**AGRICULTURE FORM ONE MS**

**END TERM EXAM 2022.**

1. What is soil profile? (1mk)
* **It is the vertical arrangement of various soil layers.**

2a) State four effects of HIV/AIDS on agriculture. (2mks)

* **Shortage of farm labour**
* **Increase cost of living of AIDS**
* **Low food supply and poverty in general has increased criminal activities.**
* **The Government and NGO’s are using a lot of time and resources in controlling the pandemic**

b) State 4 factors that contribute to the formation of the soil. (2mks)

* **Parent rock material**
* **Climate**
* **Topography**
* **Time**

c) Name three types of planes used for smoothing surfaces of work. (1 ½ mks)

* **Block plane**
* **Smoothing plane**
* **Jack plane**

3a) State one use of the following tools;

1. Marking Gauge. (1mk)
* **Used to mark lines which are parallel to the edge**
1. Bit Brace; (1mk)
* **Used for holding and turning wood bits to bore holes in the wood.**

iii)Panga; (1mk)

* **Bush clearing**
* **Cultivation**

IV) Claw bar; (1mk)

* **Used for removing long nails from wood**

b) State four reasons for maintaining tools. (2mks)

* **To reduce the replacement cost**
* **To increase durability**
* **To avoid damage to the tool**
* **Increased efficiency**

4. State two ways in which pests affect Agriculture. (2mks)

* **They feed on the whole or parts of the plant lowering the quantity and quality of the produce.**
* **They transmit crop diseases**
* **Some pests injure the plant parts exposing the plant to secondary infection**
* **They increase the cost of production**

5a) List down four farming practices that can destroy soil structure. (4mks)

* **Using heavy machinery on wet soil**
* **Maximum tillage**
* **Continuous cropping**
* **Mono-cropping**
* **Burning of vegetation**

b) State four important effects of carrying out liming in farming. (4mks)

* **Helps to improve the soil structure**
* **Enriches the soil with calcium**
* **Enhances nodulation in legumes**
* **Raises the PH of the soil**

6a) Give four reasons as to why a farmer would use a jembe instead of a disc plough.(4mks)

* **Land size may be too small**
* **Land may be too steep**
* **Absence of a disc plough**
* **When the land has many stones**
* **In case of inadequate capital**
* **When it is only economically viable to use a jembe.**

b) List two possible and appropriate hand tools needed to finish off the handle of a fork jembe. (2mks)

* **Spoke shave**
* **Cross cut saw**

7a) List down any six types of soil structure. (3mks)

* **Single –grained soil structure**
* **Crumby soil structure**
* **Granular soil structure**
* **Prismatic soil structure**
* **Platy soil structure**
* **Blocky soil structure**

b).State five constituents of soil. (2 ½ mks)

* **Water**
* **Air**
* **Organic matter**
* **Mineral matter**
* **Living organisms**

c) Name any four factors that influence soil depth.(2mks)

* **Topography slope**
* **Nature of the parent material**
* **Climate conditions**
* **Time taken by the soil to develop**
* **Frequency and rate of erosion**

8. List four aspects of rainfall that influence Agriculture.(2mks)

* **Rainfall distribution**
* **Reliability**
* **Intensity**
* **Amount**

9a) State three effects of high temperature on crop production.(3mks)

* **High level of microbial activities**
* **Improve chemical reactions in the soil**
* **Improve the quality of some crop products**
* **Improve growth rate of crops**

b) State three aspects of soil that influence it’s productivity.(1 ½ mks)

* **Soil structure**
* **Soil texture**
* **S oil colour**

10. State four environmental conditions that may lead to low crop yields.(4mks)

* **Strong wind cause destruction to crops**
* **PH above or below optimum leads to poor crop performance**
* **Hailstorms cause destruction of crops in the field**
* **Poor topography**
* **Temperature above or below optimum reduce quantity and quality produce**
* **Very low or very high light intensity affects photosynthesis and the overall effects on yields**
* **High humidity affects the process of transpiration**
* **Heavy rainfall causes flooding and erosion**

11. State six human factors affecting Agriculture.(3mks)

* **Health**
* **Economy**
* **Government policy**
* **Transport and communication**
* **Social and cultural practices**
* **Market forces**

12a) what is wind? (1mk)

* **Wind is Air in motion**

b) State six ways by which wind affects growth of crops.(6mks)

* **Increase rate of evaporation and transpiration that cause water stress**
* **Cause crop breakage**
* **Carrying away rain carrying clouds**
* **Enhance spread of pests and diseases**
* **Causing Erosion hence reducing soil fertility**
* **Increased transpiration pull hence increases mineral uptake**

13a) Differentiate between extensive system and intensive system. (2mks)

* **Extensive system requires large tracts of land, low capital investment and low labour per unit area**
* **Intensive system requires high capital and high labour investment per unit area.**

b) State three characteristics of large scale farming. (1 ½ mks)

* **Involves use of large tracts of land**
* **Requires large capital**
* **Skilled labour**
* **High level management**
* **Operation costs per unit of production are low**

14a) what is shifting cultivation? (1mk)

* **Involves farming on a piece of land continuously until it is exhausted after which the farmer moves to a more fertile ground.**

b) State any four advantages of shifting cultivation.(2mks)

* **Soil structure is maintained**
* **There is no pest and disease build- up**
* **No land disputes**
* **Low capital required**

15. Differentiate between the following terms; (4mks)

i) Floriculture and pomology.

* **Floriculture is the growth of flowers while pomology is the growth of fruits**

ii) Aquaculture and Apiculture;

* **Aquaculture is the rearing of fish in a fish pond while apiculture is the rearing of bees in a bee hive.**

16. Name three forms in which water exists. (1 ½ mks)

* **Superfluous water**
* **Capillary water**
* **Hygroscopic water**

17. State five categories of farm tools and equipment.(2 ½ mks)

* **Garden tools and equipment**
* **Workshop tools and equipment**
* **Livestock tools and equipment**
* **Masonry tools and equipment**
* **Plumbing tools and equipment**

18. State two ways a farmer can do to raise the acidity or lower the soil PH. (2mks)

* **Application of sulphur.**
* **Application of Acidic fertilizer such as Sulphate of Ammonia.**