FORM ONE AGRICULTURE MARKING SCHEME

END OF TERM 1 2023

1. Is the science and art of crop and animal/livestock production
2. - Tilling of the land.
   - Construction of farm structures
   - Measuring distances
   - Operating machines
   - Crop harvesting
   - Feeding animals
   - Marketing agricultural produce 1x4 mks)
3. - Crop pathology
   - Entomology
   - Agricultural engineering
   - Soil Science
   - Genetics (1x4 mks)
4. - It is a source of raw materials for industries
   - It provides market for industrial goods.
   - It is a source of capital to establish industries.(1x2=2 mks)
5. - It is source of food supply
   - Help the nation to earn foreign exchange

- Provide employment to citizens
- Provide capital through taxation leading to national development. 1x3 mks)

6. Crop production
   - Livestock production
   - Agricultural economics
   - Agricultural engineering
   - Soil science (1 x 5 mks)

7. Level of technology
   - Availability of land
   - Capital
   - Skilled labour (1X4)

8. Require large tracts of land
   - Require high capital instrument
   - Mechanization is common
   - Processing of the product in the farm
   - Provide more employment
   - Skilled labour
   - High level management
   - Carried out for commercial purposes. (1X4)

9. - Limited capital

- Small land sizes. 1 x 2)

10. Growing of fruits such as avocado, mangoes and citrus.(1x1mk)

11. - In search of better pastures
    - In search of water (1 x 2 mks)

12. - Wind
    - Rain
    - Light
    - Temperature
    - Relative humidity (1 x 4 mks)

13. Involves growing of trees and crops and keeping of animals on the piece of land. (1x1mk)

14. - Low production/low yield
    - A lot of time wasted in movement
    - No inventive to develop land.
    - Require large piece of land
    - Possible for only animal crops. (1x4 mks)

15. - Shortage of labour in the farm
    - Increased cost of labour
    - Reduced agricultural production/low food supply and poverty.
    - Poor agricultural development due to lack of capital (1X 2 mks)

16. - Level of education and technology
    - Economy
    - Government policy

- Transport and communication
- Cultural practices and Religious beliefs
- Market forces. (1x4 mks)

17. - Amount
- Distribution
- Intensity
- Reliability
- Form (1x4 mks)

18. - Pests
- Parasites
- Decomposers
- Pathogens
- Predators
- Pollinators
- Nitrogen Fixing bacteria (1 x 5)

19. - Farmers get sustainable income throughout the year crops and livestock have mutual benefit.
- Animals provide labour to work in the crop fields
- Resources such as land and labour are used economically.(1x4)

20. a) High incidence of disease infection to crops e.g. CBD.
- Improved quality of crops e.g. Tea and pyrethrum.
- Slow growth rate of crops due to reduced photosynthesis rate. (1 x 3mks)

b) Causes lodging of crops

- Causes soil erosion

- Spread of diseases and pests
- Destroying farm structures
- Increases evapotranspiration leading to wilting of plants. (1x4 mks)

21. - Long – day
- Short – day
- Day - Neutral (1x 2 mks)

SECTION B

22. i) - A – Top soil/zoneA/Horizon C
- B – Subsoil/Zone B/Horizon B
- C – Substratum/weathered rocks/Zone C /Horizon C

II)-More fertile/organic matter accumulation
- Better aerated and moist
- More micro-organisms/soil microbes
- Holds root of plants
- Well drained
- Contain most plant nutrients 1 x 3 = 3mks

(iii) Parent rock material

Climate

Topography

Time

Vegetation 1x4 = 4mks

23(a) Drainage of the soil 1x1 = 1mk

(b) - Sandy soil

- Loam soil

- Clay soil 1 x 3 = 3mks

(c) -Influences soil aeration affecting crop growth and microbial activity affects soil drainage.

-Influences the water holding capacity of soil.

1x3 = 3mks

(d) Soil structure – Physical appearance of the soil according to the way soil particles are arranged, packed or aggregated / arrangement of soil particles or aggregate.

Soil texture – Relative proportions of the various sizes of mineral particles in a soil sample / coarseness or fineness of soil when felt between the fingers.

24(a) To show the presence of living organisms in the soil.

(b) C – lime water turns milky

D – Lime water remain clear

(c) C - Carbon dioxide produced during respiration by living organisms present in the soil

Turns lime water milky.

D - The lime water remains clear because the living organisms in the soil had been

Killed, therefore no respiration occurred and no carbon dioxide was released.