**MARKING SCHEME AGRICULTURE FORM THREE**

1 Bacteria

Protozoa

Virus 00

 Any 3 x ½= 11/2 mks

2, - Through contaminated water, air, feed or pasture

-Through direct contact with sick animal

-By poor handling either by stocks man or farmer

-By us contaminated bedding in the animal houses

-By use of dirty equipment for drinking water or feeding

 Any 3 x ½=3

3. Nutrient-are organic or inorganic substances in a feed which is absorbed and utilized in the body tissues

 Starch equivalent - is the energy value of the feed that is equivalent to the net energy level of the a certain amount of pure starch

Digestion – is the process of breaking down of complex food substances to smaller which can be absorbed through the gastrointestinal walls (GIT). .

 Each well explained (1x1 = 1 mk)

 b)-The milk production level of the animal

 -The nutrient value of the concentrate

* The returns made from the production
* - The quantity of the pastures
* Loss of the concentrate
* - The size of the animal

 Ay 4 x 1/1= 2 mks

4.-possible to use a sire long after its death

- Semen of a superior bull is used to serve many cows

-eliminate the problem of matching size

-control transmission of breeding diseases

- reduces the cost of keeping a bull

- Easy to control breeding

 Any 4 x ½ = 2 mks

(ii) – restless

-Frequent urination

-swelling or reddening of the vulva

-Frequent monitoring of others

-It responds positively to the riding test.

 Any 4 x1/ 2= 2mks

 5. –To replace the mother’s milk at the time of weaning

-necessary to maintain the health and growth in case the mother does not produce enough milk./

-Give the young animal the necessary nutrients required for high growth rate

 - to introduce the young animal to feeds

 Any 4 x ½ = 2mks

6. – Freezing

- salting

- Sun drying

- smocking

- Deep frying

 Any 4 x½ = 2 mks

7. Demarcating the farm land from that of the neighbor

-To keep of wild animals and other intruders from the outside the farm

To separate crop field from the pastures

-To divide pastures into paddock thus facilitating controlled grazing systems such as rotational grazing

-To control the spread f parasite and disease by keeping off the wild and stray animals from the farm.

-To isolate sick animals from the rest of the herd to prevent disease spread

To control breading o by rearing different animals in different paddocks

-To provide security to the homestead and farm animals

 Any 4 x½ =2 mks

 (b) –Clearing the vegetation.

 - Leveling the ground-

-measuring the foundation

- Laying the foundation.

 Any 4 x½ =2 mks

8. – Good feeding

-Provision of clean environment

-Neutralizing the ill effects produced by the disease

-Relieving discomfort or injury t the animal .

-Preventing further spread of a disease

 Any 4 x½ =2 mks

9.-Age of the animal

-sex of the animal

-color of the animal

- Change of the climate / environment

 -Heredity/congenital cause

* Size of the hard/ flock against area covered
* -0physiological condition such as fatigue, weakness, pregnancy
* Animal coming into contact with a sick animal

 Any 4 x½ =2 mks

10. (i) Blocky and deep body, which are wellll fleshed.

 -Fast growth rate

 -Good foragers

 Any 3 x ½ =2mks

 (ii) - place of origin

* Hair of body cover
* Climatic conditions

11(a)

1. It is used to dig the holes and remove/ scoop holes
2. used for lifting soil and manure

 (1/2)

(b)- T o avoid injuries to the user

- To increase durability

-To make it efficient

- To reduce repair replacement cost.

 Any 4 x½ =2 mks

12–restraining method

-casting

 SECTION B

13(a) debeaking (1mk)

 (b) P 1 x 1 =1mk

 © Reduction of egg eating and breaking eggs

* Control cannibalism
* -Prevent injury from pegging of fishting
* Reduction of feed wastage
* Reductions feather pulling
* Moderate pecking order which encourages greater uniformity in the flock

 3 x 1 =3mks

14)

 10% DCP maize e  15 parts maize e

 20 % DCP e

35 % DCP sunflower e  10 parts e sunflower

35 % DCP sunflower 10 parts e sunflower

1. Maize$ \rightarrow \frac{15 }{25} $ x 200= 120 kg. (1mk)
2. Sunflower parts $\rightarrow \frac{10}{25}$ x 200= 80 kg (1mk)

15 5 m ks

Diseases causes characteristics prevention

|  |  |  |  |
| --- | --- | --- | --- |
| Coccidiosis | Protozoal coccidian sp | Diarrheas/ whitish/yellow blood stained | Give coccidiostat in drinking water or food |
| Black quarter | Bacterial clostridium sp | Lameness/ swollen muscle | vaccination |
| Rinder pest | virus |  Diarrhea with blood stained feaces | vaccination |
| Milk fever | Low level of calcium |  Animal goes with stiff bent neckTwitching muscles |  |

16. Roundworm 1 x1 =1 mk

(b) Cattle 2 x ½ =1 mk

Sheep

Pigs

© - practical rotational grazing

Improve sanitation

- drench animals with appropriate anthelminthic

- Hay and feeds should not be contaminated with feaces

- proper use of latrines.

 Any 3x1=3 mks

 **SECTION C 40 MARKS (ANSWER ANY TWO QUESTIONS** )

17 (a) – restlessness

-Enlargement of the vulva

-Thick mucus form the vulva

-Relaxation of the clip muscles

-Full and distended udder

-Thick sticky honey like fluid is discharged udder

-lack of appetite

Towards the end as water bag emerges and bursts where the fore legs and muscle is noticed

 Any 5x1=5 mks

 b)-To increase genetic uniformity in the herd

Used to fix the requires characteristics’ in the new –breads

To increase phenotypic uniformity

Used to get proven sire

Used in animals of higher potency

© causes anemia

-Deprive the host animal of food

-Injure and damage the tissues and organs

Disease irritation

-Causes irritation

-Obstruction of internal organs

 Any 5x 1 = 5 mks

(d)

|  |  |
| --- | --- |
|  Ruminants  | Non ruminants |
| * Chew cud
* Have four stomach cambers thus polygatric
* -regurgitate food
* - can digest cellulose. Have microorganisms in the rumen that digest cellulose
* Have no ptyline in saliva hence no enzymatic digestion in the mouth
* - Most digestion and absorption takes place in the rumen.
* -Have alkaline saliva due to presence of ammonia
 | - doesn’t chew cud- Have one stomach chamber-Cannot regurgitate foodHave no microorganisms in the stomach hence cannot digest cellulose except those animals with microorganisms in the caecumHave ptylin thus enzymatic digestion begin in the mouthMost digestion and absorption takes place in the small intestinesSaliva in is neutral in pH |

 Any 5x 1 =5mks

 18. a) use the correct tool for the correct job

- Tools should be handles carefully when in use

-They should be maintained to keep then in in good working conditions

-Safety devises should be used when handling dangerous tools to avoid accidents

-They should be left in a safe place after use

-Proper storage of tools is important to safe gourd those who work in the workshops from -getting hurt by tools left carelessly

 Any 5 x 1 = 5mks

(b) They are small in angular in form\they have dropping hump

They are narrow in the chest and c

Consequently has a close together front

The muzzle is flesh coloured

Their wool, hooves and hones are white

They are slow maturity breeding and gave a lambing percentage of 100%

They have herd breed that that does well under extensive conditions

-They have good flocking instincts which make them to be put as a bid flock under one shepherd.

-They produce flees that is highly valued, long stapled

-Under short condition they weigh 63-80 kgs . i.e the rams and ewe weigh 49-57kgs

 The carcass is of very low quality

 Any 5 x1 =5 mks

© Availability of the materials

Cost of the materials

Suitability of each type of material to the prevailing weather conditions

Durability of the materials

Strength of the material

 Any 5 x 2 = 10mks

19(a) (i) virus any 1 x 1 = 1mk

(ii) Poultry any 1x 1= 1 mk

iii) Symptoms

-The birds have difficulties in breathing, produce harsh grafting rasping sound when breathing

- The beaks remain wide open and neck are strained

-The birds become dull

-The bird’s stands with eyes closed all the time

-The birds lose appetite

-There are nasal discharge which forces the bird to shake their heads to clear it

- The birds walk with stargazing motion since the nervous system, is affected and paralyses of wings and legs may occur

.-Often the birds have their beaks and wings down.

Birds produced westerly greenish diarrhea.

Eggs laid have soft shells

 Any 5 x1= 5mks

 (iv)Control measures

-Vaccination should be done during the first 6 weeks and te two or three monthes later

 -Famers are advised to kill all the birds and burn them once infestation has occurred

-The houses should be disinfected before bringing in the new stock

-Quarantine is imposed ones an outbreak is suspected of occurrence

 Any 3 x 1 = 3mks

(b) (i)put Lomb’s whose honey has be been extracted into a basin

-Add water to a basin

-Heat the mixture until the was melts

-Strain the mixture through muslin cloth

-Squeeze the residue strongly to force the wax out

-Cool the mixture overnight

-Drain the water and remove any foreign particles

-Re-melt the wax over the water bath and put it in clean container

 8mks

(ii)

- By injection

- Orally through the mouth

 -by inhalation, that is through the nose

 -Through the cloaca

 Any 2 x 1 = 2mks