks)
3. Give four advantages of crop rotation . (2mrk)
4. State four factors that that should be considered when classifying crop pest (2mrks)
5. Give three reasons why a water logged soil is unsuitable for most crops (1 ½ mrk)
8. Give four advantages of tissue culture (2mrks)
  1. Outline four observable indicators of economic development of a nation (2mrks)
  2. Outline four indicators of well decomposed manure (1 ½mrk)
  3. Give two conditions where opportunity cost does not exist (2mrks)
4. Give four management practice that promote high herbage yields in pasture

production (2mrks)

5. Give three reasons why primary cultivation should be done early before the onset of the rains (1 ½ mrk)

6. Give two examples of farm records that are general in nature . (1mrk)

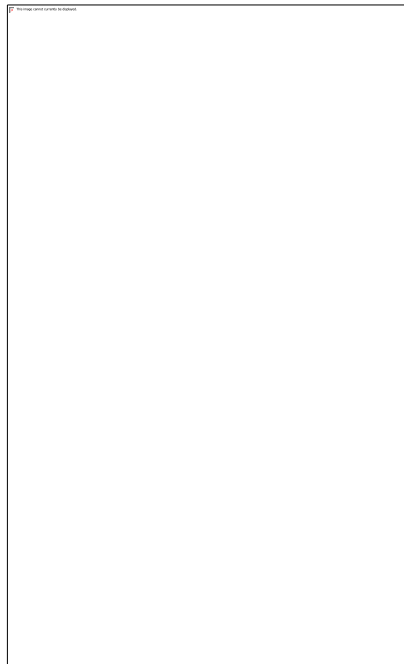
7. Give four role of nitrogen in plants (2mrks)

8. Give four benefits of possessing a land title deed (2mrks)

**SECTION B (20 MRKS)**

**Answer all the questions in this section in the spaces provided**

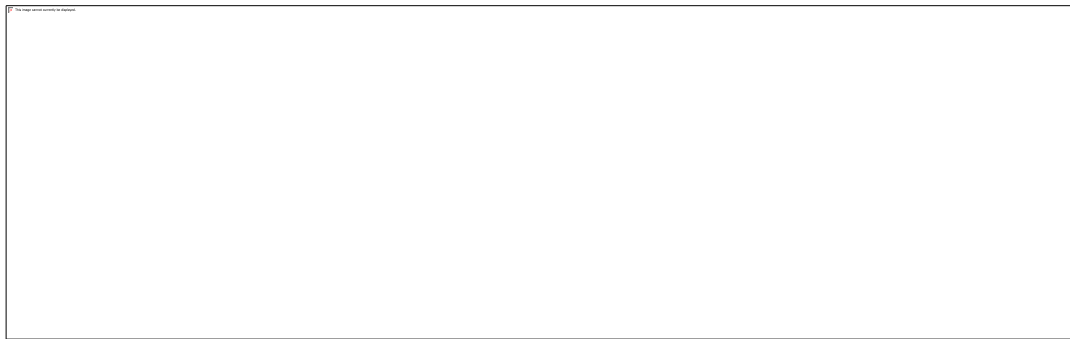
9. The diagram below illustrates a feature observed after digging the soil several metres deep Study the diagram carefully and answer the question that follow



1. Identify the feature that the diagram above represents in the study of soil (1mrk)

2. What is the name given to the part labeled p (1mrk)
3. Give a reason why part b is also referred to as layer of accumulation (1mrk)
4. State two ways in which the knowledge of the above feature would be of benefit to farmer (2mrks)

18The diagram below shows a method of crop propagation .Study it and answer the questions that follow



1. Identify the method (1mrk)
2. Name two crops that can be propagated using this method. (1mrk)
3. Give three ingredients used when preparing the tissue culture. (1 ½ mrk)

19.The following information was obtained from the records of Mr Juma's farm for the year ended on 31<sup>st</sup> march 2011

<u>Particulars</u>	<u>kshs</u>
Opening Valuation	100,000
Calves	72,000
Hired Labour	21,000
Sales of milk	13,000
Sales of cereals	33,000
Rent	9,000
Feed	5,300
Seed	1,700
Fertilizers	4,700
Sales of Vegetables	9,300
Sales of poultry	1,800
Sales of fruits	700

Pesticides	1,250
Depreciation	650
Repair and Maintenance	950
Interest on loans	200
Closing Valuation	9,0000

1. using the information given above , prepare a profit and loss account for Mr Juma's farm for the year ended 31<sup>st</sup> March (7mrks)
2. Giving a reason, State whether Mr. Juma's farm made a profit or loss ( ½ mark )

20) The diagram below shows a maize stalk infected by a certain pest .Study it and answer the questions that follow .



1. Identify the pest (1/2mrk)
2. Apart from maize, name another crop attacked by the pest named above ( ½ mark)
3. Give three cultural measures that can be applied to control the pest (3mrks)

### **SECTION C ( 40MARKS)**

**Answer any two questions in this section in the spaces provided**

- 21 a) Describe six advantages of rotational grazing (6mrks)
  1. Explain eight ways in which soil fertility can be maintained (8mrks)
  1. Explain six factors considered when drawing a farm plan (6mrks)
- 22 a) Explain the factors that influence the type of irrigation to be used in a farm (8mrks)
  1. Explain six reasons for pruning coffee. (6mrks)

2. Describe 6 ways in which labour productivity can be improved on a farm (6mrks)

23 a) Describe five importance of agro-forestry in soil and water conservation (6mrks)

1. Describe the procedure of silage making (10mrks)

2. Describe five effects of over application of nitrogenous fertilizer (5mrks)

# GATUNDU FORM 4 EVALUATION EXAM

443/2

AGRICULTURE

PAPER2

JULY /AUG.2015

2HOURS

## SECTION A 30MRKS

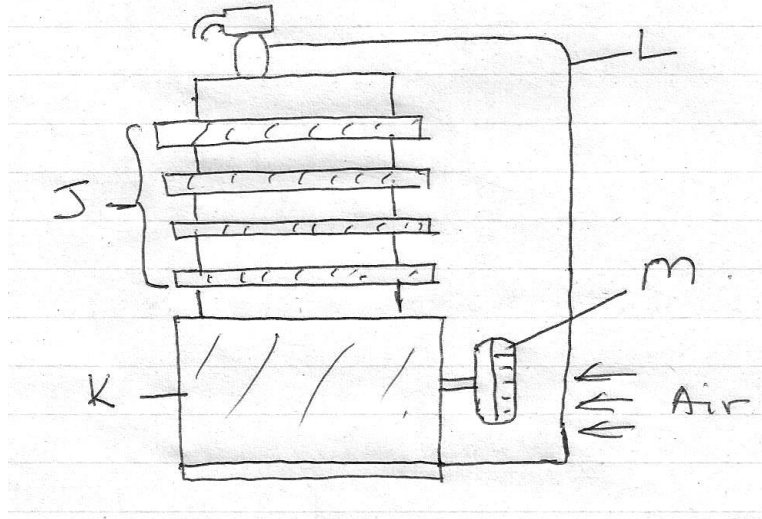
Answer all the questions in this sections in the spaces provided

1. Name the most appropriate tools used in the following operations
  - a) Removing metal chippings in file (1mrk )
  - b) Cutting wood along grains (1mrk)
  - c) Branding (1mrks)
2. State four characteristic of Boran cattle (2mrks)
3. State two functions of a useful bacteria in livestock production (1mrk)
4. Name four function of lipid in an animal body (2mrks)
5. State two ways of reducing friction in moving part of farm tool (1mrk)
6. Outline four types of fence that can be used in mixed farm (2mrks)
7. Name three methods of out breeding in livestock production (1 ½ marks)
8. Give two reasons for tailing in sheep production (1mrk)
9. Name any five internal parts of cow's udder (2 ½ marks)
10. Give five ways of transmitting livestock diseases (2 ½ marks)
11. Give four features of improved grain bin (2mrks)
12. Give three types of calving complications (1 ½ mrks)
13. State four advantages of zero grazing as a grazing system (2mrks)
14. State two functions of a queen bee in a colony (1mrk)
15. Name four symptoms of anaplasmosis in livestock (2mrks)
- 16 .What do you understand by the following terms as used I animal production .
  - a) Coponisation (1mrk)
  - b) Bullock (1mrk)
  - c. Epistasis (1mrk)

**SECTION B (20Mrks)**

**Answer all the questions in the spaces provided**

17. Below is a diagram of a cooling system .Study it and answer the questions that follow



a) Identify the type of cooling system illustrated (1mrk)

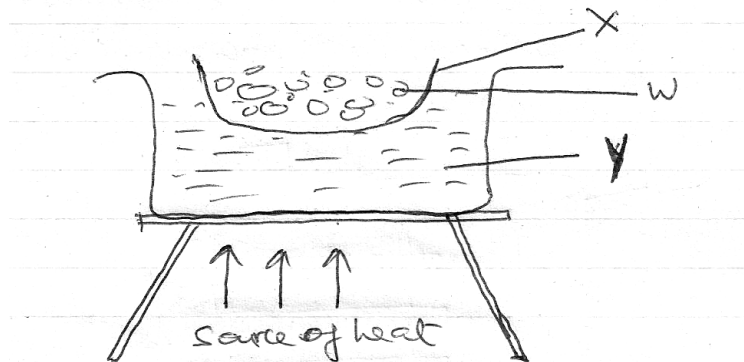
b . Name parts labelled J, K, L and M (2mrks)

c. Name two problems associated with the type of cooling system illustrated above (2mrks)

(i)

(ii)

18. Below is an illustration of a method of extracting honey from combs .Study the diagram and answer the question that follow .



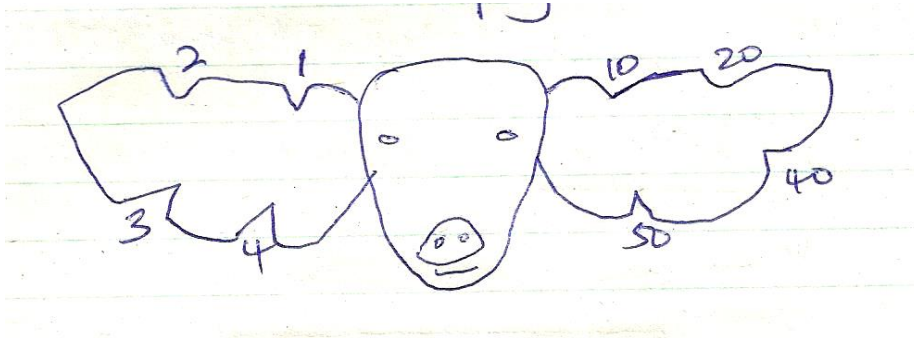
a) Indentify the above method of extracting honey (1mrk)

b) Give a reason why container x should not be heated directly (1mrk)

c) Name the parts labeled w and y (2mrks)

- d) Besides the above method ,State one other method of extracting honey (1mrk)

19The diagram below shows a certain practice carried out on pig



- a) Identify the practice illustrated above (1mrk)  
b) Draw another illustration depicting pig number 37 (1mrk)  
c) Name the tool used to carry out the practice illustrated above (1mrk)  
d) State two other method of indentifying piglet (2mrks)

20 .Below an illustration of a farm operation .Study it carefully and answer the question that follow.



- a) Identify the activity being carried out (1mrk)  
b) Give one other activity carried on the animal before the above operation is carried out (1mrk)  
c) Outline the procedure of carrying out the above operation (3mrks)

**SECTION C**



**Answer any two questions in the space provided**

21. a) Outline management practice carried out in a fish pond to ensure maximum harvest of fish (7mrks)
- b) Discuss the importance of farm mechanization (6mrks)
- c) Discuss the short term maintenance practices carried out on a tractor (7 mrks)
22. (a) Explain the feature of a piggery unit (10mrks)
- b) Explain the factor that influence the work output of a draught animal (10mrks)
23. a) Outline various method of controlling ticks (10 mrks)
- b) Describe the management of growers up to the point of lay (10mrks)