Name:…………………………………………… Index No. …………………..

School:………………………………………….. Candidate’s Sign……………

 Date:………………………..

**443/2**

**AGRICULTURE**

**PAPER 2**

**2 HOURS**

**FORM 4**

**Kenya Certificate of Secondary Education**

**INSTRUCTIONS TO CANDIDATES**

* *Write your* ***name*** *and* ***index number*** *in the spaces provided above*
* *Sign and write the date of the examination in the spaces provided above*
* *This paper consists of three sections* ***A, B*** *and* ***C***
* *Answer* ***ALL*** *the questions in section* ***A*** *and* ***B***
* *Answer* ***ANY two*** *questions in section* ***C***
* *Answers to all questions must be written in the spaces provided*

***For Examiner’s Use Only:***

|  |  |  |  |
| --- | --- | --- | --- |
| SECTION | QUESTIONS | MAXIMUM SCORE | CANDIDATES SCORE |
| A | 1-20 | 30 |  |
| B | 21-24 | 20 |  |
| C |  | 20 |  |
|  | 20 |  |
|  | **TOTAL** | **90** |  |

**SECTION A (30 MARKS)**

***Answer ALL the questions in this section in the spaces provided.***

1. State FOUR categories of produce stores found in a farm (2mks)

2. Give TWO reasons for tooth clipping in piglets (1mk)

3. State TWO uses of a rake (1mk)

4. State TWO diseases that may affect bees in a colony (1mk)

5. Differentiate between a heifer and a cow (1mk)

6. Name FOUR species of livestock that are affected by tapeworms (2mks)

7. Name FOUR viral diseases that affect poultry (2mks)

8. State FOUR disadvantages of natural incubation in poultry production (2mks)

9. Name TWO causes of bad flavours in milk production (1mk)

10. Give TWO causes of death in cows during or after parturition (1mk)

11. Differentiate between roughages and concentrates as used in livestock nutrition (1mk)

12. List THREE zoonotic diseases that can occur on the farm (1½ mks)

13. State FOUR uses of harrows on the farm (2mks)

14. State FOUR signs of heat in pigs (2mks)

15. Name FOUR plant species that can be used to establish live fences (2mks)

16. Give TWO benefits of scattering grains in a deep litter poultry house (1mk)

17. List THREE types of lubrication systems in farm machines (1½ mks)

18. List THREE sheep breeds reared for meat production in Kenya (1½ mks)

19. List THREE farm tools used during castration of farm animals (1½ mks)

20. Give FOUR disorders associated with calcium deficiency in livestock (2mks)

**SECTION B (20 MARKS)**

***Answer ALL the questions in this section in the spaces provided after every question.***

21. The photograph below illustrates a livestock rearing practice carried out in the farm.

 Diag…..

1. Identify the practice (1mk)
2. Give two farm tools used to carry out the above practice (2mks)
3. Give TWO importances of carrying out the above process (2mks)

22. Fill in the table below (3mks)

|  |  |
| --- | --- |
| Animal | Gestation Period |
| Cattle |  |
| Pig |  |
| Rabbit  |  |

23. The photograph below shows a farm implement

 Dia………

1. Identify the implement (1mk)
2. Label parts A and B (2mks)

A –

B –

1. State the function of part labeled C (1mk)
2. Explain TWO maintenance practices done on the implement (2mks)

24. The diagram below shows an equipment used in livestock breeding.

 Diag….

1. Identify the equipment (1mk)
2. What is the importance of:
3. Using warm water on the equipment (1mk)
4. Smearing Vaseline jelly on the rubber casing before use (1mk)
5. Outline the procedure of using the above equipment in the farm (3mks)

**SECTION C (40 MARKS)**

***Answer ANY TWO questions in this section in the spaces provided after question 27***

25. (a) Discuss symptoms of tapeworm attack in farm animals (5mks)

(b) Discuss pneumonia disease in livestock under the following sub-headings

1. Animals attached (3mks)
2. Predisposing factors (3mks)
3. Symptoms of attack (4mks)

(c) Describe qualities of a goat house that help to control diseases (5mks)

26. (a) Outline the importance of water in livestock nutrition (6mks)

 (b) Give FOUR functions of the gear box in a tractor (4mks)

 (c) Discuss ways of improving milk production (5mks)

27. (a) Give FIVE qualities of camels that enable them to survive the harsh conditions

of arid and semi-arid areas (5mks)

 (b) Outline various challenges hampering successful poultry production in Kenya

(7mks)

 (c) Discuss uses of various farm hand tools in the construction of a cattle dip

(8mks)