

JOINT EXAMINATION

AGRICULTURE FORM ONE TERM THREE 2023

MARKING SCHEME.

- 1) a) **Arable farming**- this is the growing of crops on a cultivated land
b) **Organic farming**- this is the growing of crops and rearing of livestock without using agricultural chemicals.
- 2) Pastoralism/mammalian livestock production

Fish farming/aquaculture

Bee keeping/apiculture

Poultry keeping
- 3) Requires large tracts of land
Low capital investment
Low labour per unit area
Low yield per unit area
- 4) Rainfall intensity
Rainfall amount
Rainfall distribution
Rainfall reliability
- 5) Mineral matter
Organic matter
Soil air
Soil water
Soil living organisms.
- 6) Single grained soil structure
Crumbly Soil structure
Granular soil structure
Platy soil structure
Blocky soil structure
Prismatic soils structure
Columnar soil structure
- 7) Lime application
Application of sulphur
Application of basic fertilizer
Application of acidic fertilizer

- 8) **Strip cup**- used to check if a cow has mastitis
Burdizzo – used to castrate bulls, rams, buck or billy
Bolus guns – used to administer solid drugs through the mouth of an animal
Plumb bob – used to check if wall is vertically straight
- 9) Slashing
Burning of vegetation cover
Tree felling
Use of herbicides
- 10) springs
Wells
Boreholes
- 11) Plastic pipes
Metal pipes (aluminium and galvanized iron pipes)
Hose pipes
- 12) Surface irrigation (flood, furrow, basin)
Overhead irrigation/ sprinkler
Sub-surface irrigation
Drip/ trickle irrigation.
- 13) Use of open ditches
Use of underground drain pipes
French drains
Cambered beds
Pumping
Planting trees e.g eucalyptus trees.
- 14) Green manure
Compost manure
Farmyard manure
- 15) Leaching
Soil erosion
Mono-cropping
Continuous cropping
Change in soil P.H.
Burning vegetation cover
Accumulation of salts

- 16) Milk
Wool
Meat
Eggs
Honey
Blood.

- 17) Dromedary
Bactrian

SECTION B

- 18) a. hand saw.

- b. A – toe
B - blade
C – Handle

- c. Teeth setting should be done

Clean after use

Straighten blade when bent

Replace broken handle

Regular sharpening of teeth if blunt

Tighten loose nuts and screws

Oil the blade during long storage to reduce rusting

- 19) a. Ridging

- b. It is done by digging soil in a continuous line and heaping it on one side to form a ridge and furrow.

- c. Promotes easy harvesting of tubers

Promotes expansion of root tubers

Furrows help to conserve water

Ridges promote anchorage

Promotes production of seeds in ground nuts

- 20) a. Roof water harvesting/ roof catchment.

- b. Surface area of the roof

Amount of rainfall/ Intensity

- c. Clean to remove dirt

Repair broken or leaking points

Place it on a strong base to resist water pressure

Paint iron sheet tanks to avoid rusting.

21) a. To compare capillarity action in different soils

- b. A- sand soil
- B- Loam soil
- C – Clay soil

c. soil type C

SECTION C

22) a. **Filtration at water intake** – it is done by series of sieves to remove large particles

Softening of water – in the softening chamber, soda ash is added to soften water and alum (aluminium sulphate) to coagulate solid particles

Coagulation and sedimentation – the tank is open to allow aeration which removes bad smell, water stays for 36 hours to kill bilharzia worms.

Filtration – done using different sizes of gravel and a layer of sand to remove small solids

Chlorination – chlorine is added using a doser to kill micro organisms

Storage – water is stored awaiting distribution

b. Domestic use e.g cooking

Washing animal structures

Construction

Diluting chemicals

Watering plants

Watering animals

Promotes aquaculture

Washing farm equipments

Cooling machines

Processing of farm produce.

c. To remove chemical impurities

To remove bad smell and taste

To kill disease causing micro organisms

To remove sediments of solid particles

23) a. Good depth

Proper drainage

Good water holding capacity

Correct P.H

Adequate nutrient supply.

Free from excessive infestation of soil borne pests and diseases.

b. Control soil erosion

- Crop rotation
- Weed control
- Minimum tillage
- Inter cropping
- Proper drainage
- Control of soil P.H
- Use of organic manure
- Use of inorganic fertilizer
- Avoid practise that reduce soil nutrients e.g burning of vegetation cover

c. Type of animal used

- Type of food eaten
- Type of litter / bedding used
- Method of storage
- Age of farm yard manure

24) a. Source of food

- Source of income when sold
- Provide animal power
- Source of raw materials
- Cultural uses e.g status symbol, medium of exchange, social ceremonies and recreational purposes.

b. Their bodies are wedge/ triangular shaped

- They have a straight topline.
- They have prominent milk veins
- They are docile with mild temperament
- They have visible pin-bone
- They have well set apart hind quarters to give room for big udder
- They have large stomach capacity therefore eat more and hence high milk production
- They have large and well developed udder.

c. It shows the history of the farm

- It helps to detect losses or thefts in a farm
- Shows whether the farm is making profit or losses
- Facilitates easy planning and budgeting
- Makes it easy to share profit and losses during partnership
- Helps to compare performance of different enterprises within a farm
- Helps to settle disputes among heirs to the estate if farmer dies without leaving a will
- Helps in assessment of income tax therefore reduced taxation
- Helps to determine worth or value of the farm by comparing assets and liabilities
- Supports insurance incase of death, theft or fire
- Provides labour information e.g NSSF dues

