TIGANIA SOUTH PRE-MOCKS 2015

Kenya Certificate of Secondary Education

AGRICULTURE
Paper 1
MAY 2015
Time: 2 Hours

INSTRUCTIONS TO CANDIDATES:

• This paper contains three sections A, B and C
• Answer ALL the questions in section A and B
• Answer any Two questions from section C
• All answers should be written in the spaces provided.

FOR EXAMINERS USE ONLY

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1. State **two** types of farming systems. (1mrk)

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2. State **two** advantages of concession company as land Tenure system. (1mrk)

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3. (a) Define the term pasture. (½mrk)

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   (b) State **three** main ways in which pastures are classified. (1½ mrks)

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4. Differentiate between mixed cropping and intercropping. (2mrks)

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5. State **three** types of capital. (1 ½ mrks)

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6. State **four** advantages of overhead irrigation. (2mrks)

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7. State **four** factors influencing mass wasting or solifluxion. (2mrks)

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8. State **three** harmful effects of crop diseases. (1 ½ mrks)

9. State **two** functions of the coffee Board of Kenya. (1mrk)

10. Give **four** factors that determine the stage at which a crop of maize is harvested. (2mrks)

11. Name **three** vegetative parts used in the propagation of pineapples. (1 ½mrks)

12. State **three** symptoms of sulphur deficiency. (1 ½ mrks)

13. List **four** types of farm records kept by a rabbit farmer. (2mrks)

14. Name **three** forms that water exists in the soil. (1 ½ mrks)
15. State **four** methods used in land clearing.  
(2mrks)

16. Give **three** methods of controlling Blossom-end not in a crop of tomatoes. (1 ½ mrks)

17. State **four** benefits of weeds to farmers  
(2mrks)

18. (a) State **three** methods of weed control in a crop of rice  
(1 ½ mrks)

(b) Define the term agroforestry.  
(½mrk)

**SECTION B (20MRKS)**

*Answer all question in this section*

19. The diagram below illustrate s a method of irrigation used on the farm. Study it carefully and answer the questions that follow.
(a) Name the method of irrigation illustrated above. (1mrk)

(b) Give two disadvantages of the above method. (2mrks)

(c) Name two types of water pumps used to lift water on the farm. (2mrks)

20. The diagram below illustrate methods of pruning in crop production. Study them carefully and answer the questions that follow.

(a) Name the methods of pruning illustrated in the Figure A and B. (2mrks)

(b) State two where the method of pruning shown Figure A is recommended. (2mrks)

(c) Give two systems of pruning in coffee. (1mrk)

21. The diagram below shows common crop pests on the farm. Study them carefully and answer the questions that follow;
22. The illustration below represent common weeds on the farm. Study them and answer the questions that follow.

(a) Name the parts represented by letter D and E. (2marks)

D. ..............................................................................................................................

E. ..............................................................................................................................

(b) State two damages of pest D (2marks)

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(c) State one control measures of pest E (1mark)

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23. State and explain factors influencing soil erosion (20marks)

SECTION C (940MARKS)

Answer any two questions in this section in the spaces provided

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Agriculture 1
24. Describe the production of maize (zea mays) under the following headings
   (a) Uses (3mrks)
   (b) Land preparation (3mrks)
   (c) Planting (5mrks)
   (d) Fertilizer Application (3mrks)
   (e) Disease (4mrks)
   Harvesting (2mrks)

25. (a) State and explain the factors considered when selecting a nursery site. (10mrks)
(b) State and explain five nursery management practices carried out on tomato seedlings
INSTRUCTIONS TO CANDIDATES

[a] Write your name and index number in the spaces provided at the top of this page.

[b] Sign and write the date of the examination in the spaces provided above.

[c] This paper consists of three sections A, B, and C.

[d] Answer all the questions in sections A and B. Answer two questions in section C.

[e] Answers should be written in the spaces provided on the question paper.

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SECTION A [30 MARKS]

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

1. Name a breed of goats that has long hair. [0.5mks.]

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2. Give three factors that should be considered when sitting a bee-hive in the farm [1.5marks]

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3. State four management practices that would ensure maximum harvest of fish in a fish pond [2marks]

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4. Give two reasons why walls of dairy sheds should be white—washed instead of painted with water or oil paint. [1mark]

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5. What is the intermediate host for liver fluke. [0.5mks.]

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6. What is the duration of estrus cycle in a cow? [0.5mks.]

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7. If a dairy cow was noticed to be showing first signs of heat at 6.00am. What time should she be inseminated? [1mark]

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8. Give four factors that determine the amount of water required by an animal. [2marks]
9. Name three holding tools and equipment. [1.5 marks]

10. Give three functions of a combination squire. [1.5 marks]

11. State three functions of the differential in a tractor's power transmission. [1.5 marks]

12. State three factors that contribute to a high working efficiency of a disc harrow. [1.5 marks]

13. List three products obtained from dromedary camel. [1.5 marks]

14. If the records showed that a rabbit doe was served on 27th September 2014, what date did she give birth/kindle? [0.5 marks]

15. Give two signs that would show that a rabbit doe is about to parturite. [1.0 mark]
16. Under what conditions would it be necessary to use a file to smoothen a piece of wood instead of using a smoothing plane? [0.5 marks]

17. What is the use of a plumb-bob? [0.5 marks]

18. State four characteristics of a Corriedale sheep breed. [2 marks]

19. State any two disadvantages that may arise from inbreeding in livestock production. [1 mark]

20. Name four cattle diseases caused by bacteria. [2 marks]

21. Name any two methods recommended for identifying goats. [1 mark]

22. State three field conditions under which a disc plough should be used instead of a mould board plough. [1.5 marks]
23. Give three symptoms of milk fever in dairy cattle. [1.5 marks]

24. Give four reasons for steaming-up dairy animals. [2 marks]

SECTION B [20 MARKS]

Answer all questions in this section in the spaces provided.

25. The drawing below shows the cross-section of a house under construction. Study it carefully and answer questions that follow.
[a] Assuming that the wooden beams are strong enough to hold the roof load. What is the most likely thing to happen when the roof load exerted presses at point Y and Z. [1 mark]
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[b] On the diagram provided draw and label two constructional features you would add to this structure in order to make it more efficient. [2 marks]
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[c] State two importance of the fascia board in the farm building. [2 marks]
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26. The following illustration show the behavior of chicks at different temperatures of the brooder.
[a] Explain the temperature conditions in each of the four diagrams A, B, C, and D. [2 marks]

A………………………………………………… B……………………………………………………………………

C……………………………………………… D……………………………………………………………………

[b] Give one method of assessing temperature in the brooder. [1 mark]

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[c] Name two other behavioral observations on chicks when temperature is very high in the brooder. [2 marks]

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27. The illustration below shows a pig farrowing pen. Study it and answer questions that follow.

![Pig Farrowing Pen Illustration]

[a] What is the use of the raised metal rails. [1 mark]

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[b] Give two uses for the parts labeled D. [2 marks]

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28. Below is an illustration representing a practice carried out in sheep. Study it and answer questions that follow.
[a] Identify the practice illustrated above. [1 mark]

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[b] State three precautions taken when carrying out the above practice. [3 marks]

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29. Study the illustration below of a poultry digestive system and answer questions that follow.
[a] Give two functions of part E. [2 marks]

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[b] State one function of part H. [1 mark]

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SECTION C [40 MARKS]

Answer any two questions from this section in the spaces provided after each question.
30. [a] Describe ten factors that are considered during the selection of a breeding stock. [10 marks]

[b] Describe five effects of parasites on livestock. [5 marks]

[c] Describe the mechanical control measures of ticks. [5 marks]

31. [a] Outline five reasons why bees swarm away. [5 marks]

[b] Discuss the preparations and practices that should be carried out on a pregnant sow 10 days before she farrows. [5 marks]

[c] Describe Gumboro disease under the following sub headings.

Causal organism [1 mark]

Livestock attacked [1 mark]

Symptoms of the disease [6 marks]

Control measures [2 marks]

32. [a] Explain five advantages of animal draught power. [5 marks]

[b] Discuss the importance of lubrication system in a tractor. [4 marks]

[c] Explain six factors considered when selecting construction materials for farm structures. [6 marks]

[d] Give five qualities of a good calf pen. [5 marks]