

FORM 1 AGRICULTURE

END OF TERM 1

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
 - Entomolgy
 - Agricultural engineering
 - Soil Science
 - Genetics (1x4 mks)
4. - It is a source of raw materials for industries
 - It provide 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 incentive 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 gets 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 eg CBD.
- Improved quality of crops eg. 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/zone A/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 affect 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.