**443**

**AGRICULTURE**

**FORM 2**

**MARKING SCHEME**

**End of term 2 examinations**

**section a**

1. Distinguish between the following

a. olericulture – is growing of vegetables while aquaculture is rearing of dish in fishponds.

b. Weed cropping is the practice of growing two or more crops in different plots while;

Intercropping is the practice of growing the same crop in same plot at the same time.

(2 x 1 = 2mks

2. Biotic factors that influence agriculture positivity

* Predators
* Pollination
* Decomposers
* Nitrogen fueling bacteria (4 x 1 = 4mks

3. Advantages of leveling

* Facilities uniform depth of planting
* Facilities uniform germination of seeds
* For easier germination of small seeds; grass seeds (3 x 1 = mks)

4. Rainfall

* Weed
* Wind
* Temperature
* Light intensity
* Relative humidity
* Type of soil (8 x 1 = mks)

5. factors that influence the number of secondary cultivation

* Type of tilt required
* Topography of the slope of the land
* Moisture content to grass type of crop to grow
* Type of implement to be used. (4 x 1 = 4mks

6. Resist to diseases

* Free from disease
* Free from pest attack
* Adapted to different soil condition e.g. soil Ph
* Complete with different scions (4 x 1 = 4mks

7. Reasons why burning is discouraged as a method of land cleaning

* Kills soil organism
* Leads to loss of nutrients
* Destroys organic matter
* Leaves the land have encouraging soil erosion (4 x 1 = 4mks

8. Disadvantages of broadcasting seeds during planting

* Leads to uneven germination
* Higher seed rates are used
* Leads to overcoming in some areas
* Difficult to carry out management practices like weeding
* Difficult to establish correct plant population (4 x 1 = 4mks)

9. Characteristics of dairy goats

* Wedge shaped /triangular shaped
* Large stomach to store more food
* Long thin neck and small head
* Lean bodies with little small head
* Straight top line
* Long thin legs
* Prominent /viable pin bones (4 x 1 = 4mks)

10. Methods of modifying soil Ph

* Apply sulphur
* Apply lime
* Apply acidic fertilizers
* Apply basic fertilizers (4 x 1 = 4mks)

11. i. movement – limping /practicing (½ x 1 = ½ mk)

 ii. Urine – different in urination, failure to urinate blood in urine (½ x ½ mk)

 iii. Mucous membrane - pink in colur, moist and soft (½ x ½ mk)

 iv. Posture – normal posture (½ x ½ mk)

12. Tracer and canuls

* Hypodermic needle and syringe
* Bull ring and lead stick
* Elastration and rubber ring

13. Records kept by a poultry farmer

* Breeding records
* Feed records
* Labor record
* Production records
* Health records (4 x 1 = 2mks)

14 maintenance practices carried out on saws

* Teeth setting
* Sharpening blunt teeth
* Straitening blunt blade
* Tightening loose nuts and bolts /screens (4 x 1 = 2mks)

15. nursery bed – special seedbed prepared for raising seedlings before transplanting

* Seed bed – a special nursery which has been uprooted from the nursery bed due to overcrowding before they are transplanted. (1 x 1 = 1mk)

**section b**

16. a. Identify the equipment

Watering can (1 x 1 = 1mk)

b. parts labeled

A - Handle

B – Rose

C – Spout (3 x 1 = 3mkS)

 c. use of the equipment ]

Watering seedlings in the nursery and after transplanting (1 x 1 = 1mk)

17. a. French drain (1 x 1 = 1mk)

b. Advantages; crops are grown normally. On the surface of the French drain

c. Importance of drainages

* Increases soil aeration
* Increases soil volume
* Raise soli temperature
* Reduces soil erosion
* removes toxic substances from the soil (3 x 1 = 3mks)

18. methods of sampling

Method X – terrace

Method Y – zigzag

b. reasons for soil sampling

To rest for soil nutrients

To rest for soil ph

c. Siles that should be avoided during soil sampling

Dead furrows

Terrace stands

Old fence lines

Old manure heaps

Swampy areas

Near trees and boundaries

Where there was a boma or animal shed

Charcoal burning sites (any 2 x 1 = 2mks)

19 100 kg – 20kg n

1kg CAN – 20 kg N

100

 200 kg CA - (20 X 2)KG n

 100

 40kg N per Ha

1 Ha requires 40 kg N

Therefore 5 Ha require 40 x 5 = 200 kg N

Proper working how (4mks)

20. a. Ridging (1 x 1 = 1mk)

b. X – ridge

 Y – furrow

c. Importance’s of the operation

It encourages tuber expansion

It allows early harvesting of root crops

It helps in water conservation (2 x 1 = 2mks)

21. a . Earthling up (1 x 1 = 1mk)

b. i. Irish potatoes important tuber formation

ii. Groundnuts promote production of seeds

iii. Tobacco - improve drainage and prevent loading (4 x 1 4mks)

iv. Maize - provide support and prevent lodging (4 x 1 = 4mks)

**section c**

1. a. three bypass of nursery beds

* Vegetation crop nurseries
* Tree nurseries
* Vegetation propagation nurseries (3 x1 = 3mks)

ii. Two reasons for constructing of shade

* To reduce the impact of rain crops
* To help in water conservation (2 x1 = 2mks)

 iii. Factors considered when selecting sting a vegetable nursery

* Near a reliable source of rain drops
* A gentle slope to prevent flooding, erosion through run-off
* In a well secured place
* Ina a deep fertile and well drained soils

b. three methods of layering

* marcotting
* tp layering
* Trench layering
* Compound/serpentine layering (3 x1 = 3mks)

Methods of fertile application

* Broadcasting
* Placement method
* Side dressing
* Folian spraying ]drip application (2 x1 = 2mks)

23. 2a four biotic factors that affect agriculture and their effect

* Pests – fed on the leaves of the plants, trench diseases, injure plant paints etc.
* Parasites – absorb food substances from the digestive tract/suck blood from the animal and irritate them by biting on their skin
* Decomposers act on their skin materials causing rotting
* Pathogens transmit diseases
* Predators kills and feeds on another animal
* Pollinates transfer pollen grains from the stamens to the pistil of the flower nitrates convert nitrogen from the air into nitrates.

Naming (4 x1 = 4mks)

Explanation (4 x1 = 4mks)

b. production of cabbages

i. land preparation

* Land is prepared early to allow weeds to dry and organic matter to decompose
* Dig land deeply during primary land cultivation /plough to land
* Various land/carry and secondary, cultivation to get medium tilth. (3 x1 = 3mks)

c. Field management practices

* Top dressing done when the cabbages are about 20-25 cm in height using sulphate of ammonia
* To field should be kept weed free
* Control harmful pests like aphid’s cutworms
* Control diseases like damping off blackout downy mildew
* Harvest three to four months after transplanting by cutting heads when they are solid and compost (5 x1 = 5mks)