**COUNTY LINK GROUP**

**COMMON EXAMINATION**

**END OF TERM II FORM 4 -2017**

**AGRICULTURE MARKING SCHEME**

**PAPER 443/2**

1. *Importance of tooth clipping*
* Avoid causing injury on teats
* Prevent piglets form injuring each other
* Controls mastitis (2x 1 = 2mks)
1. *Components of a truss*
* Cross tie
* Rafter
* Tie
* Strut (4 x $\frac{1}{2}=2mks)$
1. *Light breeds of poultry*
* Leghorns
* Ancona
* Minoca
* Sykes (4 x $\frac{1}{2}=2mks)$
1. (i) *Proper drainage*
* Saluted floor
* Raised floor (2x1 =2mks)

 (ii) *Free from draught*

* Windward side covered
* Placed in sheltered place (2 x1 $2mks)$
1. *Functions of water*

– regulate body temperature

* Important component of cells
* Froms part of animal products
* Maintain osmotic balance of blood and tissues fluid
* Help in excretion of waste products from the body (4 x $\frac{1}{2}=2mks)$
1. *Causes of infertility*
* Blocked fallopian tube
* Damaged fallopian tube
* Deficiency of essential nutrients e.g vit .E
* Freemartin
* Consensual diseases (4 x $\frac{1}{2}=2mks)$
1. *Factors determining the depth and size of foundation*
* Soil depth
* Soil type
* Function of the building (3 x $\frac{1}{2}=1 \frac{1}{2}mks)$
1. *Reasons why wind power is not reliable ==*
* Direction of flow keeps on changing
* Not evaluable at all times
* Has no constant strength
1. *Requirements of artificial brooder*
* Letter to keep the louse warm
* Ventilation
* Heat to provide desired room temperature
* Dim light to aloe chicks see food
* Round shaped brooder to discourage overcrowding
1. *Reasons for dehorning cattle*
* Prevent cattle from injuring each other
* Make the animal docile and easy to handle
* Prevent destruction of farm structures
* Polled animals occupy small space and therefore easy to transport and feed.
1. Pruning saw
* cuts hard branches of coffee
* has teeth
* Pruning knife
* pruning tea with soft branches
* has a smooth cutting edge

 (2×1=2mks)

1. – *percentage of nutrient to be obtained*

-Protein content of the feed /value of the nutrients

(2×1=2mks)

1. *Predisposing factors of mastitis in a cattle dairy*
* Age
* Stage of lactation
* Incomplete milking
* Mechanical injuries
* Poor sanitation
* Poor milking techniques (4 x $\frac{1}{2}=2mks)$
1. *Causes of bloat*
* Indigestion
* Blockage of oesophagus
* Pressure exerted on the oesophagus (2 x $\frac{1}{2}=1mk)$

**SECTION B**

1. (i)

A. Ovary

B. Funnel

C. oviduct (4 x $\frac{1}{2}=2mks)$ D. uterus

 (ii) Ovary-produce eggs and hormones

 Funnel-direct ova into the fallopian tube

 Oviduct –fertilization site

 -allows passage of ova (3×1=3mks)

(iii)- Brucellosis /contagious abortion

 - Trichomoniasis

 - Vaginitis

 - Orchitis (2×$\frac{1}{2}$ =1mk)

16.



Total parts 28+7=35 ( $\frac{1}{2}mk)$

1. Maize $\frac{28}{35}$ ×100 =80kg (1mk)
2. Simsim $\frac{7}{35}$×100 =20kg (1mk)
3. (i) liver fluke

 (ii) cattle/sheep

 (iii) Water snail

 (iv) - Control intermediate host

-Drain swampy areas

-Burning pastures during dry season

-Not grazing near marshy areas

- Routine drenching of animals (2×1=2mks)

1. Chaff cutter
2. Cut folder into small pieces
3. Greasing the moving parts regularly

-Sharpening the cutting blades

-Cleaning the equipment after days work

iv. Improve form of feed by cutting it into smaller pieces hence increasing digestibility

**SECTION C**

19. *Factors considered when sitting a produce store*

-Panorama – locate homestead where the farmer will have full view of all enterprises on the farm.

-Accessibility – structures should be located in easily accessed place

- Relationship with others structures – related structures should be close to one another

-Topography - Gentle sloping areas are the most suitable to reduce cost of leveling

-Soil type- The soil should be firm and well drained

-Direction of prevailing wind – locate homestead on the windward side of the structures with small foul scale

-Security – structures with high risk should be close to form house

-Drainage – locate structures in areas with good drainage to avoid dampness which encourage diseases. Proximity to amenities i.e: should be accessible to electricity and water supply. NB; mark right explanation only. (8mks)

b.-*Used to democrate the farm land*

-Used to keep off wild animals from the farm

-Used to separate crop field from pasture facilitating mixed farming

-Used to divide pastures field into paddocks facilities rotational grazing

-Control transport of people and animals preventing formation of unnecessary paths

- Help to control spread of parasites and diseases by keeping off wild and stray animals.

- Help isolate sick from healthy animals to prevent diseases.

- Help a farmer to control breeding.

- Provide security to the homestead and farm animals (8×1=8mks)

*C .Method of extraction*

-Type of flowers from which the nectar was obtained

-Season of the year –Honey formed in dry season seems to be of lower quality

-Maturity age of the honey mature honey is of good quality

-Method of harvesting- honey harvested well has less foreign materials (4×1=4 mks)

20 .(a) - *Control of stocking rate*

-Harvest at the correct maturity stage

-Avoid water pollution in the ponds it may poison the fish.

-Ensure adequate supply of food in the pod.

-Water in the pond should be kept in motion to facilitate aeration

-Maintain appropriate depth of water

-Control predators and thieves

-Drain and refill pond water with fresh water when necessary (1×7 mks)

(b) Well measured milk is put in a clean bucket

 - Insert index figure into the mouth of the calf

- Lower the head calf slowly into the bucket until the calf starts to drink milk

- Withdraw the figure slowly as the calf continues to drink milk from the bucket

- The procedure is repeated until the calf learn to drink from the bucket (1 x5 = 5 mks)

C - Check the engine oil using dip stick and add if necessary

-Check battery electrolyte and add distilled water if low

-Grease al the moving parts using nipples

-check the fan belt and tighten if loose

- Check water level in the radiator and add if low.

- Check sir cleaner and blow off excessive dust

-Check oil filters and replace if dirty

-Check loose nuts and bolts and tighten the loose ones

-Sediments bowl be cleaned if clogged -Check tyre pressure and adjust accordingly (1×8mk)

21. .(a)*General method of disease control giving an example in each case*

 -proper feeding eg; milk fever; bloat

 -proper housing eg; pneumonia

 - quarantine eg;anthrax, rinderpest, foot and mouth

 -Vaccination eg; Anthrax

 -Treatment eg; black quarter, pneumonia

 - proper breeding eg; brucellosis

 - Proper selection eg ; cancer

 -Use of prophylactic drugs eg; coccidiosis

 - Control of vectors e.g trypanosomiasis, ECF, anaplasmosis

 -Slaughtering affected animals e.g Antrax, Newcastle

-Proper disposal of carcass e.g Anthra

-Proper hygiene – Newcastle, contagious abortion

-Isolation -foot and mouth, Newcastle

- Hoof trimming – foot rot ( stating ×$\frac{1}{2}$ and example ×$\frac{1}{2}$ mk)

b. various tools used in the construction of Kenya top bar hive.

-Claw hammer – driving nails in and out of wood.

-Tpe measure- measuring required sizes of timber

-Clamp - for holding tight pieces of wood when cutting / joining

- Handsaw – cutting timber to the required size

-Wood chisel / brace hand drill- boring holes in wood

- Mallet – hitting the chisel

- Pliers –for cutting wire

- Jackplane –for smoothing timber surfaces

- Making / mortise gauge – making point for cutting

- Marking/ mortise gauge – marking points for cutting

- Ball pen – hammer – straightening / shaping metal sheet

- Try –square / combination square –for determining right angels on timber during construction

 (10 X 1 =10mks)