

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)

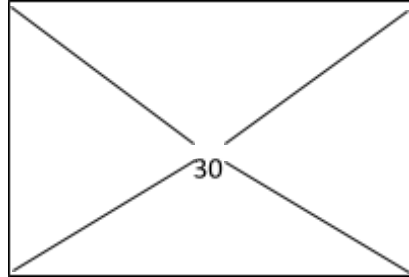
17. a) Identify the equipment
Milk can/milk churn
- b) State the use of the equipment

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 ✓

Soya bean 37

$\frac{18}{25}$ parts soya bean ✓

$$\text{Sorghum} = \frac{7}{25} \times 100\text{kg} = 28\text{kg} \checkmark$$

$$\text{Soya beans} = \frac{18}{25} \times 100\text{kg} = 72\text{kg} \checkmark$$

(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.*