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**AGRICULTURE MWAKICAN MARKING SCHEME**

PP2

SECTION A [30MKS]

1. **The dairy cattle that produce milk with highest butter fat are Friesian 1 ½=1 /2 mks.**
2. **2. Young one of a [1] Rabbit kludging 1/2mks.**

 [ii]Goat – kid 1/2mks.

 [iii] Pig –piglet 1/2mks.

1. **3. Hormones that control milk let down**

 -Oxgyticin 1/2mks

 Adrenalin 1/2mks

1. **Appropriate tools used in the following operation**

Cutting identification marks on ears of an animal

1. Ear – notcher1/2mk)
2. Removal of gases which causes bloat in rumminours
3. Trocar and Canular (1/2mk)
4. Trimming hedges and shrubs
5. Pruning shears (1/2mks)
6. **Reasons why ewes disown lambs**

Inflamed udder/ painful under/low milk supply

Poor mothering ability

Weak deformed lamed unable to follow the ewe. 3x ½ = 11/2

1. **Disadvantages of live fences**

Some have throne that may hart livestock.

They require regular trimming

They take long to establish

They act as hiding places for rodents, snakes etc

They occupy large spaced of land which could be used to grow crops

Acts as alternative host of pest

Any 4 x ½ =2mks

1. **Four lights breed of poultry**

Leghorns

Ancon

Minorea

Sykes 4x ½= 2mk

1. **Functions of parts of an ox-drawn plough**

Landside

Stabilizes /balances the plough by absorbing side thrust (1/2)

Land wheel

Regulate ploughing depth (1/2)

Share

Cuts furrow slides horizontally (1/2mk)

1. **Distinguish between randling and ringing**

Clutching is shearing of a strip of wool from either side of the vulva down to the hocks of ewes to facilitate mating while ringing is clipping the long wool surrounding the penis sheath a ram to facilitate smooth mating (1mk) mark as whole

1. **Causes of bloat in ruminant animals body.**

Obstruction of esophagus due to bulky food partials.

Abnormal pressure excreted on the esophagus by a swelling on the wall of the cheats’

Indigent due to accumulation of gases due to paralysis of rumen and valve at its entrance. (2 x ½)

1. **Diffreciate between quarantine and isolation as used in livestock production**

Quarantine is restriction of movement of animals and their product from and in to affected areas in the event of outbreak of noticeable disease while isolation is separation and confinement of a sick animals from the healthy where the animal is sick or is suspected to have a disease (1mk mark as a whole)

1. **Three sources of water in an animal’s body**

From drinking

From food

From metabolism

3x1/2 =1 1/2mk

1. **Four fresh water fish reared in fish pod farm today**

Tilapia

Nile perch

Catfish

Carps

Striped bags

Blue gills 4 x ½ = 2mks

1. **Give a functional difference between a shovel and a spade**

Spade is used for scooping and carrying soli, mature, sand/concrete while a shovel is used for lifting soil mature sand etc

2x ½ = 1

1. **State the function of a ring spanner**

Opening and loosening specific size of bolts and nuts

1. **Four methods of harnessing tractor power**

Propeller shaft

Power takes off shaft

Hydraulic shaft

The draw bar

4x ½ = 2mk

1. **Functions of each of the following parts of a tractor**

Clutch

Enable tractor drive to take off gradually and smoothly

Disconnect the engine from the rest of the power transmission system

Allowing the drive to temper lily to interrupt the power flow from the engine to the gear box and shift from one gear to another

2x ½ =1mk

Differential

Allows changes in the direction of the drive to the right angle so that power is transmitted to the rear wheels

Enable the rear wheels to travel faster than the slower than the other especially when negotiating a corner/allows the tractor to turn without the wheels skitting 2x ½ =1mk

1. **four advantages of embryo transplant**

It is possible to transplant embryo from high quality female to a less variable female and hence improve the performance of the offspring

It stimulate milk production in a female that it produces much milk

A highly productive female can be spread over a large area to benefit famers

It’s easier to transport embryo in test-tube that the whole animals

Embryos can be stored for long period awaiting availability recipient female 4 x ½ =2mk

1. **Ways of controlling cannibalism in portly farming**

**Avoid bright light in the house**

Avoid overcrowding by giving enough space to the birds

Provide birds with a balances feeds

Birds should to kept according to eye groups

Debeaking hens which peck others

Cull perceptual cannibals 4x ½ = 2mk

1. **Characteristics of succulent roughages**

High fiber content

High moisture content

High protein content

High carbohydrates contents4 x1/2 = 2mk

SECTION B

1. **Chicken A and B lacks**

M Riboflavin (vitamin B12)

N vitamin D

1mk

Sources of nutrients that chick b is lacking

Sunlight

Milk

Green grass

2x 1 = 2mks (mark any 2)

Condtion of chick **B**

Rickets 1x1 mk

Other than the condtion shown in chick be give other symptoms of diffenccy

Enlarged joints

Production of short shelled eggs in birds 2x ½ =1mk

1. **Parts of trash**

5 Tie

7 WALL PLATE

9 rafters

10 ruffer butter

2 x ½ = 2mk

Reasons for parts labeled F

To collect rain water from the roof

To prevent rain water from splashing soil on to the walls by pressure due to direct rain impart. 1mk

1. **Parts of udder**

(Iii ) Teat cistern

iv) Nipple

(vi) Gland cistern

(vii) Alveolus

Lobule 4 x ½ = 2mk

Milk letdown

Flow of milk from the upper region of the udder cacluecolar region to the gland and heat custore and that out of the by milking or sucking (1mk)

Two characteristics of clean and high quality milk

It is free from disease causing organism

It has no hair, dirt or duct

It is of keeping quality

Has good flavor

Its chemical composition is within the expected standards a

Any 2 = 2mk

1. **Parts of disc plough**

B Cross shaft

D Disc scrapper

Top link attachment shaft 3mk

Functions of parts IV and V

 V these are concave in shape. They cut, turn and invert the furrows slice

IV long bar which provides attachment for all parts of plough

2mks x 1= 2mks

1. **State one season why animals should be watered before dipping**

To prevent them from swallowing acaridae’s during dipping 1mk

 SECTION C

1. **African swine fever**

Animal affected

Domestic pig’s co especially female

Causal organism

Redo virus 1mk

**Symptoms (6mk)**

There is nasal discharge

The animal lacks depressed

The animal lacks appetite

The animals stars coughing

There is rise in temperature up 40⁰c -41⁰c

In serious cases the pig start to diarrhea

The animal become weak generously

**Control measure s (5mk)**

Kill and dispose the affected animals as well

Institute double fencing to keep wild animals away

Vaccinate the animals in case of outbreak

Impose quarantine

Prevent the consumption of the pig products from the pandemic areas

1. **A. Describe feature of an ideal calf pen7mk**

Proper drainage – facilitates free flow of urine to avoid dampness

Dry litter/bedding – maintain warmth

Concrete/raise stated floor- easy to maintain cleanliness

Proper lighting- should have good supply of natural light sunlight

Security- should be sting enough to keep away intruders/ wild animals

Drought free- the structure is strong enough to stop strong from blowing into the calf pen

Proper veneration- the structure should allow proper fresh air circulation

**B.Describe various care and maintenance of a tractor battery (6mk)**

The battery should be fitted collect on the tractor

Corroded terminals should be scraped clean and smeared with grease

In case of long store the battery content should be empted and the battery be kept upside down

 The level of electrolyte should be kept just above the plate by topping with distilled water

The battery should be charged regularly and periodically

The battery should be tightly fixed in a box to avoid to spillage and damage

The generator fun should be always be functional you ensure that the battery is always changed

6 x1 =6mks

**C.Causes of faults of ingination system**

1. **Sudden stopping 2mk**

Poor terminal connection

Fault age ignition system

2x1mk

1. **Countious engine running**

When leads are broken

When there are poor terminal connections

When contact breaker is faulty

3x1mk

**C. Advantages of battery cage system (9mk)**

Birds do not contaminate food and water

Canninabalism and egg eating are minimized

Broodiness is discouraged as the birds do not reach eggs

Higher egg production due to less energy waste from birds

There is low labor requirement.

Eggs are clean because the hens do not step on them

There is no bullying during feeding

Aciculate egg record can be kept because you can know which bird layer

Handling is easy as hens are restricted to a small place a

A large of birds can be kept in a small place hence high stocking rate.

The system can be easily mechanized.

Sick birds can be detected readily and isolated for treatment

Wire floors prevent re- infestation of parasitic worms and coccidian.

9x1mk

1. **(A)Digestion of food from crop to gizzard 10mk**

The crop acts as a temporary storage food,

Food is moisturized and mixed with water.

Mucous is secreted for moistening the food

Food enters the proventiriculus from the crop

Gastric juice is secreted in the proventticulus gastric juice contains enzyme pepsin and hydrochloric acid

No enzymatic digestion takes place since the proventticulus is very small and thus food passes though it very fast

Food is forced to the gizzard by the constaction of the proventiriculus

The gizzard has tough mussel whose movement grids food to powder

The gizzard has grit which helps in crushing food

The gizzard has a tough inner lining which prevent mechanical injury of gizzard mussels 10x 1 mk

Give any four harmful effects of keds in livestock 4mks)

Animals will become anemic

Cause considerable irritation when infections is heavy

As a result of irritation the animals scorches and bites its self thus damage the wool

There will be retarted growth in lambs

4x1

**(C)Functions of parts of plunge dip**

1. Jump

Ensure animals jump/ enters the dip tank one bybone

Ensure maxmum immersion of the animal since its high above the dip wash level

2x 1

1. Drainning race

Hold and allow excess dip wash from the animals body to drip and flow back into the dip tank 2mk

1. Roof

Reduces loss acaricude throght evaporation

Prevent dilution of the dip wash by rain water

Taps rain water that is then stored in the stored ina tank Any 2mks