

MARKING SCHEME FORM ONE

AGRICULTURE

SECTION A. 30MKS

1. Define the term agriculture

1mks

It is the art and science of crop and livestock production

2. Four factors that make agriculture to be termed as an art

2mks

-tilling of the land

-construction of farm structures

-Measuring distances

-Machines operations

Feeding and handling of animals

-marketing of agricultural produce

3. Difference between entomology and crop pathology as used in agriculture 1mk

Crop pathology is the study of crop diseases while Entomology is the study of insect and their control

4. Define the following terms as used in agriculture

(a) Floriculture 1mk

Growing of flowers such as tuberoses, roses e.t.c

(b) Olericulture 1mk

Growing of vegetables eg French beans

(c) Pomology 1mk

Growing of fruits such as avocado

5. Three forms in which soil water exist in the soil.

-Superfluous

-Capillary

-Hygroscopic 3mks

6. Functions of the following farm tools and equipments.

(a)Dibber 1mk

Making holes for transplanting

(b)Garden trowel 1mk

For lifting seedlings from the nursery

(c) Strip cup 1mk

Used for checking whether a cow has mastitis

(d) Troca and canula 1mk

Used for removal of gases which causes bloating in ruminant.

(e)Stock and die 1mk

For cutting thread on pipes

Pipe cutter 1mk

For holding, tightening and loosening metallic pipes

7. Four importance of primary cultivation 4mks

- To remove weeds
- To bury organic matter for easy decomposition
- To facilitate water infiltration and aeration
- To destroy soil borne pest by exposing them to the predators and sun.
- To make planting easy

8. Functional difference between a bolus gun and a drenching gun. 1mk

-Bolus gun is used for shooting solid drugs through the mouth of an animal while drenching gun is used to administer liquid drugs through the mouth of an animal

9. Four factors to consider when making a choice of the type of irrigation to be used in the farm 2mks

- capital availability
- Topography of the land
- water availability
- Type of soil
- Type of crop to be irrigated

10. Outline any two effects of high temperature on crop production 2mks

- Increase evaporation leading to wilting of crops
- Increase rates of growth or hasten the maturity of a crop
- Improves the quality of crops such pineapple and oranges
- Increase incidences of disease infection and pest infestation in crops

11. Give any four factors influencing soil formation

2mks

-parent rock materials

-climate

-Topography

-Time

12. Three factors determining the depth of ploughing 3mks

-The type of crop to be planted

-The implement available

-The type of the soil

SECTION B 30MKS

13. (a) Identify the type of spanner marked a-c.

a- adjustable spanner

b- Open ended spanner

c- Ring spanner

3mks

(b) Advantage of a spanner a over spanner b s

1mk

Can be used to tighten or loosen nuts of different sizes since it is adjustable

14. (a) Name the parts marked a-h

4mks

a-Nozzle

d-Strap

g-Trigger

b-Hand lance

e-Spray tank

h-Lid

c-Preamatic lever

f-Hosepipe

(b) Give any four maintenance practices of a knapsack sprayer

4mks

-cleaning after use

-Tightening loose nuts

-Repairing worn out parts

-Proper storage

15. (a) Identify the parts marked a and b

2mks

a-Ridge

b-Furrow

(b) Two advantages of using the above structures in growing of crops

2mks

-Allow expansion of tubers

-Allow easy harvesting of root crops

- Allow proper root penetration

16 .State the six stages of water treatment process

6mks

-filtration at water intake

-softening of water

-coagulation and sedimentation

-filtration

-chlorination

-storage

17a.-Drip irrigation

(b) Five advantages of the irrigation system drawn above 5MKS

- minimizes labour requirement
- minimizes possible theft of pipes
- Economic on the use of the water
- Fungal diseases such as blight are reduced because water does not accumulate on leaves
- Water does not cause erosion
- Can be practiced on both slopy and flat land

18. State aspects of rainfall that a farmer may consider when deciding on what crop to grow in an area

- Rainfall reliability
- Rainfall intensity 2mks
- Amount of rainfall
- Rainfall distribution

SECTION C 40mks

19. (a)State and explain any five importance of agriculture to our economy 10mks

Food supply

Agriculture leads to a health population by supplying food to Kenyans in rural and urban area
.Food shortage leads to food importation leading to less capital for buying essential commodities.

Source of employment Farm employer and those

Some people are employed directly in agriculture as full time farmers' and others in agribased industries. A section of population is indirectly employed in extension services, research stations, transport and industries.

Provision of foreign exchange

Agricultural products are exported thus earning foreign exchange for the country

Source of raw materials for the industry

Most of agricultural products are processed in most Kenyans industries e.g. Tea factories, maize mills e.t.c agriculture is therefore necessary so as to provide raw materials.

Provision of market for industrial goods

Agriculture sector provides market for final product such as Agro chemicals, tools like jembes e.t.c.

5x2=10mks

(b)Outline five maintenance practices carried out on workshop tools and equipment

-cleaning after use

-sharpening the cutting edges when necessary

-Tightening loose parts

-Applying oil on metallic parts to prevent rusting

-Replacing or repairing all broken parts

-lubricating the moving parts to reduce friction

5x2=10mks

20 a .State any five types of soil structures

5mks

- single grained soil structure
- Crumby soil structure
- Prismatic soil structure
- Granular soil structure
- Platy soil structure
- Blocky soil structure

(b)Outline five general uses of water in the farm

(5x2=10mks)

- for domestic purpose washing utensils
- for watering livestock
- for diluting chemicals used in pest and disease control
- Used in processing of farm produce
- for mixing concrete used in construction of building
- for irrigating crops especially during the dry season

(c) Five effects of education to agricultural production 5mks

- help people to use the right type and amount of inputs.
- Helps people to know the proper method and time of doing things, such as planting.
- Help people to apply inputs in the right place.
- Help farmers in making right observation e.g. observing signs of diseases

-help farmers in identifying proper methods of harvesting and storing crops