**NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ADM:\_\_\_\_\_\_\_\_\_\_\_**

**DATE:\_\_\_\_\_\_\_\_\_\_\_**

**SIGN:\_\_\_\_\_\_\_\_\_\_\_\_**

**FORM 3 AGRICULTURE**

**END OF TERM -2 - 2021 EXAMINATION**

**TIME: 2HRS**

**INSTRUCTIONS TO ALL CANDIDATES:**

1. ***Write your name and admission number in the spaces provided.***
2. ***This paper consists of section A, B and C.***
3. ***Answer all questions in section A, B and C in the spaces provided.***

***FOR EXAMINERS USE ONLY***

|  |  |  |  |
| --- | --- | --- | --- |
| **SECTION** | **QUESTIONS** | **MAXIMUM SCORE** | **CANDIDATE SCORE** |
| **A** | **1-19** | **40** |  |
| **B** | **20-23** | **20** |  |
| **C** | **24-26** | **20** |  |
| **20** |  |
|  | **TOTAL** | **100** |  |

**SECTION A (40MKS) ANSWER ALL QUESTIONS IN THE SPACES PROVIDED.**

1. What is olericulture? (1mk)
2. Name three industrial goods whose market is provided by agriculture.(3mks)
3. Give three farming practices which can be employed to achieve minimum tillage.(3mks)
4. Name any four biotic factors that influence agriculture negatively.(2mks)
5. Give three characteristics of subsoil layer of a soil profile.(3mks)
6. State the meaning of the following terms as used in pig rearing.(2mks)

i) Sow`

ii) Piglet

1. Describe three factors that determine the depth of ploughing.(3mks)
2. State two features of the gizzards that make them efficient in their function.(2ks)
3. Distinguish between a straight fertilizer and a compound fertilizer.(2mks)
4. State any two methods that can be used to detect mineral deficiency in crops.(2mks)
5. State four disadvantages of broadcasting as a method of planting.(2mks)
6. Give a reason for carrying out each of the following practices in a cabbage nursery.(2mks)

i) Pricking out.

ii) Hardening off.

1. State three reasons for flushing ewes.(3mks)
2. Describe four reasons for pruning in coffee production.(2mks)
3. Give two reasons for preferring tilapia fish for rearing in ponds.(2mks)
4. State four roles played by worker bees.(2mks)
5. Name a crop that requires the following training

a) Staking (1/2mk)

b) Trelishing.(1/2 mk)

1. Give four ways of harvesting water in the farm.(2mks)
2. Explain the meaning of the term selection as used in livestock production.(1mk)

**SECTION B (20MARKS) ANSWER ALL QUESTIONS IN THE SPACES PROVIDED.**

1. The diagrams below illustrate some soil structures study them and answer questions that follow.

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a) Identify the soil structures.(2mks)

G-

F-

b) Name the parts labeled X and Y in diagram F (2mks)

X-

Y-

c) State three ways in which soil structure G influences crop production.(3mks)

1. Study the diagrams below and answer the questions that follow

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A B

1. Name the process used to treat Irish potatoes setts in readiness for planting.(1mk)
2. Which of the two setts A or B is suitable for planting?(1mk)
3. Give a reason for your answer in (b) above e.(1mk)
4. The diagram below shows a plunge dip. Study it and answer the questions that follow.

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1. State one use of each of the parts of the dip labeled A,B and C (3mks)

A-

B-

C-

1. Give two ways in which the dipwash in a plunge dip may be exhausted.(2mks)
2. The diagrams below show common farm weeds.

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a) Identify the weeds labeled J and K. (2mks)

b) Classify weed J according to its life cycle. (1mk)

c) State one harmful effects of weed K to livestock. (1mk)

d) At what stage of growth of maize is it recommended to control weed labeled K using post emergence herbicides? (1mk)

**SECTION C (40MKS) ANSWER ANY TWO QUESTIONS IN THIS SECTION IN THE SPACES PROVIDED.**

24 a) Explain the physical or structural methods of controlling soil erosion.(8mks)

b) Describe effects of land fragmentation.(6mks)

c) i) Differentiate between soil texture and soil structure.(2mks)

ii) Describe benefits of a good soil structure on crop production.(4mks)

25 a) Describe production of cabbages under the following subheadings

i) Ecological requirements. (4mks)

ii) Land preparation.(3mks)

iii) Transplanting (6mks)

iv) Disease and pest control.(4mks)

b) State three factors that determine the amount of water taken by an animal.(3mks)

26.a) Describe upgrading as a method of improving indigenous cattle for milk production.(6mks)

b) Describe five effects of crop pests.(5mks)

c) Explain five importance of keeping livestock in good health.(5mks)

d) Describe four effects of high temperature in crop production.(4mks)