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. *2x1=2mks***

1. to increase efficiency on the farm
2. to enhance production
3. to enhance safety on the farm

**2. Reasons that a farmer opts to rear indigenous cattle breeds over the exotic breeds. *3x ½ =1 ½ mks***

1. -they can withstand high temperatures
2. -they are capable of walking for long distances in search of pasture and water.
3. -they are more resistant to most of tropical diseases and pest attack
4. -they can survive on poor quality pastures

**3. Characteristics of bacterian type of camel. *3x ½ =3mks***

1. -it has two humps
2. -it is heavy and has short legs
3. -it lives in cold region hence has thick and long coat

**4. Factors that influence the pulse rate of an animal. *4x ½ =2mks***

1. -the degree of excitement
2. -the age of the animal
3. -the sex of the animal
4. -physiological status of the animal e.g. pregnancy

**5. Signs of attack by endoparasite a farmer can observe. *3x ½ =1 ½ mks***

1. -loss of weight and emaciation
2. -pot bellied
3. -the animal will suffer indigestion
4. -anaemic condition due to sucking of blood
5. -swollen and painful abdomen
6. -dullness and the animal appearing depressed

**6. Factors that determine the amount of food given to an animal. *4x ½ =2mks***

1. body size or weight of the animal
2. environmental conditions within which the animal
3. physiological condition of the animal
4. level of production
5. 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 ½ = 1 ½* mks**

1. scarcity of water
2. -shortage of capital
3. -small number of herds

**8. Factors considered when selecting construction materials. *4x ½ = 2mks***

1. -availability of materials
2. -cost of materials
3. -suitability of materials
4. -durability of materials
5. -strength of the material
6. -workability of the material

**9. Name three methods a farmer can use when selecting livestock for breeding. *3x ½ =1 ½ mks***

1. -mass selection
2. -progeny testing
3. -contemporary comparison

**10. Signs of heat in a doe. *3x ½ =1 ½ mks***

1. -restlessness
2. -frequent urination
3. -swollen vulva
4. -doe throws itself on its sides
5. -tries to contact other rabbits in the next hutch

**11. Reasons for carrying out identification to the herds. *4x ½ =2mks***

1. -for selection and breeding
2. -disease control and treatment
3. -feeding purpose
4. -record keeping
5. -culling

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

1. -acarive disease
2. -American foul brood disease

**13. Methods a farmer can use when preserving fish after harvesting. *4x ½ =2mks***

1. -freezing
2. -salting
3. -sun drying
4. -smoking

**14. Factors that determine the choice of poultry rearing system. *4x ½ =2mks***

1. -availability of land
2. -availability of appropriate equipment
3. -availability of capital
4. -security etc.

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

1. prevent accumulation/buildup of parasites
2. -prevent accumulation of dung that may lead to dampness

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

1. they produce less power
2. -they are inefficient in burning fuel to produce power
3. -they are air cooled thus limiting the size of engine

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

1. -poor terminal conditions
2. -faulty ignition system ***2x ½ =1mk***

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

1. -are tedious than the tractor drawn implement
2. -more than one person is required to guide the plough and the animals
3. -animals are slower than the tractor
4. -animals can be attacked by diseases in some areas
5. -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***

1. good on rough field with stones, stumps or roots not easily broken by obstacles
2. good on wet, heavy and sticky soils
3. good on hard and dry soils by cutting various depth
4. can be used on soil prone to soil erosion
5. requires less power to pull
6. 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.**

1. transmit Nagana to the livestock and sleeping sickness in human. (trypanosomiasis)
2. cause anaemia due to sucking of blood
3. 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.**

1. keep house clean and disinfected
2. practice rotational grazing
3. keep the feeding and watering equipment clean
4. proper meat inspection
5. proper cooking of meat
6. use of prophylactic drugs ***3x1 =3mks***

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

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

1. causes a lot of pain to the animal
2. it reduces quality of the hides and skin
3. 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***

1. The age of the animal
2. The breed of the animal
3. The sex of the animal
4. The colour of the animal
5. The species of the animal
6. Evironment
7. Movement
8. Genetics

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

1. location of dwelling places
2. accessibility to water sources
3. nearness to nector producing flowers
4. sunlight
5. 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**

1. physical fitness
2. health
3. level of performance
4. age
5. body conformation
6. quality of the products
7. temperament/ behavior
8. adaptability
9. mothering ability
10. prolificacy ***5X2 = 10 Marks***

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

1. water – for drinking and cooling the hive
2. propolis – for sealing cracks and services in the hives
3. pollen grains – from flowers. Fro feeding the brood and queen bee
4. nector – from flowers.

-used as bees main food.

-used for making honey  ***4X2 = 8 Marks***

**(b) Equipments for harvesting honey**

1. protective gear – to protect the person from the stings
2. honey container – e,g. pail or backet to hold honey or combs
3. a hive tool – used to cut honey combs

* used to open the hive top bars

1. bee brush – used to brush the bees from the honey combs

***4X2 = 8 Marks***

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

1. supplies cheap and good protein to substitute meat
2. suitable where land is limited
3. makes fish available nearby
4. It is a source of income to farmers ***4X1 = 4 Marks***