**AGRICULTURE**

**END OF TERM 2 - 2021**

**FORM TWO**

**MARKING SCHEME:**

1. State four systems of farming. (2mks)
* ***Intensive***
* ***Extensive***
* ***Large scale***
* ***Small scale***
1. 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.***
1. List four physical agents of weathering. (2mks)
* ***Wind***
* ***Water***
* ***Moving ice***
* ***Temperature***
1. List four factors influencing soil formation. (2mks)
* ***Climate***
* ***Biotic factors***
* ***Time***
* ***Parent material***
* ***Topography***
1. Name two types of water pumps. (2mks)
* ***Centrifugal***
* ***Piston/ reciprocating***
* ***Semi-rotary***
* ***Hydram***
1. Mention two tertiary operations carried out during land preparation. (1mk)
* ***Ridging***
* ***Rolling***
* ***Leveling***
1. 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.***
1. 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.***
1. 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.***

1. Name two forms in which nitrogen is absorbed by plants. (2mks)
* ***Nitrate ion / NO3-***
* ***Ammonium ions / NH4+***
1. State two deficiency symptoms of Nitrogen. (2mks)
* ***Leaf chlorosis / yellowing***
* ***Stunted growth***
* ***Premature ripening***
* ***Premature leaf fall.***
* ***Light seeds.***
1. List four examples of phosphatic fertilizers. (2mks)
* ***Single super phosphate***
* ***Double duper phosphate***
* ***Triple super phosphate***
* ***Diammonium phosphate***
1. A farmer was asked to apply fertilizers as follow: 200 kg/ha of DSP (40% P2O5), 150kg/ha of sulphate of ammonia 20% Nitrogen and 150kg/ha of Muriate of Potash 60% K2O)
2. How much P2O5 did the farmer apply per ha. (2mks)

$$\frac{40\%}{100\%}×200kg=80kg/ha P\_{2}O\_{5}$$

1. How much K2O did the farmer apply per ha. (2mks)

$$\frac{60\%}{100\%}×150kg=90kg/ha K\_{2}O$$

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

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

1. State two methods of pH testing. (2mks)
* ***Universal indicator solution***
* ***pH metre***
1. 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.***
1. 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.***
1. State four post harvesting practices. (2mks)
* ***Threshing / shelling***
* ***Drying***
* ***Cleaning***
* ***Sorting and grading***
* ***Dusting***
* ***Processing***
* ***Packaging***
1. The diagram below shows a type of storage facility. Use it to answer question that follow.
2. Name the structure. (1mk)

***Traditional granary***

1. 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.***

1. Name the roofing material the structure is made of: (1mk)

***Thatch/ Dry grass***

1. 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.***
1. 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.***
1. Give four categories of vegetables. (2mks)
* ***Leafy***
* ***Fruit***
* ***Pod***
* ***Stem***
* ***Bulb***
1. The diagram below represents a pest that attacks tomatoes.
2. Identify the pest. (1mk)

***American bollworm.***

1. State two control measures of the above pest. (2mks)
* ***Spraying tomatoes with an appropriate insecticide***
* ***Crop rotation.***
* ***Early planting.***
* ***Planting resistant varieties of tomatoes.***
1. (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 interfers 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***
1. (a) List two harmful effects of tsetsefly infestation to livestock. (2mks)
* ***Transmits trypanosomiasis***
* ***Sucks blood causing anaemia.***
* ***Damages the skin causing wounds.***

(b) Name:

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