

MACHAKOS COUNTY

443/1

AGRICULTURE

PAPER 1

TIME: 2 HOURS

SECTION A (30 MARKS)

Answer all the questions in this section in the spaces provide.

1. What is meant by the following terms
 - (a) Under sowing. (1mark)
 - (b) Over sowing. (1mark)
 - (c) Ammonification. (1mark)
2. State four qualities of a scion for use in vegetative propagation materials (2marks)
3. Give two advantages of compound fertilizer. (2marks)
4. State four effects of soil depth on crop production. (2mark)
5. Give four ways of improving sandy soils. (2marks)
6. State two reasons for rolling in wheat crop productivity. (2marks)
7. Give four roles of cost agricultural economics. (2 marks)
8. State two effects of varying spacing in maize production. (1 mark)
9. State three financial documents in agricultural production. (1½ marks)
10. Give four disadvantages of concession land tenure systems. (2 marks)
11. State five symptoms of viral diseases in crop production. (2½ marks)
12. Give four factors that are considered when selecting a nursery site. (2 marks)
13. Distinguish between seed dressing and seed inoculation. (2 marks)
14. Give three reasons for cutting back in pyrethrum. (1½ marks)
15. Give five ways in which consolidation helps to improve farm management. (2½ marks)

SECTION B (20 MARKS)

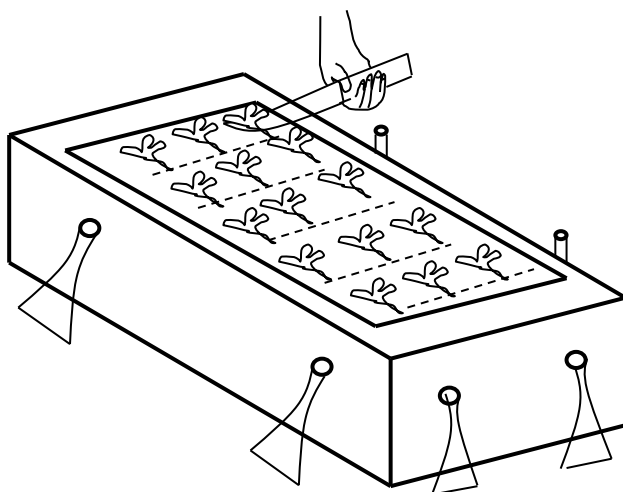
Answer all the questions in this section in the spaces provided.

16. i) The following is a farm record Mr. Makau had kept as at 30th June 2011. Study it carefully and prepare a balance sheet for the farm. (6 marks)

Equity loan	180,000
Equity overdraft	24,000
Working tools	30,000
Cash at hand	15,000
Cash in bank	50,000
Buildings	60,000
Debtors	18,000
Goats	48,000
Land	70,000
Creditors	49,000
Ox plough	20,000

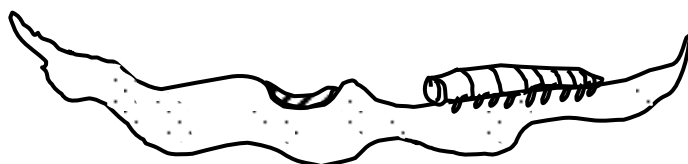
ii) Is Mr. Makau business solvent or insolvent? Explain (2 marks)

17. The diagram below illustrates an agroforestry practice. Study it and answer the questions that follow.



- i) Identify the agroforestry practice illustrated above. (½ marks)
- ii) State advantages of the practice illustrated above. (3 marks)
- iii) State three forms of agroforestry. (1½ marks)

18. Study the pest below and answer the questions below.



- a. Identify the pest (1 mark)
- b. State two methods of controlling the pest. (2 marks)
- c. Name the crops attacked by the pest. (1 mark)

19. The diagram below illustrates a field management practices in tomatoes



- i) Identify the practice (1 mark)
- ii) State three reasons for carrying out the practice. (3 marks)
- iii) Give another practice that could be carried out to give the same results. (1 mark)

SECTION C (40 MARKS)

Answer any two questions from this section in the spaces provided after question 22

- 20. a) State the functions of the Kenya National Federation of Producers in Kenya (5 marks)
- b) State five factors considered when drawing a farm plan (5 marks)
- c) Describe the harvesting of cotton (10 marks)

- 21. a) Describe the production of carrots under the following sub headings
- b) Seedbed preparation (3 marks)
- c) Harvesting (4 marks)
- d) Explain five cultural methods of weed control in bean production. (10 marks)
- e) Outline three roles of sulphur in crop production. (3 marks)

- 22. a) Explain the effects of solifluction (6 marks)
- b) Outline importance of grafting in oranges (4 marks)
- c) Describe ways of improving labour efficiency (10 marks)

MACHAKOS COUNTY

AGRICULTURE

PAPER 2

2 HOURS

SECTION A (30 MKS)

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

1. State four heavy breeds in poultry (2 mks)
2. Give two effects of sheep lice infection in sheep production (1 mk)
3. State the advantages of contemporary comparison in selection of livestock. (2 mks)
4. State two reasons tailing in sheep management (2 mks)
5. State two functions of differential in a tractor transmission system. (1 mk)
6. Give four effects of protein deficiency in livestock production. (2 mks)
7. State four predisposing factors of pneumonia in livestock production. (2 mks)
8. Give four factors influencing milk let down in dairy cattle production. (2 mks)
9. Name four instances where animal power is advantageous over other form of powers. (2 mks)
10. State four reasons for handling dairy cattle in livestock production. (2 mks)
11. Give factors considered in choice of rearing systems in poultry production. (2 mks)
12. State four factors that affect the choice of feed stuff in livestock. (2mks)
13. Give four practices carried out on fish before preservation. (2 mk)
14. State four disadvantages of live fence in livestock production. (2 mks)

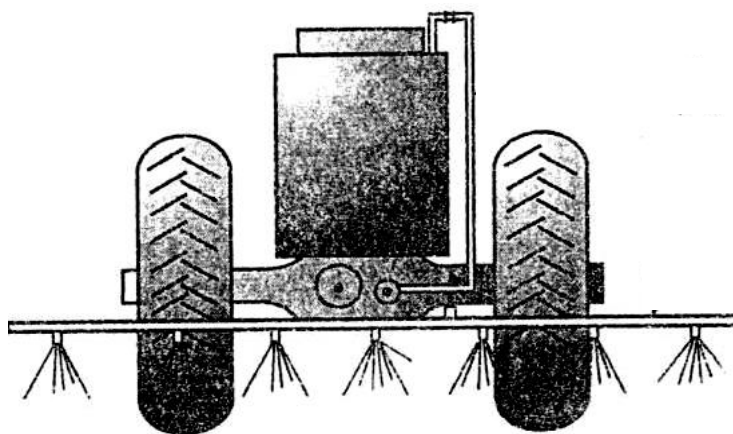
15. a) Give four prophylactic measures used in controlling diseases in livestock. (2 mks)
b) State four mechanical measures of controlling ticks in livestock production. (2 mks)

16. State two functions of caecum in poultry production. (1 mk)

SECTION B (20 MKS)

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

17. Below is a diagram illustrating a farm implement, Study it and answer the questions that follow.



- a) Identify the implement illustrated above. (1 mk)

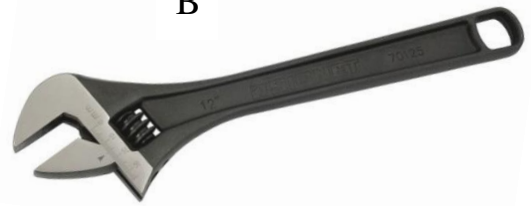
- b)
- c) State the use of the implement on the farm. (1 mk)
- d) Explain three maintenance practices carried out on the implement. (3 mks)

18. Below are illustrations of farm tools and equipment.

A



B

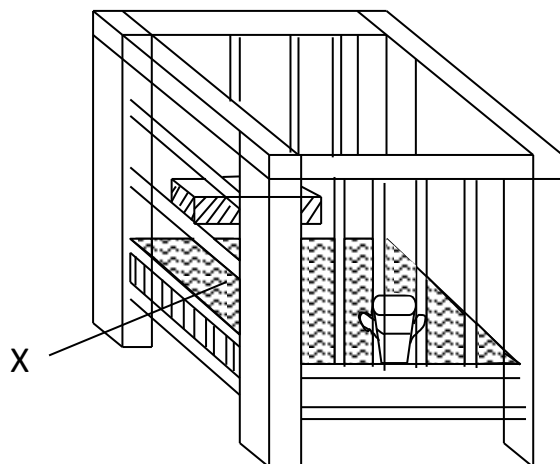


C



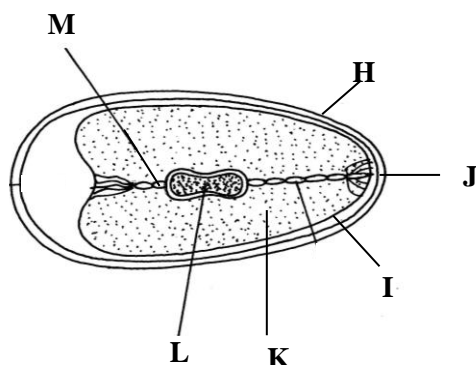
- a) Identify the tool labelled A and C (1 mk)
- A
-
- B (1 mk)
-
- b) State the advantage of tool B over tool C (1 mk)
- c) State two maintenance practices carried out on tool labelled B. (2 mks)

19. Below is a farm structure. Study it carefully and answer the questions that follow.



- a) Identify the farm structure above (1 mk)
- b) State the requirement of the part labelled X (1 mk)
- c) State three maintenance practices that should be carried on the structure. (3 mks)

20. The diagram below is an illustration of an egg. Study it carefully and answer the questions that follow.



- a) Name the parts labelled I, J, K and M. (2 Mks)
- b) Give two qualities of the part labelled H that would be considered when selecting eggs for incubation. (2 Mks)
- c) What is the function of the part labelled L (1 Mk)

SECTION C (40 Mks)

Answer any two questions from this section.

- 21. a) State five reasons for feeding livestock (5 mks)
- b) Describe the factors a farmer should consider when selecting a gilt for breeding. (8 mks)
- c) Outline routine management practices that should be carried out on a lactating ewe. (7 mks)

- 22. a) Outline routine maintenance practices that should be carried out in deep litter system. (6 mks)
- b) State eight practices that would ensure clean milk production. (6 mks)
- c) Compare the use of an ox-drawn mouldboard plough with that of a tractor drawn plough (10 mks)

- 23. a) Describe the importance of farm mechanization. (6 mks)
- b) Describe East Coast Fever under the following sub headings
 - a) Causal organism (1 mks)
 - b) Signs of infection (5 mks)
 - c) Control measures (3 mks)
- c) Outline five causes of stress in poultry. (5 mks)

