Name ………………………….………………………….. Adm No …………….

443/2

Agriculture

Paper 2

Time: 2 HOURS

**FORM FOUR END OF TERM 2, 2019**

**INSTRUCTIONS TO ALL CANDIDATES**

1. Write your name and admission number in the spaces provided above.
2. This paper consists of three section A, B and C
3. Answer all questions in section A and B and any other questions in section C
4. Answers should be written in the spaces provided

**FOR EXAMINERS USE ONLY**

|  |  |  |
| --- | --- | --- |
| **SECTION**  | **MAXIMUM SCORE** | **CANDIDATES SCORE** |
| A | 30 |  |
| B | 20 |  |
| C | 40 |  |
| **TOTAL** | **90** |  |

1. State **four** signs of good health in a cow. (2 mks)
2. …………………………………………………………………………………….
3. ……………………………………………………………………………………
4. ……………………………………………………………………………………
5. …………………………………………………………………………………….
6. State **four** dairy cattle breeds reared in Kenya (2 mks)
7. ………………………………………………………………………………………
8. ………………………………………………………………………………………
9. ………………………………………………………………………………………
10. ………………………………………………………………………………………
11. State **four**  advantages of embryo transplant (2 mks)
12. ……………………………………………………………………………………..
13. ………………………………………………………………………………………
14. ………………………………………………………………………………………
15. ………………………………………………………………………………………
16. List **four** characteristics of a good dairy cow (2 mks)
17. ………………………………………………………………………………………
18. ………………………………………………………………………………………
19. ………………………………………………………………………………………
20. ………………………………………………………………………………………
21. Give **two** reasons why honey is harvested in the evening (1 mk)
22. ………………………………………………………………………………………
23. ……………………………………………………………………………………..
24. ……………………………………………………………………………………..
25. ………………………………………………………………………………………
26. State **two** methods recommended for identifying goats (1 mk)
27. ………………………………………………………………………………………
28. ………………………………………………………………………………………
29. State **two** advantages of using wood in farm buildings (1 mk)
30. ………………………………………………………………………………………
31. ………………………………………………………………………………………
32. State **four** characteristics of succulent roughage (2 mks)
33. ………………………………………………………………………………………
34. ………………………………………………………………………………………
35. ………………………………………………………………………………………
36. ………………………………………………………………………………………
37. What is the significance of microbial activities in the rumen? (2 mks)

…………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….

1. State **four** factors that affect digestibility in livestock feeds (2 mks)
2. ……………………………………………………………………………………..
3. ………………………………………………………………………………………
4. ………………………………………………………………………………………
5. ………………………………………………………………………………………
6. Name the tool used for the following functions (1 mk)
7. Holding, tightening and loosening metallic pipes -
8. Joining two ends of wire by winding it -
9. Name the livestock disease associated with deficiency of the following in the diet (2 mks)
10. Iron -
11. Iodine -
12. Copper-
13. Magnesium -
14. List **two** methods of controlling rinderpest in cattle (1 mk)]
15. ………………………………………………………………………………………
16. ……………………………………………………………………………………..
17. Name **two** functions of crop in digestive system of chicken (1 mk)
18. ……………………………………………………………………………………
19. ……………………………………………………………………………………
20. State **three** differences between dromedary and bactrian camel ( 1 mk)
21. ……………………………………………………………………………………
22. ……………………………………………………………………………………
23. ……………………………………………………………………………………
24. State **two** reasons why maintenance of farm structures is important. (1 mark)
25. ……………………………………………………………………………………..
26. …………………………………………………………………………………
27. Name **two** kinds of livestock which can be castrated using a rubber ring (1 mk)
28. ……………………………………………………………………………….
29. ……………………………………………………………………………….
30. Name **two** ways of improving milk production in a herd of indigenous dairy goats (1 mk)
31. ………………………………………………………………………………….
32. ………………………………………………………………………………….
33. Outline **four** advantages of Kenya Top Bar Hive over the log hive (2 mks)
34. ……………………………………………………………………………………………………………………………………………………………………………..
35. ……………………………………………………………………………………………………………………………………………………………………………..
36. ………………………………………………………………………………………………………………………………………………………………………………
37. ………………………………………………………………………………………………………………………………………………………………………………

**SECTION B – 20 MARKS**

1. The diagram below illustrates a routine practice carried out to control a certain livestock disease. Study and answer the questions that follow.



1. Identify the practice (1 mk)

………………………………………………………………………………

1. Name the disease that is controlled by the above practice (1 mk)

……………………………………………………………………………………

1. State **two**  symptoms of the disease controlled by the practice above (2 mks)
2. ……………………………………………………………………………….
3. ……………………………………………………………………………….
4. State **two** predisposing factors of the disease controlled by practice above (2 mks)
5. ………………………………………………………………………………
6. ………………………………………………………………………………
7. Study the farm tools below and answer the questions that follow.



1. Identify each tool (2 mks)

………………………………………………………………………………

1. State the functions of each tool (2 mks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….

1. State **two** maintenances practices carried out on the tool marked Z. (2 mks)
2. ………………………………………………………………………………….
3. ………………………………………………………………………………..
4. The diagrams below shows livestock parasites. Examine them and answer the questions that follow. (2 mks)



1. Identify each parasite (2 mks)
2. L –
3. M –
4. State **two** negative effects on animals caused by each of the parasites (4 mks)

**L**

1. …………………………………………………………………………...
2. …………………………………………………………………………….

 **M**

1. ………………………………………………………………………….
2. …………………………………………………………………………..
3. State **one** method of control for each parasite (2 mks)
4. ……………………………………………………………………………….

**SECTION C (40 MARKS)**

**Answer any TWO questions from this section in the answer booklet provided**

1. (a) Describe the working principles of a four stroke cycle of a petrol engine (12 mks)

(b). State the components of power transmission system and one function of each component (8 mks)

1. (a) Discuss Newcastle disease under the following sub headings
2. Causal organisms (1 mk)
3. Signs of attack (7 mks)
4. Control measures (2 mks)

(b). Outline the various management practices in a fish pond that ensure maximum yields of fish (5 mks)

©State **five** disadvantages of free range system of rearing poultry (5 mks)

1. (a) Describe **six** advantages of artificial insemination over natural (6 mks)

(b). List **four** types of fences (4 mks)

© Describe the advantages of fences (10 mks)