**Agriculture**

**form ONE**

**marking scheme**

**End of term 2 examination**

**Section A**

1.. Methods of farming

* Mixed farming
* Nomadic pastoralism
* Shifting cultivation
* Organic farming
* Agroforestry (4 x 1= 4mks)

2. three underground water sources

* Springs
* Wells
* Bore Holes (3 x 1= 3mks)

3. Four aspects of rainfall

* Rainfall reliability
* Rainfall intensity
* Amount of rainfall
* Rainfall duration (4 x 1= 4mks)

4. Three surface irrigation methods

* Flood irrigation
* Farrow irrigation
* Basin irrigation (3 x 1= 3mks)

5. Benefits of rolling

* Prevents soil erosion
* Prevents small seed from being carried away
* Increases seed soil contact
* Levels the seed bed to ensure uniform germination (3 x 1= 3mks)

6. Three methods of land clearing

* Tree felling
* Burning of vegetation
* Slashing weeds
* Use of herbicides rej. chemical (3 x 1= 3mks)

7. Three types of spanners

* Open ended spanner
* Adjustable spanner
* Ring spanner (3 x 1= 3mks)

8. Maintenance practicing dome on a wheelbarrow

* Oil the wheel to reduce friction
* Tighten loose bolts and nuts
* Paint metallic surfaces
* Replace broken handles

9. i. tinsnips/Tinsman’s snip

ii. slide rule

* tape measure

10. Four practices that make agricultural on act

* Tilling of the land
* Construction of farm structures
* Measuring distances
* Machine operations
* Harvesting of crops
* Feeding and handling animals
* Marketing of agriculture produce (4x 1 = 4mks)

11. i. cabbages – Olericulture (1x 1 = 1mk)

ii. Avocado – Pomoculture (1x 1 = 1mk)

12. Three factors influencing soil formation

* Climate
* Topography
* Living organisms
* Parent rock material
* Time (3x 1 = mks)

13. Advantages of mixed farming

* There are mutual benefits
* Farmer gets income throughout the year
* There is desertification of production
* If one enterprise fails the farmer will benefit from the enterprise (2x 1 = 2mks)

**Section B (30MKS)**

14.a a. filtration at the water intake

b. Softening stage

c. Sedimentation and coagulation

d. chlorination (4 x1 = 4mks)

b. - soda ash (sodium bicarbonate)

- Allum (aluminum sulphate) (1 x1 = 1mk)

c. - Water remains for 36hrs to kill Bilhazia worms

- Sediments coagulate and settle down at the bottom of the sediments tank. (1 x1 = 1mk)

d. Reasons for treating water in the form

- To remove solid particles/physical impurities

- To remove chemical impurities

- To kill pathogens

- To remove bad small an taste (3 x1 = 3mks)

15. a. to show that soil is made up of different sized particles . (1 x1 = 1mk)

b. C – Humus/organic matter

D. Gravel

c. soil texture (2 x1 = 2mk)

16. a, M – working axe (claw axe)

N- Drenching gun/dozing gun

P- Hand drill

R -Pruning shears

b. m- splitting timber

R – Trimming hedges and shrub (1 x1/2 = 1mk)

c. - Clean after sue to remove dire

- Greasing/oiling to reduce friction (1 x1/2 = 1mk)

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

b. Q - Ridge (½ mk)

R – Furrow

c. Irish potatoes (1 x1 = 1mk)

Cassava

d. - Allows expansion of tubers

- Reduces speed of run of run off this containing soil erosion (1 x 1= 1mk)

18. a. E – prismatic soil structure

F- Single grained soil structure (2 x ½ = 1mk)

b. Top soil grained soil/and eliminate alkaline soils (1 x 1= 1mk)

c. - Drainage of excess water

- liming/addition of soil amendments

- Planting three of eucalyptus which withdraw a lot of water from the soil (3 x 1= 3mks)

d. - Influences soil aeration

- Influences water holding capacity of soil

- Influences soil drainage

- Influences root penetration with soil (3x 1= 3mks)

**Section C (30MKS)**

19. Practices that could be used to improve soil structure

* Use of organic manure
* Growing of cover crops
* Crop rotation/fallowing
* Use of organic mulch
* Minimum tillage
* cultivating when the soil moisture content is very high (any 4x 1 = 4mks)

20. Importance of agriculture to the country’s economy

* Food supply
* Provision of raw materials for industries
* Provision of market for industrial goods
* Creates employment
* Source of income to the farmer
* Source of foreign exchange (6x 1 = 6mks)

21. Precautions when working with workshop tools

* Tools should always be left in a safe place
* Use of correct tool for the correct job
* Maintain and service tools to remain in good working condition and last long
* Handle tool correctly when in use to avoid damage to the tool or injury to the user
* Use safety devices e.g. first Aid kit, goggles when welding
* All tools should be stored properly in tool cabinets or in tool racks (5x 1 = 5mks)

22. Methods of preventing water pollution.

* Fencing off water sources
* Enforcement by law the use of integrated methods of controlling pest and weeds
* Planting grass along river banks
* Adequate storm water control methods in heavy rainfall areas
* Terracing/cultivation along contours (5x 1 = 5mks)

22. a. Effects of HIV/AIDs

* Loss of farm labor
* Low motivation of infected people towards work and investment
* Waste of time while seeking medical attention and taking care of the sick
* Low food supply
* Low living standards/poverty of Hiv/Aids patient’s and relatives ( 4x 1 = 4mks)

b. Market forces influencing agriculture

* Demand force
* Supply force (2 x 1 =2mks)

23. Reasons for carrying out minimum tillage

* To reduce the cost of cultivation or ploughing
* To control soil erosion
* Maintain soil structure
* Conserve soil moisture
* Prevent the disturbance of roots and underground structures e.g. bulbs and tubers.
* Prevent exposure of humus to adverse conditions e.g. sun’s heat that cause volatilization of nitrogen

(4 x 1 =4mks)