
FORM FOUR TERM ONE EXAM 2017

AGRICULTURE PAPER 2 MARKING SCHEME

SCHOOLS NET KENYA

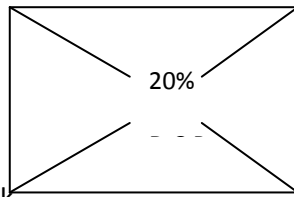
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MARKING SCHEME

1. Large white $1 \times \frac{1}{2} = \frac{1}{2} \text{ mk}$
2. Epistasis is a combination of genes which on their own could have been inferior or undesirable $1 \times 1 = 1 \text{ mk}$
3. four reasons of treating timber before roofing farm buildings $4 \times \frac{1}{2} = 2 \text{ mk}$
 - Prevent attack from insects
 - Prevent attack from fungi (rotting)
 - Resist weather condition: -extreme temperature
 - Resist water penetration
 - To harden and make it durable and more strong
 - To avoid warping
4. four abnormalities of eggs that can be detected during egg candling. $4 \times \frac{1}{2} = 2 \text{ mks}$
 - Absence of yolk.
 - Double / triple yolk.
 - Air space in wrong position.
 - Excessively large air space.
 - Cracks on egg shell.
 - Blood / meat spots.
 - Deformed / broken yolk.
5.
 - Tsetse flies
 - Ticks $1 \times 1 = 1 \text{ mk}$
 -
6. Steaming up of ewes to have milk to be suckled
 - Use of lambing pens
 - Ewes are made to recognize lambs after lambs
 - Blind folding ewes to activate maternal instinct $4 \times \frac{1}{2} = 2 \text{ mk}$
 - Attend/ treat inflamed udders/ painful
7. Monkey strainer/wire strainer $1 \times \frac{1}{2} = \frac{1}{2} \text{ mk}$
8.
 - Filthy surroundings e.g. wet and muddy areas cracking of the hooves
 - Sharp objects in pastures
 - Overgrown hooves/elongated hooves $2 \times \frac{1}{2} = 1 \text{ mk}$
9.
 - 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 livestock feed $4 \times \frac{1}{2} = 2 \text{ mks}$
10. (a) Are diseases that are transmitted from animal to man or from man to animal $1 \times 1 = 1 \text{ mk}$
 (b) Anthrax, Brucellosis, Rabies, Tuberculosis, Rift-valley fever, Trichomoniasis, Mud cow disease $2 \times \frac{1}{2} = 1 \text{ mk}$
11.
 - mass selection
 - Progeny testing
 - Contemporary comparison $3 \times \frac{1}{2} = 1 \frac{1}{2} \text{ mk}$
12. bull – mature male cattle - Bulluock -mature castrated male cattle $1 \times 1 = 1 \text{ mk}$

Billy –mature male goat - Nanny –mature female goat

13
Wheat (35%) ½ mk



10 Parts of sunflower cake

$$\frac{1}{2} \times \frac{1}{2} = 1mk$$

Sunflower (10%) ½ mk

Sunflower seed cake

$$\frac{10}{25} \times 100 = 40 \text{ kg of sunflower seed cake } \frac{1}{2} \text{ mk}$$

$$\frac{10}{25} \times 100 = 60 \text{ kg of wheat } \frac{1}{2} \text{ mk}$$

14. - Purity – free from wax/wings/smoke/combs
- Colour – brown yellow
- Viscosity – not dilute or too thick
- Smell – right smell not of rotten combs

$$4 \times \frac{1}{2} = 2mks$$

15. - Spaceous
- High above the ground/well drained site
- Well ventilated
- Well lit

$$4 \times \frac{1}{2} = 2mks$$

16. - To aid in grinding grains into paste by thick muscle of the gizzard

$$1 \times 1 = 1mk$$

17. . (i) - Sahiwal
- Red poll
- Simmental
- Brown Swiss

$$2 \times \frac{1}{2} = 1mk$$

18. - Injection
- Orally
- By inhalation
- Through the cloaca

SECTION B

- 19 a) (i) Fish pond
(ii) P-inlet

$$1 \times \frac{1}{2} = \frac{1}{2}mk$$

Q-dam wall / embarkment

R-drainage pipe / outlet

S- spillway pipe

$$4 \times \frac{1}{2} = 2mks$$

- (b) Grass on the structure (pond) planted on the land around it is to stabilize the ground 1x½=½mk

- (c) –water supply should be available

- slope of the land

- soil type – clay is best

- market for the fish

$$2 \times 1 = 2mks$$

-release the bull

$$4 \times 1 = 4mks \text{ -mark as whole}$$

20. (a) **Parts labelled.**
A - Lobe
B - Gland cistern.
C - Teat cistern.

$$1 \times 3 = 3mks$$

- (b) healthy milking herd.

Clean milking cows
 Healthy and clean milk man
 Clean milking shade
 Clean milking utensils
 Milk filtration, cooling and storage
 Avoid favours in milk.
 (c) cul perpetual carnivals
 Debeak the birds
 Keep birds busy
 Control external parasites
 Avoid bright light in poultry house.
 Avoid overcrowding
 Provide birds with balanced diet.
 Keep birds according to their ages.

21.(a) B - Burdizo

L. -Pickaxe

M- Adjustable spanner

N.- Ring spanner

O.- Pipe wrench $5 \times \frac{1}{2} = 3\frac{1}{2}$ mks

(b) Give one functional advantage of tool M over tool N 1 x1=1mk

Tool M can be used for tightening or loosening more than two sizes of nuts and bolts

22. a) i raised calf pen

ii slatted floor

iii 40-60cm high

b i –to allow urine and dung to pass through

- To keep the floor dry

ii-Prevailing direction of wind

- Security of the calf pen proximity to the dairy shed/ accessibility

- Drainage of the soil

- Topography

SECTION C

Short notes on Friesian breed on;

23. (a) – feeding – feed troughs should be topped once or twice per day

- control of diseases ie vaccination against marek , fowl typhoid and Newcastle disease should be carried out according to the scheduled . Antibiotics should be added to the drinking water and hygiene maintained to prevent disease attack
- controlling of parasites- external parasites are controlled should be controlled by dusting and the litter should be removed after every 6 months and replaced with fresh one to prevent pest build up. Internal parasites are controlled by derworming
- egg collection collected 2 or 3 times per day
- Debeaking it is done to discourage egg pecking and toe and cannibalism
- Culling unproductive, old and cannibal birds should be removed from the the flock

2×5=10mks

(b)characteristics of clean milk

- Has normal taste
- Free from physical materials
- Free from pathogens
- Free from foul smell
- It is of high keeping quality
- Is chemical composition is within the expected standards1×5=5 mks

C) - animal grow faster attaining maturity

- increase the yields
- increase the quality of the products
- They are economical to keep i.e. they save on veterinary and drug costs
 - To avoid spreading diseases to other animals and human beings
 - To have long productive life
 - To give rise to strong and healthy offsprings $1 \times 5 = 5$ mks

24.a *Bacillus anthracis*

- b.
- animal develops fever
 - swelling of underside body
 - extensive bloating of stomach after death
 - Blood stains in faeces and milk
 - Tar-like watery blood comes from all orifices such as noses, anus and mouth and blood does not clot quickly.
 - Carcass lacks rigor mortis i.e. stiffness of the body $1 \times 5 = 5$ mks
- b.
- give large doses of anti-anthrax serum
 - uses of antibiotics
 - treatment of wounds
 - vaccination using blanthax
 - Quarantine in case of outbreak
 - Carcass must not be opened
 - Burn and burying of carcass should be done as a preventive measure $1 \times 4 = 4$ mks

25.a

- Availability of water the surrounding - should be within 3km radius
 - Availability of flowers - readily available to facilitate collection
 - Shelter- protected from strong sun and wind
 - Noise and other disturbances- free from noise and other disturbances
 - pests and diseases free from pests and diseases
 - Dampness and bad odours free from dampness or any odour $1 \times 5 = 5$ mks
- (b)
 - restless
 - vulva turns red and swells
 - Udder became full with milky fluid
 - sows starts to build nest $1 \times 5 = 5$ mks
- c)
 - increase the efficiency of the tractor by reducing the rate of tear and wear of moving parts
 - Reduces the heat of rubbing surfaces
 - Acts as cleaning agent
 - Oils and prevents rusting $1 \times 2 = 2$ mks

i) **Origin.**

- Holland / Denmark. $1 \times 1 = 1$ mk

(ii) **Characteristics.**

- (i) It is black with white markings.
- (ii) The forehead udder and the legs below the knee are white.
- (iii) The average weight for bull is between 900 - 1000 kg while cows weigh between 700 kg.
- (iv) They are heavy feeder owing to their large bodies.
- (v) It produces 900 to 1000 kg of milk on average per lactation of 305 days.
- (vi) Milk butterfat content is about 3.5 to 4% BF.
- (vii) Heifers should reach service age at 21 months.
- (viii) Friesian calve for the first time at 30 months of age. $6 \times 1 = 6$ mks