# KENYA NATIONAL EXAMINATION COUNCIL REVISION MOCK EXAMS 2016 TOP NATIONAL SCHOOLS

SACHO HIGH SCHOOL

AGRICULTURE

PAPER 2

MARKING SCHEME

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# SACHO HIGH SCHOOL KCSE TRIAL AND PRACTICE EXAM 2016

# AGRICULTURE PAPER 2 / 443/2 MARKING SCHEME

Causal organisms of pneumonia.

- 1. (a) Mycoplasma mycoides
  - (b) Predisposing factors of pneumonia.
  - Poor ventilation
  - Overcrowding
  - Age of the animal
    - Dampness/ chillness in animal's house
  - (c) Ways of controlling pneumonia.
    - Young animals should be kept in warm pens.
    - Proper sanitation should maintained.
    - Early cases should be treated using antibiotic.
    - Affect animals should be isolated for proper in warm pen.
- 2. (a) (i) A pair of shears
  - (ii) Scapel / sharp razor/ sharp knife.
  - (b) Colustrum is highly nutritious /rich in protein, vitamins, fats and minerals etc.
    - Contains antibodies which provides immunity to piglets.
    - Acts as laxative and helps to clear digestive track.
    - Highly digestive.
- 3. If a farmer has little capital
  - If the land is very steep.
  - If the farmer has little load to carry.
  - Nearness to nectar production flowers.
  - In shady/cool/bushy place.
  - Safe distance from livestock, living houses.
  - A way from disturbance.
  - Protect them from predators.
- 5. Control of stocking rate.
  - Control of water pollution.
  - Supply of fish food/ nutrients.
  - Aerating water/ flowing water.
  - Maintaining appropriate depth of water in the pond.
- 6. Wet ground / muddy soils.
  - Injuries on hooves/ wounds.
- 7. Fresh water snail/limneas species / water snail /mud snail.
- 8. Lack of calcium
  - Some diseases e.g Newcastle disease
- 9. `- Age of the animal.
  - Size /weight of the animal.
  - Physiological condition of the animal.
  - Production level of an animal.
- 10. To allow for even fat distribution in the body.
  - To prevent accumulation of dirt which would encourage blowfly infestation.
  - Minimize faulting of the wool with faeces.

- Facilitate easy mating later in adult life.
- 11. Foot and mouth.
  - Rindepest
  - Rabies
  - Pneumonia
  - Devine malignant catar
  - Blue tongue
  - Lumpy skin fever
  - Rift valley fever.
- 12. Increase embryonic mortality/abortion.
  - Reduce disease resistance ability.
  - Reduce the vigor of the animal/weak / causes.
  - Reduce yield.
- 13. Plucking off fur to line up the nest.
  - Making nest.

# **SECTION B (20MARKS)**

14. (a)

Tool	Name
Р	
Q	
R	
S	

- (b) **P** Measuring angles / layout of angles / measuring lengths.
  - **R** Cutting timber to make joints /used for joinery work.
    - Fine cutting /sawing
- (c) To determine if the floor level /walls are vertical.
- (d) Sharpening the cutting edge.
- 15. (a) Barbed wire fence.
  - (b) **S** Barbed wire
    - Y Dropper.
  - (c) Y Stop wire sagging / reinforce wire /strain.
    - **S** Strengthen the fence.
- 16. (a) Y Tsetse fly/glossina spp.
  - Z Tapeworm / taenia spp / moniezia expansa
  - (b) Small intestine /ileum intestine.
  - (c) By eating infected raw meat / eating infected undercooked meat.
  - (d) -y
    - Bush clearing
    - Spraying bushes with appropriate insecticides.
    - Trapping and killing tsetse flies.
    - Sterilizing males with sterilizing agents and releasing them.
    - Z.
    - Proper sewage disposal/farm hygiene
    - Use of antihelminthic drugs
    - Eat well cooked meat
    - Buy inspected meat.
- 17. (a) Incubator
  - (b) **C** Thermometer
    - **D** water source /water bath
  - (c) A damp cloth for maintaining relative humidity.

- (d) Temperature is maintained at 37.0°C 39.4°C
  - Should be enough fresh air circulation.
  - Should have correct relative humidity (60% RH)
- (e) It is expensive
  - Labour demanding
  - Require more skills than natural methods (reject require skill alone)

#### **SECTION C(40MARKS)**

- 18. (a) Location of the homestead
  - Accessibility
  - Security
  - Drainage
  - Direction of prevailing wind.
  - Relationship between the structures.
  - Framers tastes and preference
  - Topography
  - Proximity of amenities water and electricity.
  - Government regulations.
  - (b) Perimeter fence mark boundaries
    - Keep off wild animals and intruders
    - Separate crop field from pasture
    - Divide pasture in paddocks
    - Control spread of parasites and diseases.
    - Control movement of animals or people (Trespass)
    - For isolation of sick animals
    - Provide security to homesteads and farm animals
  - (c) Cheap and easy to establish.
    - Tall varieties are wind breaks e.g. kei apple
    - Have aesthetic value(Beauty)
    - Roots holds soil firmly controlling soil erosion.
    - Livestock feeds e.g. tithonia Spp.
    - Provide shade to livestock
    - Source of organic matter.
    - Source of wood fuel
    - Some had medical value.
    - Thorny species keep off intruders

#### **Mastitis disease**

- (i) Casual organism
  - Streptococcus agalactiae
  - Staphyloccus urens.
- (ii) Predisposing factors
  - Sex
  - Age Older animals that are lactating are affected.
  - Stage of lactation period- Affects during early or late lactation
  - **Under attachment** Large and pendulous udders are at risk.
  - Incomplete milking Retained milk leads to infection
  - Mechanical injury Leads to bacteria infection
  - **Poor milking technique** Pulling teat make the sphincter muscles of the udder weak and loose
  - Hereditary factors.
- (iii) Symptoms

- Milk contains pus, blood, thick clots and turns watery
- Swollen udder and teats / cow kicks when udder is touched .
- Death of infested quarter
- Milk has a salty taste
- Small clots / flakes in milk

#### (iv) Control measures

- Treat affected teats with antibiotics
- Use a teat dip on every quarter after milking
- Use correct milking technique
- Strict cleanliness.

# NB - Name of stroke 4x ½ =2mks)

# - Explanation for each stroke 2x4=8mks

## (b) Advantages of four –stroke engine over two –stroke

- The engine produces more power and can do heavier work
- Have efficient fuel and oil utilization
- Perform a wide range of farm operations
- The engine is efficiently cooled by water.
- Exhaust gases are effectively expelled from the cylinder
- They have heavy crankcase enabling them to withstand vibrations
- Make less noise than 2- stroke engines.

### (c) Disadvantages of using animals power on the farm.

- Extra land is required for grazing draught animals.
- Require extra cost in case of sickness
- Animals can only work on small scale farms
- Animals can damage crops
- Animals power is affected by weather and reducing their efficiency
- Animals are fully maintained even when not in use .