

AGRICULTURE
END OF TERM 2 - 2021
FORM TWO

MARKING SCHEME:

1. State four systems of farming. (2mks)
 - **Intensive**
 - **Extensive**
 - **Large scale**
 - **Small scale**

2. State two effects of HIV/AIDS on agricultural production. (2mks)
 - **Shortage of farm labour**
 - **Loss of family support**
 - **Low living standards.**
 - **Increased criminal activities.**
 - **More time is spent by NGOs and government in caring the sick.**

3. List four physical agents of weathering. (2mks)
 - **Wind**
 - **Water**
 - **Moving ice**
 - **Temperature**

4. List four factors influencing soil formation. (2mks)
 - **Climate**
 - **Biotic factors**
 - **Time**
 - **Parent material**
 - **Topography**

5. Name two types of water pumps. (2mks)
 - **Centrifugal**
 - **Piston/ reciprocating**
 - **Semi-rotary**
 - **Hydram**

6. Mention two tertiary operations carried out during land preparation. (1mk)
 - **Ridging**
 - **Rolling**
 - **Leveling**

7. Outline four characteristics of a fertile soil. (2mks)
- **Good depth**
 - **Good aeration**
 - **Good water holding capacity**
 - **Proper drainage**
 - **Correct soil pH**
 - **Adequate nutrient supply**
 - **Free from soil borne pests and diseases.**
8. Give two characteristics of plant used for preparing green manure. (2mks)
- **Fast growth rate**
 - **Have a high nitrogen content**
 - **Capable of rotting quickly**
 - **Leafy / highly vegetation.**
 - **Hardy/ capable of growing in poor condition.**
9. Differentiate between a root stock and a scion as used in grafting. (2mks)
- Root stock – a part of a plant bearing roots used in grafting while a scion - is a part bearing a bud which is grafted onto the root stock.**
10. Name two forms in which nitrogen is absorbed by plants. (2mks)
- **Nitrate ion / NO_3^-**
 - **Ammonium ions / NH_4^+**
11. State two deficiency symptoms of Nitrogen. (2mks)
- **Leaf chlorosis / yellowing**
 - **Stunted growth**
 - **Premature ripening**
 - **Premature leaf fall.**
 - **Light seeds.**
12. List four examples of phosphatic fertilizers. (2mks)
- **Single super phosphate**
 - **Double duper phosphate**
 - **Triple super phosphate**
 - **Diammonium phosphate**
13. A farmer was asked to apply fertilizers as follow: 200 kg/ha of DSP (40% P_2O_5), 150kg/ha of sulphate of ammonia 20% Nitrogen and 150kg/ha of Muriate of Potash 60% K_2O)
- a) How much P_2O_5 did the farmer apply per ha. (2mks)

$$\frac{40\%}{100\%} \times 200kg = 80kg/ha P_2O_5$$

b) How much K_2O did the farmer apply per ha. (2mks)

$$\frac{60\%}{100\%} \times 150kg = 90kg/ha K_2O$$

c) How much nitrogen did the farmer apply per/ha. (2mks)

$$\frac{20\%}{100\%} \times 150kg = 30kg/ha N$$

14. State two methods of pH testing. (2mks)

- **Universal indicator solution**
- **pH metre**

15. Outline four disadvantages of mulching in crop production. (2mks)

- **It is a fire risk**
- **Providing a breeding ground/ hiding place for pests.**
- **Obstructs rain drops from reaching the soil.**
- **Expensive to acquire, transport and apply.**

16. List 3 factors that determine the time of harvesting farm produce. (3mks)

- **Stage of maturity**
- **Use/purpose of the crop**
- **Tastes and preferences of consumers**
- **Weather conditions.**
- **Moisture content in the crop.**

17. State four post harvesting practices. (2mks)

- **Threshing / shelling**
- **Drying**
- **Cleaning**
- **Sorting and grading**
- **Dusting**
- **Processing**
- **Packaging**

18. The diagram below shows a type of storage facility. Use it to answer question that follow.

a) Name the structure. (1mk)

Traditional granary

- b) Name part L and state its function. (2mks)
L – **Rat proof / rat guard/ rat deflector**
Function – **use to prevent rats from ascending into the store to damage the crop produce.**
- c) Name the roofing material the structure is made of: (1mk)
Thatch/ Dry grass
- d) List three limitations of the above structure. (3mks)
- **Easily attacked by rats and weevils.**
- **Grains can easily rot because the roof is not leak-proof.**
- **Limited in size.**
- **It is a fire risk.**
- e) Give two preparations that the farmer should make on the above structure before the crop produce is brought in. (2mks)
- **Cleaning the store.**
- **Preparing broken and worn out parts.**
- **Dusting.**
- **Clearing vegetation around the store.**
19. Give four categories of vegetables. (2mks)
- **Leafy**
- **Fruit**
- **Pod**
- **Stem**
- **Bulb**
20. The diagram below represents a pest that attacks tomatoes.
- i) Identify the pest. (1mk)
American bollworm.
- ii) State two control measures of the above pest. (2mks)
- **Spraying tomatoes with an appropriate insecticide**
- **Crop rotation.**
- **Early planting.**

- **Planting resistant varieties of tomatoes.**

21. (a) Differentiate between health and disease as used in livestock health. (2mks)

Health – is a state in which all body organs are functioning normally while

Disease – is any deviation in the state of an animal’s body which interferes with its normal functioning.

(b) State four factors that predispose livestock to diseases. (4mks)

- **Species of the animal**
- **Breed**
- **Age**
- **Sex**
- **Colour**

(c) Outline 3 routine management practices of disease control. (3mks)

- **Proper feeding and nutrition.**
- **Proper breeding and selection.**
- **Proper housing.**
- **Proper hygiene.**

(d) State three activities in livestock health that necessitate handling of animals. (3mks)

- **Drenching**
- **Injection**
- **Mastitis control**
- **Hand spraying**

22. (a) List two harmful effects of tsetsefly infestation to livestock. (2mks)

- **Transmits trypanosomiasis**
- **Sucks blood causing anaemia.**
- **Damages the skin causing wounds.**

(b) Name:

i) Intermediate host for tapeworm. (1mk)
- **Cattle/ pigs**

ii) Intermediate host for liverfluke. (1mk)
- **Fresh water / mud snail.**

(c) Give two examples of one host tick. (2mks)
- **Blue tick**

- *Texas fever tick*
- *Cattle tick*
- *Tropical Horse tick.*