**SET 9**

**AGRICULTURE PAPER MARKING SCHEME**

**1** - Tattooing

 - Using neck straps **2 x ½ = 1mk**

**2.** Gizzard adaptations: - It has strong/thick muscles

 - Contains grits which pierce the feed e.g. grains **2 x ½ = 1mk**

**3.** Dairy goat breeds: Saanen, toggenberg, Anglo Nubian

 - British Alpine; Indian Jamnapari **4 x ½ = 2marks**

**4.** Implements powdered by P.T.O:

 -Mowers e.g. reciprocating mower/lawn mower

 - Power/chain saw

 - Boom sprayer/sprayers

 - Planters - Rotavators

 - Fertilizer spreaders **4 x ½ = 2marks**

**5.** Reasons for castrating billy goats:

 -To control in breeding

 -Control breeding

 -Prevent breeding/control breeding diseases

 -For faster growth

 -Improve quality of meat by removing bad smell **(1 ½ marks)**

**6.** Qualities of whole milk

 -Homogenous

 -Free from pathogens

 -Free from bad odour or taste

 -Chemical composition within expected standards

 -Clean/creamish white in colour-fresh from solid dirt e.g. hair, soil, dust **4 x ½ = 2marks**

**7.**  **i.** **Differentiate the terms mothering ability and prolificacy.**

 Mothering ability is animals with good natural instinct while prolificacy is animals with an ability to

 give birth to many offspring at a time ( large litter) **1mk**

  **ii. Flushing** is giving a high plane of nutrition two to three weeks before and after mating while steaming

 up is the practice of providing extra feed of high nutritive value to an animal during the last weeks of

 gestation **1mk**

**Functions of; 4 x ½ = 2marks**

**8**  i.)Shear – cuts furrow slice

 ii. Landside – counteracts the side forces hence keeps plough on steady straight line to prevent bloat

**9.** Reason for4 withering Lucerne- to avoid bloat **1mk**

**10.** **Disadvantages of natural mating 4 x ½ = 2marks**

 **i.** It is uneconomical to keep a bull

 **ii.** May lead to uncontrolled mating

 **iii.** High risk of transmission of breeding disease

 **iv.** Only a small number of cows can be served

 **v.** Aggressive and heavy bulls may cause physical injury to a cow or to the handler.

**11. qualities of good honey**

 Purity –free from wax, bee wings ,smoke, honey combs etc

 Colour- brown yellow not dark brown

 Viscosity-not too dilute nor too thick

 Smell- right smell not of rotten combs/burned **(1 ½ marks)**

**12. Harvesting machines commonly used the farm (1 mark)**

 *Combine harvester Potato litter*

 *Forage harvester*

**13. Disadvantages of using thatch as roofing material. (1 mark)**

 Good thermo insulation

 Sound proof to pounding rain

 Relatively cheap

**14. reasons of spreading a polythene paper ( PVC) on the slab of a permanent ( 1 ½ marks)**

 To prevent moisture from rising up the wall

 To prevent coldness from ascending to the floor surfaces

 To control termites

**15. Two functions of a footbath in a plunge cattle dip. (1 mark)**

 Wash animal’s feet

 Contains a chemical cu2so4 //formalin used to control foot rot

**16. Three reasons for debeaking birds in poultry . (1 ½ marks)**

 Control canibalism

 Prevent toe pecking

 Prevent egg eating

**17. Four reasons for raising rabbits hatch above the general level. (1 mark)**

 Hasten drying of bedding material

 Protect animal from predators

**18. The use of a stir up pump. (½ mark)**

 Apply liquid agro-chemical under high pressure to animals

**19. Two additives in livestock nutrition. (1 mark)**

 stilbestrol( hormone

 Coccidiosis(medicant)

 Tetramycycine( antibodies

 **20. Function of the guard rails in a farrowing pen. (1 mark)**

 To prevent the sow from lying on the piglets; to prevent the sow from feeding on the creep feed.

 Gizzard adaptations: - It has strong/thick muscles

 - Contains grits which pierce the feed e.g. grains

**21. i)** Air undesirable in the process of making silage.

 Too much air may cause overheating

 **ii.** Too much air may cause decomposition **1x 2= 1mk**

**22. Reasons culling a breeding boar. (2 marks)**

 Old age

 Hereditary defects

 Perpetual sickness/poor health/ contraction of venereal diseases

 Loss of sight ,limbsetc

 To avoid inbreeding

**Section B**

**23. The diagram of a biogas plant below and answer the questions that follow.**

 **(a) Main component of biogas that is trapped in part L.**

- Methane Gas  **(1 mark)**

**(b) Name and use of the materials deposited in part labeled M.**

 Slurry – used for manuring crops on the farm. **(1 mark)**

 **(c) Uses of biogas on the farm.**

 - Cooking and heating.

 - In internal combustion engines.

 - Lighting.

 - Run refrigerators. **( 3marks)**

24. **a(i)** **Operation is usually carried out on the part labeled A during a sheep’s early stages of life?**

 Docking **1mk**

**(ii)** **Give one reason as to whythe operation in( i) is necessary (1 mark)**

 To facilitate mating/ to ease mating

 To control blow fly attack

 To ensure uniform distribution of fat

 1-2 weeks after birth

**(iii)** **stage of sheep when the operation in (i) above is carried out? (1mark)**

 1-2 weeks after birth

**(iv)** **Two methods of carrying out the operation in (i) above 1mark**

 Use of elastrators and rubber ring

 Use of sharp knife

 Use of a docking iron

**b) (i) Operation usually carried out on part labeled B ( 1 mark)**

 hoof trimming

 **(ii) Problem which occur if the operation in (bi)) above is not carried out? 1mark**

 The animal would become lame

 Foot rot may develop

**c) Practice done on the ram in the part labeled C to control breeding . (1 mark)**

 Raddling

  **25. (a)**Barbet wire gate **(1 mark)**

 **(b)** C – gate post/King post/strainer

 D – Wire loop

 E – Dropper. **(3 marks)**

  **(c) (i)** Support the gate post

 To ensure the barbet remains tout. **(1 mark)**

  **(ii)** Prevent movement of farm animals outside

 Keep away livestock from outside.

 Used as entrance into/exit from the farm**. (2 marks)**

**26. a) i)Identify the parasite (1/2 mark)**

 pork tape worm/Taenia solium

 **b) Give one forms in which the parasite is found in livestock. (1/2 mark)**

 cyst embryo/ bladderworm; - inverted eggs

  **c) Name the intermediate host of the above parasite. (½ mark)**

 Pig

 **d) State one way through which the above parasite can be passed to man. (1 mark)**

 Eating infested raw /undercooked meat.

**SECTION C (40 MARKS)**

**27.a)Describe the procedure of wool shearing in sheep.** (10mks)

 After proper restraining follow the procedure below in shearing;

 - Open up fleece at the base of the neck using a pair of wool shears.

- Then clip all the wool from the neck through the stomach up to the udder or scrotum.

- Turn the animal over and shear the flank from the base of the neck through the left shoulde

up to the position where it sit on.

- Likewise turn over the animal and shear the right flank.

- Then roll the sheep over shear the back up to the rump.

- Shear the wool on the head and neck.

- Finally shear the wool on the rump, tail and hind legs.

 - Place the fleece on a clear wool table.

 - Sort and grade the wool. **10X1=10 MARKS**

  **b. Practices explain and appropriate methods of handling livestock (10 marks)**

 **i)** **Vaccination.**

 - Animals should be in a crush to restrict it from running away.

 - Young animals should be tied properly in the crush.

 - Birds should be held by a helper as the vet. Officer administer the vaccine.

 **(ii) Wool shearing.**

 - Sheep is made to sit on its rump and then turned as shearing goes on.

  **(iii) Ploughing.**

 Animal should be properly harnessed by a yoke. The yoke should be made by a soft material to

 prevent direct injury on livestock.

 **(iv) Livestock exhibition.**

 Bulls should be paraded by an aid to lead stick and bull rings, cows and heifers held by a halter.

 **(v) Transportation.**

 - Small animals i.e. rabbit should be transported in cages, mature chicken in coops and chicks in perforated cartons.

 - For large animals should be restricted in a vehicle by use of ropes and floor of vehicle spread

 with saw dust or straw to prevent skidding.

  **(vi) Milking**

 - Lactating cow should be put in the milk parlour and if necessary tied at the near legs lightly.

 **(vii) Castration**.

 - Restrain the animals well - use the appropriate tool.

  **(viii) Deworming:**

 - Correct equipment should be used.

 - The drug should be given small amount until the whole dose is given to prevent choking the

 animal. The restraining should be applied to avoid stressing the animals.

 (vix) Debeaking.

 - Restrain the chicken by tying the legs. Hold the chicken under the armpit and debeak.

 1 practice and handling method=1 mark.

 **(1x10= 10 marks)**

**28.a) Explain five factors that influence the choice of building materials. (5marks)**

Availability:-select materials that are locally available to reduce cost of transport.

Cost: - use materials that are not very expensive .

Durability: - Select materials that are long lasting

Workability: - select materials that are easy to work with / that do not require a lot of labour and a lot of skills.

Climate / prevailing weather: - select materials that are suitable for the climate of the area.

Strength of the material: - consider the strength of the material in respect to the use.

**b) Procedure of bull castration using burdizzor.**

- Restrain the animal.

- With one hand, pull the testicles to let them free from scrotal neck.

- Using the other hand place the cusps of the burdizzor to clasp the scrotal neck.

- With your free hand, locate the spermatic cord of one testis and press handles of theburdizzor till a snap sound is heard.

- Repeat the procedure of cutting the spermatic cord on the testis.

- Finally, release the animal. **(5 marks)**

**c)Management during parturition in cattle:**

- Watch for signs of parturition;

- Separate the animals and put it in a parturition pen;

-Watch for breed presentation, and seek the assistance of a veterinarian;

- Remove mucus around the muzzle of young one to allow for efficient breathing;

- Administer artificial respiration to the young one if breathing is delayed;

- Allow the young one to suckle colostrums;

- Allow the mother to lick the young one/ wipe the calf using a clean piece of cloth if the mother does not lick it;

- Tie and cut the navel cord; arid

- Disinfect the navel cord wound using iodine;

- Check and ensure the placenta comes out, if not consult a veterinarian;

- Record the weight of the calf; to help monitor growth;

- Take orphaned,/ disowned / weak calf to a warm place to avoid chilling.

- Separate the calf from the dam after it has been licked and take it to a warm calf pen;

 **Any 10 points =(1x10) =10marks)**

**29. Rearing of one day old chicks from the day they arrive on the farm to the point of laying.**

-On arrival give chicks water mixed with glucose;

-Provide a source of heat.

-Maintain temperature within the required levels.

-Provide dim light.

-Provide adequate chick mash.

-Check birds for weakness and treat.

-Provide clean and adequate water.

-Debeak on the tenth day.

-Vaccinate against common diseases.

-Withdraw the heat source after 4th week.

-Remove dead chicks and dispose of the properly.

-Control external parasites.

-Introduce sand and grit in the sixth week.

-Introduce growers mash in the 7th week.

-From the 6th week reduce chick mash gradually.

-Place chicks in the main house from 9th week.

-Feed them on growers mash only.

-Having some green vegetation in the house.

-Provide soluble grit / oyster shells towards

-Introduce layers mash during 16th – 19th week.

-Ensure litter is kept dry.

-Provide plenty of clean water at all times.

-Keep records. **(1x20=20marks)**