ANESTAR SCHOOLS
END YEAR EXAM
FORM ONE
AGRICULTURE TIME: 1hr45min OUT OF 80

1. Name two areas of study that make agriculture to be regarded as a science (2m)
- Crop pathology
- Entomology
- Soil science
- Genetics
- Ecology

2. State four human factors that influence agriculture (4m)
- Level of education and technology
- Health (HIV/AIDS)
- Economy
- Government policy
- Transport and communication
- cultural and religious belief
- Market forces

3. State 3 forms in which horticulture is practised in Kenya (3m)
Olericulture
Pomoculture
Floriculture

4. List down three biotic factors that influence agriculture negatively (3m)
- Predators
- Pest
- Pathogens

5. Name four aspects of rainfall that affects the level of crops growth and production (4m)
- Rainfall Reliability
- Amount of Rainfall
- Rainfall distribution
- Rainfall Intensity

6. Name 4 factors that influence soil formation (4m)
- Parent rock material
- Climate
- topography
- Biotic / organic influence
- Time

7. State four constituents of soil (4m)
- Mineral matter
- organic matter
- Air
- water
- Living organisms

8 - 6m

9 - 4m

10 - 8m

11. State four reasons for Land preparation (2m)
- To remove weeds
- To bury organic matter for easy decomposition
- To facilitate water infiltration and aeration
- To destroy soil-borne pests by exposing them to predators and sun
- To make planting easy

12. Name Four types of water pumps (4m)
- centrifugal / Rotary dynamic pumps
- Piston / Reciprocating pump
- Semi-rotary Pump
- Hydram

13. a) Name two sources of water on the farm (1m)
- Ground
- Surface
- Rain water

14 a) State three reasons of treating water (3m)
- To kill disease-causing micro-organisms
- To remove chemical impurities
- To remove smells and bad taste
- To remove sediments of solid particles

b) State four uses of water in the farm (2m)
- For domestic purposes
- For watering livestock, washing animals
- for diluting chemicals
- During the processing of farm produce
- In the construction of buildings
- for Irrigating

15 - 5m

16 Outline four features and characteristics of a fertile soil (4m)
- Good depth
- Proper drainage
- Good water holding capacity
- Adequate nutrient supply
- correct soil pH
- free from excessive infestation of soil borne pests and diseases

17 Give four characteristics of crops used for green manure preparation (2m)
- Should be highly vegetative / leafy
- They should have a fast growth rate
- should have high nitrogen content / leguminous
- should be capable of rotting quickly
- should be hardy

18. State four importances of livestock in Kenya (2m)
- source of food
- Animal power

19 3m

20. What is nitrogen cycle (1m)

It is a series of changes which nitrogen undergoes between the atmosphere, water, soil and living organisms

21 State two types of sampling methods (2m)

- traverse method
- Zigzag method

22 State four reasons for applying phosphate fertilizers (2m)

- Root development
- essential for flowering, fruits and seed formation
- plays an important role in metabolic processes
- It is part nucleoproteins which are required during cell division
- Strengthens plant stems, thus preventing lodging.

23. A farmer was advised to apply 150 kg CAN/ha while top dressing the maize crop, CAN contains 21% N

Calculate the amount of nitrogen applied /ha (2m)

21 kg N is contained in 100kg CAN

150 Kg CAN supplies;

100 Kg CAN = 21 Kg N

$$150\ Kg\ CAN = \frac{21\ Kg\ N \times 150\ Kg\ CAN}{100\ Kg\ CAN}$$

$$= 31.5\ Kg\ N/ha$$

END.