FORM ONE AGRICULTURE MARKINGSCHEME

1.
   - ❖ Parasite
   - ❖ Pathogens
   - ❖ Predators   3 x 1 = 3mks

2.
   - ❖ Help decompose organic matter hence release minerals for plant use
   - ❖ Some micro organism produce toxic substances which may help kill soil borne disease organism
   - ❖ Some micro-organism fix nitrogen in the soil
   - ❖ Upon death they eventually decompose resulting to manure   4 X 1 = 4mks

3.
   - ❖ Increases incidences of some pests / parasite and diseases
   - ❖ Improves quality of certain crop e.g. pyrethrum
   - ❖ Increases rate of evapotranspiration / wilting in plants
   - ❖ Increases rate of growth for early maturity in crops
   - ❖ Limits distribution of exotic livestock breeds
   - ❖ Lowers production in livestock
   - ❖ Influences design of farm buildings and structures
   - ❖ Lowers labour productivity   4 X 1 = 4mks

4.

   Soil structure is the relative proportion of the different sized particles in the soil; while soil structure is the genera appearance of the soil in relation to the arrangement of the individual soil particles
                   (Mark as a whole)   2 X 1 = 2mks

5.
   - ❖ Using a sieve / sieve analysis
   - ❖ Sedimentation method   2 X 1 = 2mks

6.
   a)
   - ❖ Physical
   - ❖ Chemical   2 X 1 = 2mks

   b)
   - ❖ Plant roots
   - ❖ Animals
   - ❖ Human activities   2 X 1 = 2mks

7.

a)

 Soil capillarity   1 X 1 = 1mk

b)

 G – Sandy

 H – Loam

 J – Clay   3 X 1 = 3mks

c)

 G – Rough and coarse texture

 J – Fine texture   2 X 1 = 2mks

d)

 ❖ Addition of organic manure

 ❖ Addition of lime   1 X 1 = 1mk

8.

 ❖ Allow proper infiltration / drainage of water

 ❖ Has good aeration

 ❖ It is not easily eroded   3 X 1 = 3mks

9.

 ❖ Temperature

 ❖ Prevailing winds

 ❖ Soil types

 ❖ Rainfall   4 X 1 = mks

10.

 ❖ Supports plant life anchorage

 ❖ Provides nutrients and water

 ❖ Contains organic matter, food for micro-organisms

 ❖ Contain oxygen / air necessary for crop growth.   3 X 1 = 3mks

11.

 ❖ Land is abundant

 ❖ Population is sparse

 ❖ Number of livestock per unit area

 ❖ Land is communally owned   4 X 1 = 4mks

12.

 ❖ Soil air

 ❖ Soil water

 ❖ Soil living organism

 ❖ Soil mineral matter

 ❖ Soil organic matter   4 X 1 = 4mks

13.
   a)
   This is the vertical arrangement of soil layers / horizons   1 X1 = 1mk

   b)
   This is the zone found between any two bordering soil layers in a soil profile   1 X 1 = 1mk

   c)
   - ❖ Compact and less aerated
   - ❖ Formation of hard pan
   - ❖ Has accumulation of leached nutrients   2 X 1 = 2mks

14.
   - ❖ Animals can survive and do well in these areas where crop production is not possible
   - ❖ Pasture improvement in these areas help increase land carrying capacity
   - ❖ Animals can be moved with ease inside an enclosed area in search of food and water
   - ❖ It is an important way of earning livelihood in the dry areas helping to relieve population pressures on high potential areas
   - ❖ It improves beef production in the dry areas of Kenya   4 X 1 = 4mks

15.
   a)
   Agricultural engineering is a branch of agriculture dealing with the use and maintenance of farm tools, machinery and structure; while agricultural economics is a branch of agriculture dealing with the utilization of scarce resources.   (Mark as a whole)   2 X 1 = 2mks

   b)
   - ❖ Agricultural engineering helps ease the use of mechanization in agricultural production
   - ❖ Agricultural economics helps aim at maximizing output while minimizing costs   2 X 1 = 2mks

16.
   - ❖ Crops and animals have mutual benefits whereby crops supply the animals with feed while the animals supply crops with manure
   - ❖ Income for a farmer is spread throughout the year from both crops and manure
   - ❖ There is better use of permanent farm labour throughout the year
   - ❖ It is an easier way of diversifying production so as to spread the risk of total failure; meaning a failure in one enterprise fails the farmer can depend on the other.   4 X 1 = 4mks

17.
   - ❖ Topography
   - ❖ Parent rock material

- ❖ Time
- ❖ Climatic factors
- ❖ Biotic factors   3 X 1 = 3mks

18.
- ❖ Help in accurately measuring and applying of agricultural inputs for positive results
- ❖ Analyzing results correctly leading to proper decision making
- ❖ Help in proper feeding of animals according to their nutritional requirements
- ❖ Help in the interpretation of the technical language used in agriculture
- ❖ Proper timing and use of proper method of doing things.   3 X 1 = 3mks

19.
- ❖ Nomadic pastoralism
- ❖ Poultry
- ❖ Aquaculture
- ❖ Apiculture   4 x 1 = 4mks