

# MOMALICHE 4 CYCLE 8 JOINT EXAM

## Form 4

### AGRICULTURE

### Paper 2

## MARKING SCHEME

#### SECTION A 30 MARKS

#### 1. Reasons of using farm tools and equipment in the farm. $2 \times 1 = 2 \text{ mks}$

- (i) to increase efficiency on the farm
- (ii) to enhance production
- (iii) to enhance safety on the farm

#### 2. Reasons that a farmer opts to rear indigenous cattle breeds over the exotic breeds. $3 \times \frac{1}{2} = 1 \frac{1}{2} \text{ mks}$

- (i) -they can withstand high temperatures
- (ii) -they are capable of walking for long distances in search of pasture and water.
- (iii) -they are more resistant to most of tropical diseases and pest attack
- (iv) -they can survive on poor quality pastures

#### 3. Characteristics of bacterian type of camel. $3 \times \frac{1}{2} = 3 \text{ mks}$

- (i) -it has two humps
- (ii) -it is heavy and has short legs
- (iii) -it lives in cold region hence has thick and long coat

#### 4. Factors that influence the pulse rate of an animal. $4 \times \frac{1}{2} = 2 \text{ mks}$

- (i) -the degree of excitement
- (ii) -the age of the animal
- (iii) -the sex of the animal
- (iv) -physiological status of the animal e.g. pregnancy

#### 5. Signs of attack by endoparasite a farmer can observe. $3 \times \frac{1}{2} = 1 \frac{1}{2} \text{ mks}$

- (i) -loss of weight and emaciation
- (ii) -pot bellied
- (iii) -the animal will suffer indigestion
- (iv) -anaemic condition due to sucking of blood
- (v) -swollen and painful abdomen
- (vi) -dullness and the animal appearing depressed

#### 6. Factors that determine the amount of food given to an animal. $4 \times \frac{1}{2} = 2 \text{ mks}$

- (i) body size or weight of the animal
- (ii) environmental conditions within which the animal
- (iii) physiological condition of the animal
- (iv) level of production

- (v) purpose for which the animal is kept

**7. Reasons why a farmer may use machakos dip instead of a plunge dip to control ticks.**

$3x \frac{1}{2} = 1 \frac{1}{2}$

mks

- (i) scarcity of water
- (ii) -shortage of capital
- (iii) -small number of herds

**8. Factors considered when selecting construction materials.  $4x \frac{1}{2} = 2mks$**

- (i) -availability of materials
- (ii) -cost of materials
- (iii) -suitability of materials
- (iv) -durability of materials
- (v) -strength of the material
- (vi) -workability of the material

**9. Name three methods a farmer can use when selecting livestock for breeding.  $3x \frac{1}{2} = 1 \frac{1}{2} mks$**

- (i) -mass selection
- (ii) -progeny testing
- (iii) -contemporary comparison

**10. Signs of heat in a doe.  $3x \frac{1}{2} = 1 \frac{1}{2} mks$**

- (i) -restlessness
- (ii) -frequent urination
- (iii) -swollen vulva
- (iv) -doe throws itself on its sides
- (v) -tries to contact other rabbits in the next hutch

**11. Reasons for carrying out identification to the herds.  $4x \frac{1}{2} = 2mks$**

- (i) -for selection and breeding
- (ii) -disease control and treatment
- (iii) -feeding purpose
- (iv) -record keeping
- (v) -culling

**12. Two diseases that affect bees commonly on the farm**

- (i) -acarive disease
- (ii) -American foul brood disease

**13. Methods a farmer can use when preserving fish after harvesting.  $4x \frac{1}{2} = 2mks$**

- (i) -freezing
- (ii) -salting
- (iii) -sun drying
- (iv) -smoking

**14. Factors that determine the choice of poultry rearing system.  $4x \frac{1}{2} = 2mks$**

- (i) -availability of land
- (ii) -availability of appropriate equipment
- (iii) -availability of capital
- (iv) -security etc.

**15. Significance of mobile calf pen in calf rearing. 1x1=1mk**

- (i) prevent accumulation/buildup of parasites
- (ii) -prevent accumulation of dung that may lead to dampness

**16. Disadvantages of two stroke engine. 2x ½ =1mk**

- (i) they produce less power
- (ii) -they are inefficient in burning fuel to produce power
- (iii) -they are air cooled thus limiting the size of engine

**17. Factors that could cause sudden stopping of a tractor engine.**

- (i) -poor terminal conditions
- (ii) -faulty ignition system 2x ½ =1mk

**18. Disadvantages of animal drawn implements over tractor- drawn implements.**

- (i) -are tedious than the tractor drawn implement
- (ii) -more than one person is required to guide the plough and the animals
- (iii) -animals are slower than the tractor
- (iv) -animals can be attacked by diseases in some areas
- (v) -animals requires extra piece of land for pastures and fodder crops.

**SECTION B 20 MKS**

- 19 a) A furrow wheel or rear thrust  
 B beam  
 C disc  
 D disc scrapper 4x1 = 4mks

**b) Advantages of using the above implement over mould board plough. 2x1 = 2mks**

- (i) good on rough field with stones, stumps or roots not easily broken by obstacles
- (ii) good on wet, heavy and sticky soils
- (iii) good on hard and dry soils by cutting various depth
- (iv) can be used on soil prone to soil erosion
- (v) requires less power to pull
- (vi) requires less maintenance

- c) i) A - for balancing the whole implement  
 -also used to adjust the depth of plough
- ii) D - to remove wet soils from the disc  
 -Aid in the turning and inverting of the furrow slice

- 20 a) X – tsetse fly  
 Y – tape worm 2x1=2mks

**b) Effects of parasite X.**

- (i) transmit Nagana to the livestock and sleeping sickness in human. (trypanosomiasis)
- (ii) cause anaemia due to sucking of blood
- (iii) damage the skins and the hides of animals **2x1=2mks**

**c) Disease transmitted by the parasite X. 1x1 =1mk**  
trypanosomiasis

**d) Measures taken to control the parasite labelled Y.**

- (i) keep house clean and disinfected
- (ii) practice rotational grazing
- (iii) keep the feeding and watering equipment clean
- (iv) proper meat inspection
- (v) proper cooking of meat
- (vi) use of prophylactic drugs **3x1 =3mks**

21 a) E- halter **1x1 =1mk**

**b) Reasons why branding is discouraged as a method of identification.**

- (i) causes a lot of pain to the animal
- (ii) it reduces quality of the hides and skin
- (iii) causes wounds which on healing leaves a scar. **2x1 = 2mks**

c) **Caponisation** is the act of making a male birds lose their male characteristics.

## **SECTION C 40 MKS**

**22. a) Factors that predispose livestock to diseases. 5x2 =10mks**

- (i) The age of the animal
- (ii) The breed of the animal
- (iii) The sex of the animal
- (iv) The colour of the animal
- (v) The species of the animal
- (vi) Environment
- (vii) Movement
- (viii) Genetics

**b) Factors a farmer may consider when sitting a beehive in the farm. 5x2=10mks**

- (i) location of dwelling places
- (ii) accessibility to water sources
- (iii) nearness to nector producing flowers
- (iv) sunlight
- (v) quietness of a place **Explained 5x2=10mks**

**23. a) Equipment used by the farmer in milking**

- i) udder cloth/ towels – for washing and drying the udder
- ii) milking jelly - prevent teats from crucking
- iii) warm water – washing the udder to remove dirt
- iv) milking pails/buckets – for milking
- v) strip cup – defecting mastitis

- vi) milk cans/churns – for storage and transportation
- vii) milking stool – for a milkier to sit on as he/she milk

10mks



**b) Factors considered when selecting a breeding stock**

- (i) physical fitness
- (ii) health
- (iii) level of performance
- (iv) age
- (v) body conformation
- (vi) quality of the products
- (vii) temperament/ behavior
- (viii) adaptability
- (ix) mothering ability
- (x) prolificacy

5X2 = 10 Marks

**24. (a) four materials collected by bees**

- (i) water – for drinking and cooling the hive
- (ii) propolis – for sealing cracks and services in the hives
- (iii) pollen grains – from flowers. Fro feeding the brood and queen bee
- (iv) nectar – from flowers.
  - used as bees main food.
  - used for making honey

4X2 = 8 Marks

**(b) Equipments for harvesting honey**

- (i) protective gear – to protect the person from the stings
- (ii) honey container – e.g. pail or bucket to hold honey or combs
- (iii) a hive tool – used to cut honey combs
  - used to open the hive top bars
- (iv) bee brush – used to brush the bees from the honey combs

4X2 = 8 Marks

**(c) Reasons that make fish farming popular today**

- (i) supplies cheap and good protein to substitute meat
- (ii) suitable where land is limited
- (iii) makes fish available nearby
- (iv) It is a source of income to farmers

4X1 = 4 Marks