**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.*