NAME:…… INDEX NO…….

SCHOOL:…….. DATE:…….

443/1

AGRICULTURE

FORM IV

PAPER II

TERM I1, 2019

TIME: 2 HRS

MOKASA II PRE-MOCKS -2019

INSTRUCTIONS TO CANDIDATES

- Write your name and index number in the spaces provided
- This paper consist of three sections A, B and C

SECTION	MAXIMUM SCORE	CANDIDATE'S SCORE
A	**30**	
B	**30**	
C	**40**	
TOTAL	**100**	

This paper consist of 11 printed pages candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing

1. State four mechanical methods of controlling ticks. (4mks)

2. Give two examples of feed addictives in cattle. (1mk)

3. Name the mineral deficiently that causes each of the following condition in livestock.
   Grass stagger (Tetany) (1/2mk)

   Milk fever/parturient parensis (1/2mk)

4. Name two hormones produced in a lactating cow. (2mks)

5. What is referred to as a ‘ Notifiable disease’ (1mk)

   b) Name four examples of notifable diseases in livestock. (2mks)

6. Outline three pre-disposing factors of footrot disease in sheep.(1 ½ mks)

7. List any four metal work tools and equipment used in the farm. (2mks)

8. Outline four qualities of eggs for incubation. (2mks)

9. State four prophylactic measures used by a farmer to control livestock diseases. (2mks)

10. Give three methods of feeding colostrums to newly born calves. (1 ½ mks)

11. A) Define the term "zoonote disease." (1mk)

    b) Give two examples of zoonote diseases. (1mk)

12. List three advantages of hedges. (1 ½ mks)

13. Why is it necessary to provide grit to birds? (1mk)

14. State four good qualities of honey. (2mks)

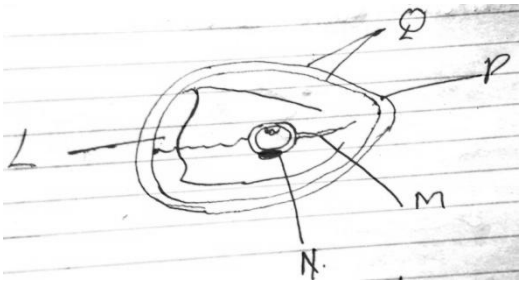
15. State two causes of soft shell in eggs. (1mk)

16. Name three methods of livestock selection. (1 ½ mks)

17. Name a tool used for tightening barbed wires during fencing. (1mk)

SECTION B. (Answer all the questions.)

18. Study the diagram of an egg below and answer the question that follow.



i) Name the parts labeled N,Q and P. (1 ½ mks)
N

Q

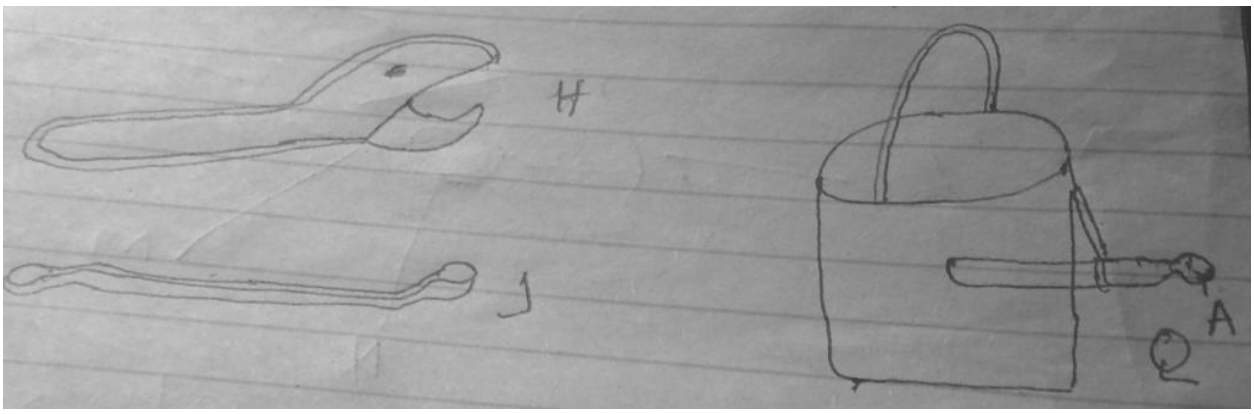
P

ii) State the function of the parts labeled M and L. (1 ½mks)

iii) Why should the egg be turned during incubation. (1mk)

19. State four reasons of treating timber. (4mks)

20. Below are the diagrams of workshop tools H, J and Q. Study them and answer the question that follow.



i) Identify each tool. (1 ½ mks)
H

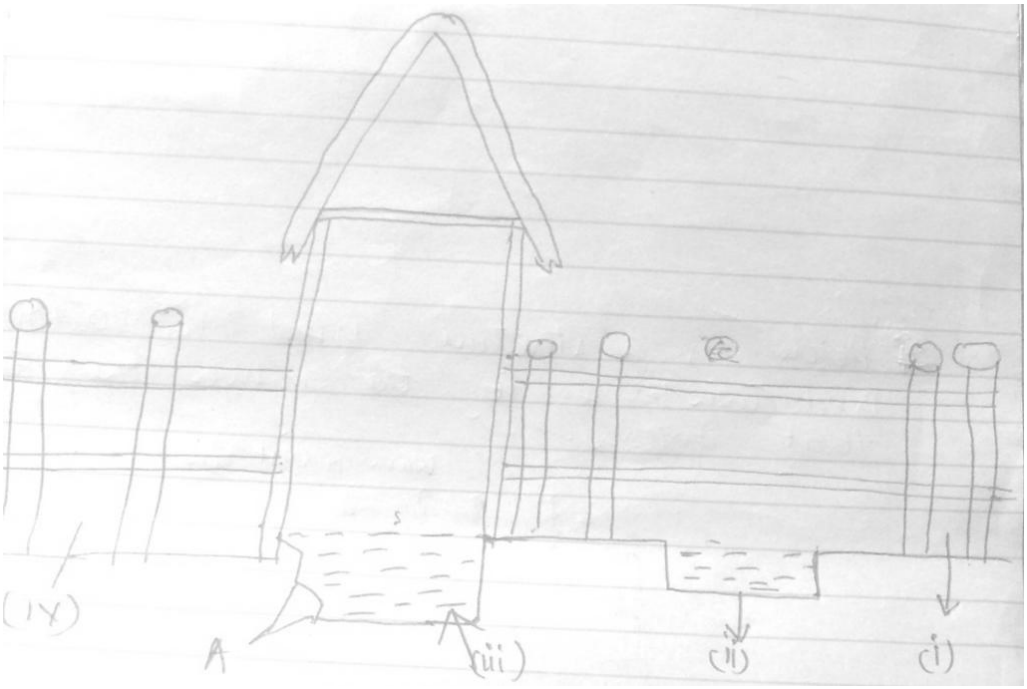
J

Q

ii) What functional advantages does H have over J. (1mk)

iii) Why is the part labeled H an important component of watering can. (1mk)

21. Below is a diagram of a certain farm structure. Use it to answer the questions that follow.



a. Name the parts labelled.
   i.

   ii.

   iii.

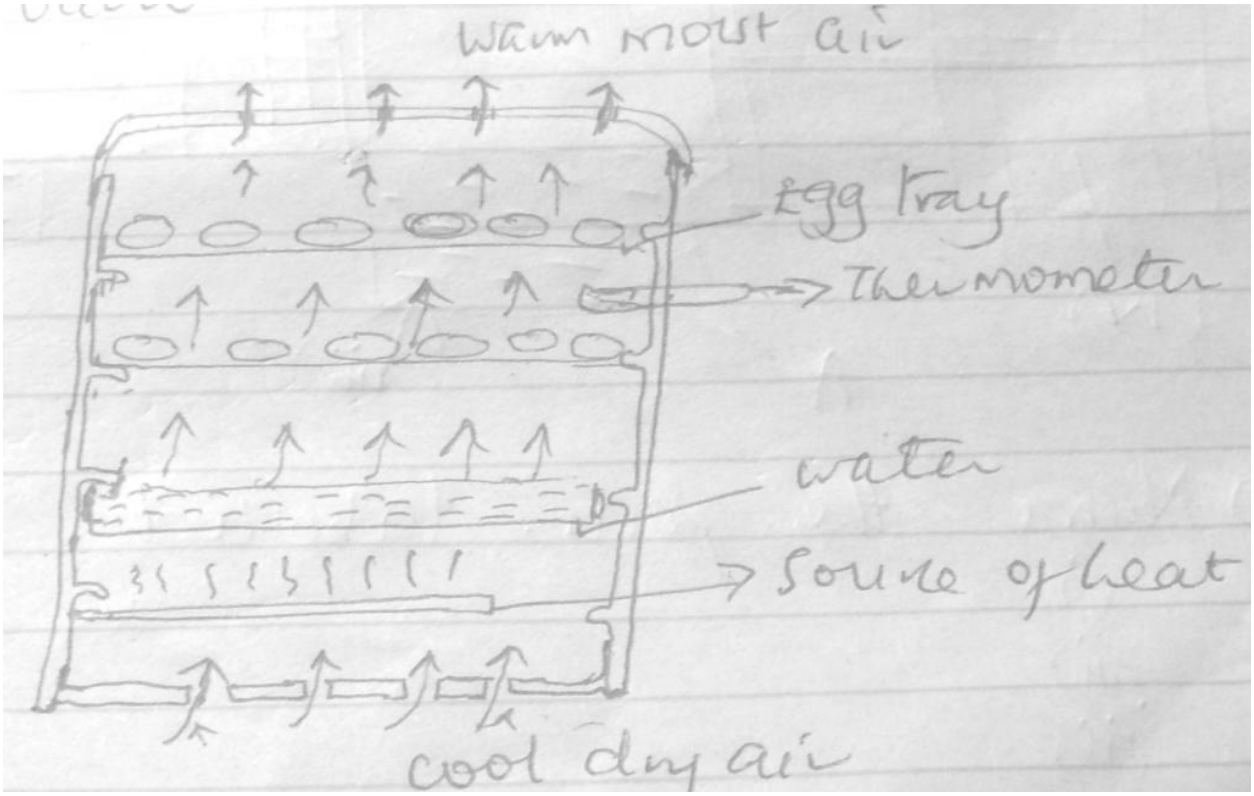
   iv.

b. Identify the part labeled A.(1/2 mk)

c. Give the function of the part labeled A.(1/2 mk)

d. State two maintenance practice carried out in part (ii) above. (2mks)

22. Below is a structure used in poultry production. Use it to answer the questions that follow.



a. Identify the structure. (1mk)

b. State the main function of the structure. (1mk)

c. Give the function of the following in the structure.
Water (1/2 mk)

Thermometer (1 /2 mk)

SECTION C
Answer any two questions in this section.

23. A) Outline the use of fence in the farm. (10mks)

b) Discuss the tractor transmission system. (10mks)

24. Discuss foot and mouth disease under the following sub-headings.

Animal affected. (2mks)

Methods of transmission. (2mks)

Symptoms of attack. (4mks)

Control measures. (2mks)

b) Outline general control measures of livestock parasites. (10mks)

25. Outline the various methods of maintaining farm tools and equipment. (8mks)

b. Describe artificial rearing of layer chicks from day one to end of brooding. (12mks)

AGRICULTURE P2 MARKING SCHEME FORM FOUR TERM II EXAM – 2019

SECTION A

1. - Rotational grazing
   - Hand picking / deticking and killing
   - Hand dressing
   - Burning pastures / paddocks
   - Double perimeter fencing (1x4) 4mks

2. - Hormones e.g. stilbestrol
   - Antibiotics e.g. tetranyne

   Reg collidiostat medicants 2 x ½ = 1mk

3. (a) Grass tetany – Lack of magnesium ions (mg^{2+})
   Milk fever - Lack of calcium ions (Ca^{2+})
   (1/2 mk)

4. - Oxytocin
   - Andrenaline (2 x 1/2 = 1mk)

5. (a) - A disease that is highly contagious and infectious and needs notification of the relevant authorities to impose quarantine for its control. (1mk)

   (b)
   - Rinderpest (cattle plague)
   - Anthrax
   - New castle
   - Foot and mouth disease
   - Rift valley fever (4 x ½ = 2mks)

   (6)
   - Filthy sorroundings e.g. wet and muddy areas
   - Sharp objects
   - Overgrown hooves (3 x ½) = 1 ½ mks)

7
- Soldering gun
- Tins ship
- Centre punch
- Hacksaw (4 x ½) = 2mks

8.-
- Smooth shell
- Medium size
- Clean
- Free from abdomalities e.g. blood spot, meat spot, double yolk
- Free from crack

- Fertile egg (4 x ½ = 2mks

9. - Vector control
- Isolating sick animals
- Vaccination
- Use of prophylactic drugs (4 x ½ = 2mks)

10. - Natural rearing
- Foster rearing
- Artificial rearing / bucket feeding (3 x ½ = 1 ½ mks)

11(a) - Are those that are transmitted from animal to a man or from man to animal. (1mk)

(b) - Anthrax, Brucellosis, Rabies, Tuberculosis, Rift valley fever, Trichomomasis, mud cow disease (2 x ½ = 1mk)

12. - Provide shade to livestock.
- Cheap and easy to establish
- Tall varieties act as wind breakers e.g. kai apple
- Have aesthetic value / beauty
- Roots hold soil firmly controlling soil erosion
- Can be used as a livestock feed. (3 x ½ = 1 ½ mks)

13. - To aid in grinding grains into paste by thick muscle of the gizzard. (1mk)

14. - Purity - free from wax, wings / smoke, combs
- Colour - Brown yellow
- Viscosity - Not dilute or too thick
- Smell - Right smell not of rotten combs (4 x ½ mks) = 2mks

15. - Lack of calcium
- Effects of some diseases e.g. New castle

16. - Mass selection
- Progeny testing
- Contemporary comparison (3 x ½ = 1 ½ mks)

17. - Monkey strainer / wire strainer (1x1 = 1mk)

SECTION B

18(i) N - Yolk
Q - Shell membrane
P - Egg shell (3 x ½ = 2mks)

(ii) M - Holds the yolk in position (central position)
L - Air space (supplies air to the developing chick) (2 x 1 = 2mks

(iii) - Prevent germinal disc from sticking on the side
- Ensure enough ventilation to all parts. (1 x 1 = 1mk)

19. - To prevent warping / bending or twisting
- To prevent rotting / damage by fungi
- To protect it from pest attack
- To make timber achieve its maximum strength (4 x 1 = 4mks)

20.(i) - H - Adjustable spanner
J - Ring spanner
Q - Watering can (3 x ½ = 1 ½ mks)

(ii) - Adjustable spanner can be used for tightening / loosening different sizes of nuts while ring spanner can be used to tighten or loosen at least two different sizes of nuts. (1 x 1 = 1mk)

(iii) Causes water to come out in spreading manner hence reducing its impact on seedlings while at the same time avoiding soil erosion. (1 x 1 = 1mk).

21.(a) (i) Entrance / yard
(ii) Foot bath
(iii) Dip tank
(iv) Drainage race (4 x ½ = 2mks)

(b) Exist steps / stairs / lead out stairs. 1 x ½ = ½ mk

(c) part A allows animals to come out of the dip wash / dip tank (1 x ½ = ½ mk)

(d) Cleaning / removing mud or dung
Changing water when dirty
Adding more disinfectant (2 x 1 = 2mks

22(a) Artificial incubator (1mk)

(b) - Provide fertilized eggs with suitable conditions for embryoric development (1mk)
(c) (i) Water - Gives required relative humidity(1/2 mk)
(ii) Thermometer - Determines actual temperature in the incubator (1/2 mk)

SECTION C

23(a) - Keep off animals / domestic animals
- Add aesthetic value
- Add value to the farm

- May provide livestock feeds, fuel and human food
- Help control pests and diseases
- Some act as wind breaks
- Control breeding
- Control grazing by use of paddocks
- Marking boundaries
- Keep off intruders / thieves (1x10 = 10mks)

(b) (i) - Disconnects engine from lest of power transmission system.
- Interrupts power flow engine, allowing selection of one gear to another.

(ii) - Alters relation between engine speed and wheel speed.

(iii) - Allows one wheel to move faster than the other e.g. corner negotiation, speed reduction mechanism.

(iv) - Rotates wheels and transmits power from differential to final drive.

(v) - Reduces speed of revolutions for low speed to reach the wheel.

(vi) - Wheel rotates allowing tractor movement, order should be maintained (5x2 = 10mks)
(Award explanation if identity / structure is correct.

24(a)(i) - Cattle, sheep, goats, pigs (2 x 1 = 2mks)

(ii) - Ingestion of contaminated water / feed with saliva blood.
- Machinery and animals / human from one form to another. (2 x 1 = 2mks)

(iii) - Rapid rise in temperature
- Painful blisters in muzzle, udder and mouth
- Lack of appetite – difficult eating
- Excessive salivation
- Lameness and peeling hooves
- Grinding teeth
- Dullness and shivering 4 x 1 = 4mks

(iv) - Quarantine
- Report to government authorities
- Compulsory vaccination
- Treat the wounds (2 x 1 = 2mks)

(b) - Rotational grazing / paddocking
- Regular deworming
- Spraying / dipping in acaricide

- Maintaining hygiene / proper sanitation
- Double fencing
- Proper meat inspection
- Proper cooking of meat
- Proper disposal of human waste / proper use of latrines.
- Draining of marshy areas / fencing off marshy areas
- Burning infested pastures during dry season
- Ploughing infested pastures
- Hand picking / physical killing
- Biological control / sterilizing male tsetseflies
- Applying chemicals to kill parasites and intermediate hosts e.g. copper sulphate to kill water snails in marshy areas. 10 x 1 = 10mks

25(a)
- Use the right tools for the right work
- Handle tools and equipment properly
- Clean tools after use
- Store tools at the right places
- Replace and repair worn out parts of the tools
- Grease moving parts and bearings
- Sharpen cutting edges / digging edges of the tools
- Oil exposed parts to prevent rusting
- Straighten bent blades
- Tighten loose nuts and bolts (8 x 1 = 8mks)

(b)
- Ensure brooder corners are rounded.
- Provide enough brooding space
- Clean and disinfect brooder and equipment
- Provide proper guard around heat source
- Provide proper litter on floor / wood shavings
- Maintain appropriate temperature according to age of the chick
- Temperature during first week 32 – 35^0C, then reduce accordingly.
- Maintain proper ventilation by adjusting openings.
- Provide adequate fresh quality feeds / chick mash
- Provide dim light in the brooder
- Remove dead chicks
- Provide adequate and appropriate waterers
- Control parasites by applying appropriate pesticides
- Control diseases using appropriate method e.g. vaccination.
- Treat sick chicks
- Provide adequate water
- Keep proper records
- Debeak 8 – 10 days towards end of brooding
- Gradual change of chick mash to growers mash during last one week
- Spread newspapers on top of litter for the first few days and scatter feed on them
- Isolate the sick chicks (12x 1 = 12mks