**MARKING SCHEMES**

**AGRICULTURE MARKING SCHEME P2**

1. Methods of selection in livestock

* Mass selection
* Progeny testing
* Contemporary comparison

1. a) Casual organism of fowl typhoid

* Salmonella gallinarum (virus)

b) Signs on carcass which shows that an animal died of anthrax

* Extensive bloating of the stomach
* Tar-like watery blood from orifices
* Carcass lack rigor mortis

1. Difference between cropping and harvesting in fish farming

* Cropping is the removal of marketable sized fish from the pond
* Harvesting is the removal of fish from the pond

1. Methods of dehorning in cattle rearing

Use of:

* Caustic potash stick (potassium hydroxide)
* Disbudding iron
* Dehorning saw/wire
* Rubber ring and elastrator
* Dehorning colloidion

1. Structural requirements of a calf pen

Should have:

* Concrete floor for easy cleaning
* Adequate space for exercise, feeding and watering equipment
* Single housing prevent licking/hair balls in the rumen
* Proper lighting for synthesis of vitamin D
* Draught free
* Leak proof roof
* Proper drainage

1. Characteristics of a good site for a bee hive

* Availability of water
* Availability of flowers
* Sheltered place
* Free from noise and other disturbances

1. Functions of an egg shell

* Gives egg its shape
* Provides protection to inner contents

1. Factors that can affect maintenance requirement of an animal

* Body size or weight of the animal
* Age of the animal
* Animal’s activities
* Level of production

1. Parts of a roof on a farm building

* Tie/beam
* Rafters
* Struts
* Purlins
* Rafter batter

1. Disadvantages of nomadic pastoralism system of rearing livestock

* Only practiced where land is abundant
* Only practiced where land is communally owned
* Land degradation/soil erosion
* Non incentive to invest in permanent structures

1. Signs of heat in cows

* Restlessness
* Slight rise in body temperature
* Slight drop in milk yield
* Vulva swells/becomes reddish
* Bellowing/mooing frequently

1. Methods of acaricide application onto cattle

* Spraying
* Dipping
* Hand dressing using pyegrease

1. Distinguishing between inbreeding and line breeding as used in livestock production

* Inbreeding – mating of closely related animals
* Line breeding – mating distantly related animals with a common ancestry

1. Maintenance requirements of a jack plane

* Replace worn out parts
* Cutting edge of plane iron shaped on oil stone
* Replace broken knobs/handles
* Plane iron and cap Irion be placed when worn out

1. Practices that a farmer should carry out to reduce egg eating in poultry

* Collect eggs regularly
* Make nests dark
* Feed birds on balanced ration
* Debeak perpetual egg eaters
* Supply green leaves

1. a) Features of a good laying nest

* Spacious to allow movement
* Warm with nesting materials
* Well ventilated
* Dry

b) Reasons why a young calf must be fed on colostrums during the first few days of birth

* Highly digestible
* Highly nutritious
* Has antibodies
* Has laxative effect
* Highly palatable

17 Reasons why calcium and phosphorus are important in the diet of young livestock

* Formation of strong bones and teeth
* Prevents rickets/osteomalacia

18. Kinds of livestock which can be castrated using a rubber ring

* Kids
* Lambs

196a*)*Dromedary/(Camelus dromedarius)

(b)

* Milk
* Meat
* *Transp*ort services
* Hides

(c)

* Withstands/resists hightemperature.
* Can stayfor alongtimewithout food water.
* Canresisttropical diseases.
* Can survive on poor pastures.
* Can walklongdistancesin search of food arid water.
* Has long eye lashes that prevent
* Has long nose fops that prevent

1. (a) J — watering can.

K— milkchurn/milk can.

M — Mason's Trowel.

(b) K — temporary storage of milk/holdingmilk duringtransportation

L — drivingnailsintowood/removing nails from wood.

(c)

* cleaning after use.
* paintingwithaluminiumpaint to prevent rusting.
* repair/replace broken/worn out parts.

1. Dry cow therapy
2. At theendof dryingoff.
3. teatdipping

completemilking

proper milkingtechnique

applyingmilkingjellyaftermilking.

1. (a) N —

P *—* Rumen

Q— Gail bladder

(b) S — Digestion/absorption of food

T— Absorption of water.

(c) R— Lipase/Trypsin/amylase

S— Peptidase/maltase/sucrase (invertase)/lactase

**SECTION C**

23- Well ventilated

* Spacious
* Concrete floor
* Housed singly
* Well drained to avoid dampness
* Free from draught
* leak proof, well covered roof
* Raised in high to control dampness.  ***(any 5 well explained = 10mks)***

1. Cropping is when harvesting is for the mature and market size fish only while harvesting is non-selective and all the young and mature fish are all caught (2 marks)
2. - Maintain appropriate water level by use of inlets and outlets

* Protection of fish pond by fencing and planning grass on the wall to control soil erosion
* Removal of weeds regularly around and on walls of fish pond
* Cleaning the pond by removing silt, roots,stones etc that have settled at the bottom of pond
* Repair of fences i.e. Fish immediately.
* Repair of pond bottom; regularly check water seepage problem and introduce an even layer of clay to seal off the bottom well.
* Inspection of the pond; check for cracks regularly and seal them

***(State practice 1mk x4)=4***

24. ***(Explanation 1mk x4) =4 total = 8 mks***

a) i. Coccidia (1mk)

ii. Poultry, calves, young rabbits, kids, lambs ***(1 x 4=4 mks)***

iii. -Diarrhea

-Dysentery in the dung

-Euraciation

-Ruffled feathers

-Birds become dull with droping wings

-Sudden death in birds, rabbits and kids ***((1 x 4=4 mks)***

iv) -Drugs such as coccidiostats mixed with food or water.

-Isolation of infected animals

-Avoid filthy, un hygiene animal surroundings

-Avoid common dunking points for livestock from different farms

-Avoid overcrowding in poultry houses. ***(1 x 3=3 mks)***

1. i)- Able to kill ticks

* Healthy milking shed
* Clean milking cow
* Health and clean milkman
* Avoid mavous in milk
* Clean milking utensils
* Milk titration
* Cooling and storage
* Correct milking procedure
* Clean milking materials and equipment ***(1 x 10=10 mks)***

25.i) **Describe the life cycle of a two host tick**

* Eggs are laid I the sheltered place
* Eggs hatch into larva
* Larva climbs on the first host, feeds on the blood and become engorged
* The engorged larva mounts, into nymphs while on the same host
* The nymph sucks blood, become engorged and drops to the ground and mounts into adult.
* Adults climbs into the second host feed and mute there. The female drop down eggs.

***(6 correct points 6mks)NB. It must be procedure.***

**ii) Describe digestion in a rumen of a ruminant**

* Food is stored when the animal is grazing
* Food is chewed, mixed and softened with water during storage
* Micro organism in the rumen break down cellulose simple carbohydrates
* Volatile fatty acids and ammoniac are produced during the breakdown of cellulose
* Bacterial protein is also produced
* Gas like methane, CO2 and hydrogen are released
* Food is fermented
* Volatile fatty acids and ammoniac are absorbed through the rumen wall
* Proteins are broken down into peptides
* Amino acids and other non-proteins nitrogen compounds are synthesized from ammoniac
* Vitamin B complies are also synthesized by microorganism***. (any 8x1=8mks)***

b) - Spraying animals

- Dipping-involves immersing the animal into acaricide or wetting the animal by the acaricide

- Hand dressing-involves smearing pyegrene on areas not likely to be reached by acaricide.e.g. in theears.

***(State practice 1mk x3)=3***

***(Explanation 1mk x3) =3***

***Total = 8 mks***