**MOKASA ONE JOINT EXAMINATION – 2021**

**AGRICULTURE PAPER 2**

**MARKING SCHEME**

1. Importance of good ventilation in animal houses.

*(i) To have sufficient air circulation*

*(ii) To regulate humidity inside the house*

*(iii) To help regulate temperature inside the house*

(2 x ½m = 1 mark)

2. Factors that affect the digestibility of a feed.

*(i) Chemical composition of the feed*

*(ii) Form in which the food is given/method of preparation*

*(iii) Species of the animal*

*(iv) The ratio of energy/carbohydrate to the proteins*

*(v) Feed mixtures and other ingredients in the feed*

*(vi) Quantity of feed already present in the digestive system of the animal*

(4 x ½ = 2 marks)

3. Signs that shows a rabbit doe is about to give birth

*(i) Nest building*

*(ii) Plucking of fur from her abdomen*

*(iii) Restlessness*

*(iv) Large/congested udder*

*(v) Loss of appetite*

4. Meaning of the following terms

a) Chick – *Newly hatched bird from one day to eight weeks old* (½ mark)

b) Gilt – *A young female pig from weaning to farrowing* (½ mark)

c) Heterosis – *Increased ability and performance of the offsprings above the average of two of unrelated parents* (½ mark)

d) Kindling – *Act of giving birth/parturition in rabbits*. (½ mark)

5. Maintenance measures for a cross-cut saw (2 marks)

*(i) Clean after use*

*(ii) Set the teeth to the right angle*

*(iii) Sharpen the teeth if blunt*

*(iv) Replace broken handles*

*(v) Tighten loose screws (4 x ½ = 2 marks)*

6. Tools used for checking verticalness of a wall when laying bricks.

*(i) Spirit level*

*(ii) Plumb bob/plumbline*

(2 x ½m = 1 mark)

7. Four reasons why a farmer should use concrete floors for dairy shed.

*(i) Easy to clean*

*(ii) Long lasting*

*(iii) Do not encourage foot rot*

*(iv) Aid in controlling parasites*

*(v) Help to prevent waterlogging*

*(vi) Allow easy drainage of urine*

(4 x ½m = 2 marks)

8. Origin of the following breeds;

(i) Charolais - *France* (½ mark)

(ii) Toggenburg - *Switzerland* (½ mark)

(iii) Merino - *Spain* (½ mark)

(iv) Landrace - *Denmark* (½ mark)

9. Four ways in which diseases can spread

*(i) Through vectors*

*(ii) Through eating contaminated food*

*(iii) Through breeding/mating*

*(iv) Through breathing in contaminated air*

*(v) Through surgical instruments*

*(vi) Through sucking of young ones*

(4 x ½m = 2 marks)

10. Limitation of artificial insemination in cattle breeding (2 marks)

*(i) Harmful traits/diseases can be spread faster*

*(ii) It requires trained personnel*

*(iii) There are low chances of conceptions due to death of sperm*

*(iv) Requires more labour than natural mating*

(4 x ½m = 2 marks)

11. Functions of carbohydrates in the body of an animal.

*(i) Supply of energy to carry out body processes*

*(ii) Provide raw materials for the synthesis of animal products such as milk, meat and eggs.*

*(iii) They aid in peristalsis*

*(iv) Excess carbohydrates are converted to fat and stored under the skin providing insulation to the body.*

(4 x ½m = 2 marks)

12. Forms of which tapeworms are found in livestock (1 mark)

*(i) Embryo/infective egg*

*(ii) Cysts/bladderworms/cysticercus/larva*

(2 x ½m = 1 mark)

13. Routine livestock rearing practices used to control parasites and diseases.

*(i) Vaccination*

*(ii) Deworming*

*(iii) Hoof trimming*

*(iv) Docking*

*(v) Dipping/spraying*

*(vi) Dusting*

(4 x ½m = 2 marks)

14. Factors that influence the quality of honey

*(i) Presence of impurities/foreign materials*

*(ii) Source of nectar/type of flower*

*(iii) The stage of ripening/maturity*

*(iv) The method of extraction/honey harvesting*

*(v) Season of the year*

*(vi) Rate of smoking*

(4 x ½m = 2 marks)

15. Four ways in which animal utilizes a production ration. (2 marks)

*(i) For synthesis of products such as milk and meat/for fattening*

*(ii) For reproduction/foetal development/mating*

*(iii) For growth in young animals*

*(iv) For daily work/activities like ploughing and pulling carts*

(4 x ½m = 2 marks)

16. Four reasons for treating timber

*(i) Prevent attack from insects*

*(ii) Prevent attack from fungi/rotting*

*(iii) To resist weather conditions e.g. extreme temperature*

*(iv) To resist water penetration*

*(v) To harden the wood/make it durable/increase strength*

**SECTION B: (20 marks)**

17. a) Identify the equipment

*Milk can/milk churn*

b) State the use of the equipment

*Keeping milk/carrying milk*

c) State three methods that can be use to sterilize the equipment

*(i) Using sunlight*

*(ii) Steam the equipment/use hot water treatment*

*(iii) Use chemical sterilizers e.g biocide.*

18. sorghum 12% 7 parts sorghum √

30

Soya bean 37 18 parts soya bean √

25 parts √

Sorghum = 7 x 100kg = 28kg√

25

Soya beans = 18 x 100kg = 72kg √

25 (5 marks)

19. a) F – *cervix* (1 mark)

H – *Oviduct/fallopian tube*

b) (i) *Produce ova/ female gametes*

(ii) *Produce hormones that control ovulation and pregnancy.*

20. a) Identify the practice being carried out.

*Spraying/tick control*

b) Name the structure in which the practice is being carried out.

*Spray race.*

c) Give three advantages of the structure above over a plunge dip

*- Suitable for pregnant and sick animals as they do not get shock.*

*- It is economical-the acaricide wash is not wasted since it is re-cycled in the process. It also requires a small amount of acaricide wash.*

*- Animals cannot swallow the acaricide wash ie no poisoning of animals.*

*- Spraying is faster ie can spray more animals per hour than a plunge dip since animals walk through the spray race.*

*- Less labour is required*

*- Small stock eg sheep can easily be sprayed.*